



**PFERD**



## Your personal contact

Do you have any questions regarding our products and solutions? Together with our distributor partners, we offer qualified support, free of charge and without obligation. Contact your personal PFERD representative directly!

You will find the addresses of our worldwide sales offices and your local PFERD distributors at:  
**[www.pferd.com](http://www.pferd.com)**

# TRUST BLUE



Files



Carbide burs, router bits  
and bi-metal hole saws



Mounted points, cones and plugs,  
bench wheels



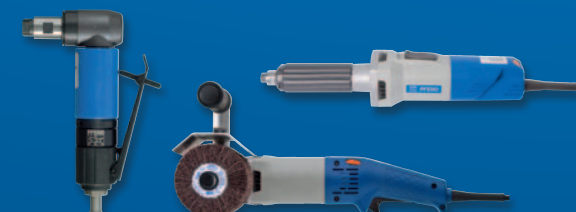
Fine grinding and finishing products



Grinding wheels, flap discs and  
cut-off wheels



Power and maintenance brushes



Power tools

Chamfering  
Fine finishing  
Sharpening



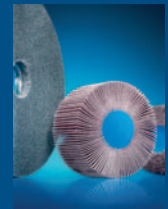
Deburring  
Chamfering and edge bevelling  
Hole cutting



Cleaning and deburring  
Machining and shaping of geometries  
Light grinding and sharpening



Create, achieve surface finishes  
Levelling and blending  
Polishing



Grinding  
Weld removal  
Cutting



Deburring  
Weld cleaning  
Surface conditioning



Air grinders  
Electric grinders  
Flexible shaft drives



Keywords index  
EDP index

# PFERD product selection

## The fast way to the best solution

With over 7,000 products for surface finishing and material cutting, PFERD offers the ideal solution for every application. The selection of the best suited product is determined by the **application**, the **material** to be worked and the intended **power tool**.

In order to make the choice easier for you, use our navigation pages entitled "Quick product selection guide" located in the beginning of each catalogue section.

## Application

Every application imposes different requirements on workers, power tools and products. These are determined by:

- the desired **work result**, e.g. high stock removal, high surface quality
- the **operating conditions**, e.g. the available power supply, stationary or hand application
- the **workpiece** to be worked, e.g. its dimensions, geometry or accessibility
- the duration of use, e.g. occasional or in-line production environment
- requirements and ergonomic advantages in accordance with labour protection laws

PFERD offers **individual, targeted support**. Our sales representatives and technical advisors will assist you in analyzing your requirements and will work together with you to achieve the **best** and most cost-effective **solution** – free of charge and on-site.



## Power Tool

The power tool that is used has a significant influence on the **cost-effectiveness** of the working process. PFERD is one of only a few manufacturers offering the combination of both high-performance products and specially-designed air grinders, electric grinders, and flexible shaft drives from a single source. The ideal power tool is selected taking the following criteria into consideration:

- Design, shape and size
- Power output
- Rotational speed
- Mounting requirements
- Power supply (compressed air or electric)

Further information on PFERD power tools can be found in our "Power tools" catalogue (section 209).

## The best solution

High performance, cost-effective, safe, ergonomic

## Workpiece Material

PFERD's **broad product range** comprises solutions for working on steel, stainless steel (INOX), aluminum, plastic, and a wide range of additional materials. The varying properties of these materials place **individual requirements** on the products used to work on them. PFERD products are especially designed for the **differing material properties** and thus allow users to achieve the highest possible levels of productivity and the **very best results**.

# The PFERD brand

## The brand you trust

PFERD is the leading brand for the development, production, supply and support of surface finishing and material cutting solutions.

In keeping with a tradition dating back to 1799, PFERD operates as an independent, global-oriented, family-owned company with a long-term vision to support and advance individuals dedicated to metalworking trades with the best performing, safest and most innovative products and services.

PFERD products offer the user maximum benefit and cost-effectiveness.

Its unlimited commitment to premium quality, its dedication to support and service, and its responsible use of resources all make PFERD a dependable and reliable supplier that operates with sustainability in mind.

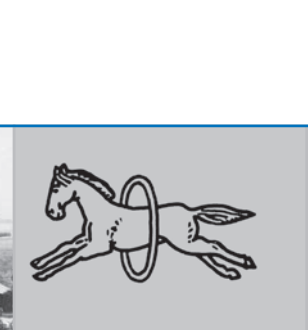
All those involved in PFERD play their part in securing PFERD's position as an internationally valued premium brand. Thanks to their personal involvement, people across the whole world Trust Blue and choose PFERD.



**PFERDMEDIA**

Enjoy a short video about PFERD company and products at [pferdusa.com/thecompany](http://pferdusa.com/thecompany)

Quality since  
1799







**TRUST BLUE**

# Quality

## PFERD quality

### Our commitment to safety and service

PFERD's high quality standards are the foundation for innovative, high-performance products. Research and development, our own machine and plant construction, as well as the continuous testing and further development of the quality and safety standards in our own laboratories guarantee high PFERD quality. In addition to the high quality standards, occupational safety and health as well as ergonomics play a prominent role in development.

PFERD quality management is certified according to ISO 9001.

As long-standing member of the "Organisation for the Safety of Abrasives (oSa)", PFERD offers the highest possible levels of safety for the user by constantly monitoring manufacturing, along with standard-compliant production and labelling of all products, in all PFERD production facilities worldwide.



### PFERD production facilities

Marienheide and Hermeskeil, Germany

Vitoria-Gasteiz and Araia, Spain

Spartan, South Africa

Milwaukee, WI USA





# The PFERD range

## A solution for every application

The product range includes more than 7,000 solutions for different applications, from cutting, to coarse grinding, to mirror polishing. PFERD products are used each and every day in many different markets.

Innovations in the PFERD range include impressive solutions that are not only popular with end-users, but also among distributor: PFERD innovations are unique selling propositions!

A team of experienced product managers is responsible for ensuring that the range is constantly updated and improved. If required, PFERD can develop a tailor-made solution just for you, always aimed at attaining the highest levels of cost-effectiveness.

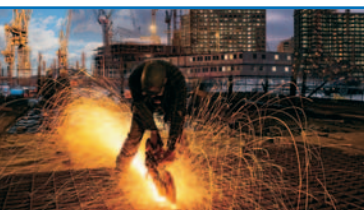


### In use in many industries

- Chemical and process industries
- Equipment, tank and pressure vessel construction
- Steel mills
- Foundries
- Tool and die construction
- Pipeline construction
- Shipyards
- Automotive industry
- Structural construction and fabrication
- Aviation and aerospace, gas turbine construction and repair
- Machine engineering

### For a broad spectrum of applications

- Cutting
- Grinding
- Milling
- Filing
- Brushing
- Polishing
- Cleaning
- Conditioning
- Derusting
- Deburring
- Matt finishing





**PFERDMEDIA**

More information on  
PFERD products is available at  
[pferdusa.com](http://pferdusa.com)

# Delivery and logistics

## Always at your side

Our products, services and support are right in your back yard. Sold exclusively through authorized distributors in North America, PFERD products are available throughout Canada and the United States. A complete distribution network with highly trained sales teams results in immediate customer support and fast delivery times.

Distributor warehouses are quickly replenished from PFERD distribution centers, which allows us to ship 98% of products in the catalogue program within 24 hours from a facility near you. PFERD's sales support, applications and customer service teams are on hand to assist you. We are dedicated to providing an expert response to your request and processing your order efficiently. Establishing a close dialogue with you forms the key to mutual success.

Originating at a massive warehouse and manufacturing facility in Germany, ultra-efficient production and state-of-the-art logistics result in a continuous supply of available product at our North American centralized distribution center in Wisconsin. Our global logistics network, serving over 20 countries, guarantees that your product will be ready for you on demand.





# The optimal **service package**

## Support, training, information

Optimizing working processes requires profound knowledge of the relationships between abrasive products, workpiece materials and power tools. PFERD sales representatives and technical advisors, along with the PFERD TOOL-MOBILE, are deployed worldwide to help you find the best solution for your application – together with your distributor, individually and on site.

The **PFERD**ACADEMY provides users, distributor personnel and employees from all over North America with a highly specialised and practical knowledge from the world of grinding and cutting. A progressive series of classes and topics will enable you to become a PFERD specialist.

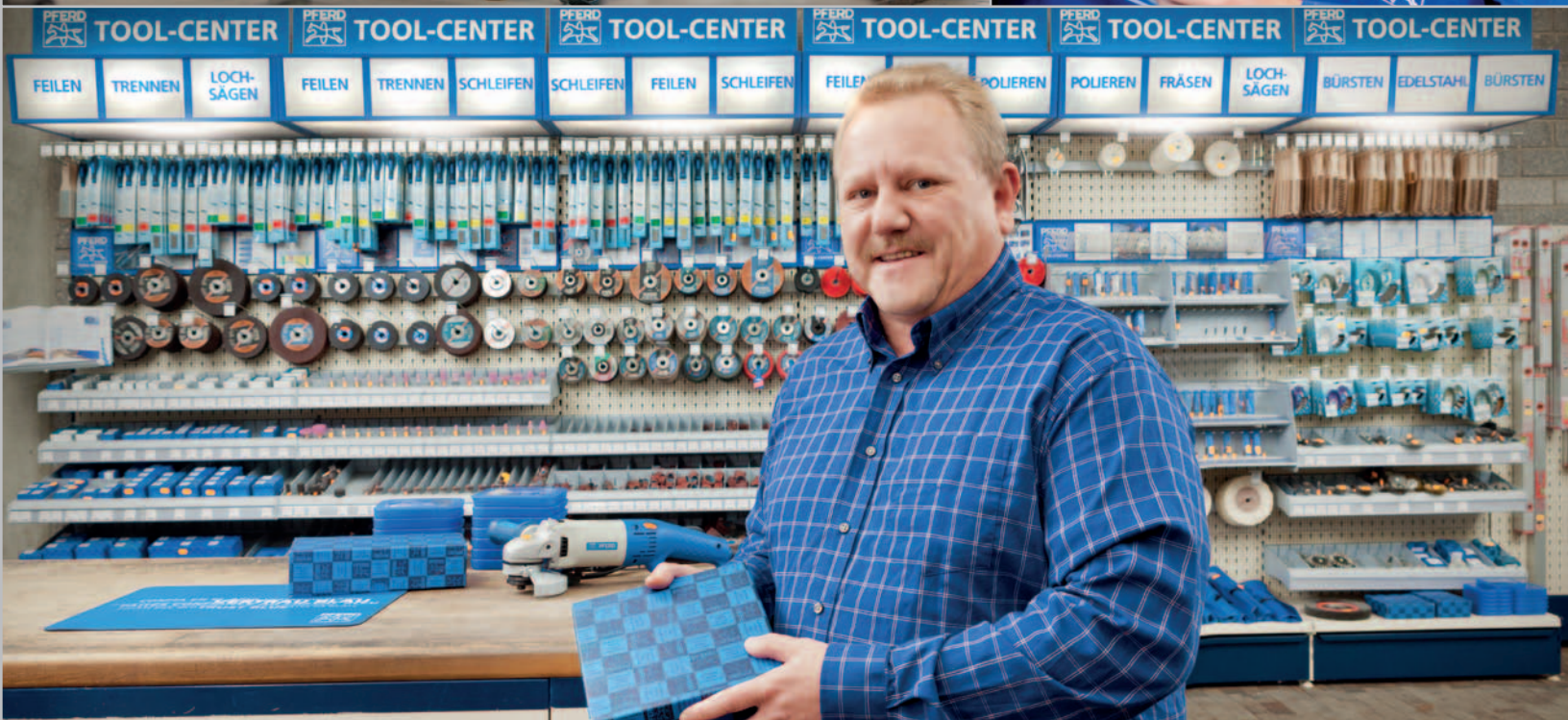
With the Tool Manual, PFERD offers more than just a catalogue. Thanks to the product navigation, which is easy to understand and logically structured, along with in-depth technical information on more than 550 pages, this 22<sup>nd</sup> edition strives to provide you with all of the information you need to efficiently find the best solution for all of your applications.

You will also find all the important information you require in order to select the most appropriate product solution directly from your local distributor's PFERD TOOL-CENTER.



The most important PFERD tool:  
**The Tool Manual**





# The PFERD formula

## The right mix for your success

Workers all over the world Trust Blue and choose PFERD. The combination of individual support and innovative high-performance products, together with the worker's experience on site, consistently guarantee the optimal result for every task.

Advisory services, such as on the improvement of ergonomics at work, are increasingly gaining importance. Our field applications team will evaluate your application and its parameters to build the foundation for a safe, productive, and ergonomic working process.

CONFÍA EN EL AZUL VERTROUW BLAUW  
ZAUFAJ NIEBIESKIM **TRUST BLUE**  
FAITES CONFIANCE AU CHEVAL BLEU  
MAVIYE GÜVEN CONFIE NO AZUL  
FIDATI DEL BLU **VERTRAU BLAU** LITA PÅ BLÅTT

## The PFERD formula

Innovative high-performance products  
+ Individual, targeted support  
+ Correct selection of power tool  
+ Worker's experience

---

= Optimal productivity





*"When we need to carry out cost-effective grinding or cutting, we only use PFERD products. The durability of the products themselves, coupled with the time saved, truly convinced me!"*



*"At PFERD, we can obtain everything we need for cutting and surface finishing from a single source, with consistently high and reliable quality. That's why I Trust Blue!"*



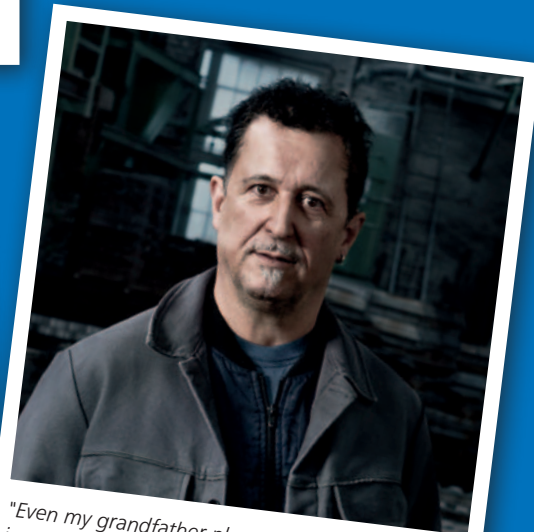
*"Using the right PFERD product, we could experience the full potential of our power tools. I never thought that was possible!"*



*"Safety and working comfort are at the heart of what we do – The ergonomically optimized products really convinced us!"*



*"Together with the PFERD representative, we analyzed our applications, tested several products, and finally selected the most cost-effective solution – with PFERD, we always feel well-advised!"*



*"Even my grandfather placed a great deal of importance on quality, and that's why he chose PFERD products. We have been relying on the performance of PFERD for over 50 years."*

**PFERDVALUE®**

Increase  
Effi

Reduce  
**Vibrations**

Reduce  
**Noise**

**PFERDERGONOMICS®**

Increase  
**Comfort**

Reduce  
**Emissions**



ciency

Optimal use of  
Resources

Save

Time & Costs

**PFERDEFFICIENCY®**

Save

Energy

Reduce

Waste



PFERDMEDIA

For more information on  
PFERDVALUE®, please visit  
[pferdusa.com/pferdvalue](http://pferdusa.com/pferdvalue)

# PFERDVALUE®

The optimization of work processes through the use of powerful premium products and power tools has a positive effect on the cost-effectiveness of your operations.

In the long term, to be cost-effective is to be sustainable. Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD products offer measurable added value.

Experience the added value with PFERD.

Discover **PFERDERGONOMICS®** and **PFERDEFFICIENCY®**.

## PFERDERGONOMICS®

Ergonomics is an important aspect of occupational health. The aim is to organize working conditions as to **increase the users' comfort** and **not to impair their health** – even under tough working conditions and if they have to carry out a certain job for a long time.



**Vibration**Filter

Users of hand-held products are exposed to a significant degree of mechanical oscillation. The effects of these oscillations may include decreased performance and adverse health effects.

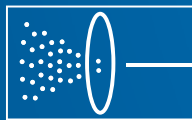
PFERD products and power tools with the "**Vibration**Filter" pictogram cause substantially fewer vibrations than comparable products.



**Noise**Filter

Noise at the workplace can become an issue. Depending on the job and personal perceptions, noise at work may be bothersome, disruptive and may even pose a danger to health.

The "**Noise**Filter" icon identifies PFERD products and power tools that have been optimized in terms of their noise emissions, and which pose a reduced risk of damage to users' hearing.



**Emission**Filter

The air quality in work areas is adversely affected by dust. Not only does the pollutant content constitute a health hazard, but the size of the particles may also create issues. The smaller they are, the greater the health hazard.

PFERD products which create comparatively less dust when used are marked with the "**Emission**Filter" icon.

PFERD's oil-free air grinders result in lower emissions, and also carry the "**Emission**Filter" icon.



**Haptic**Filter

With any hand-held application, it is important that the work is carried out with the lowest levels of force and effort, with a high amount of control, and with as much comfort as possible.

PFERD products and power tools with the "**Haptic**Filter" allow for labour-saving, comfortable work with minimal effort.

## PFERDEFFICIENCY®

**Efficiency** is the focus of all work processes. It ensues from **cost savings** on the one hand and **productivity increases** on the other. Under these considerations, users are challenged daily with completing their **tasks in a fast and effective manner and with the best results**. The efficiency of the products used arises not only from the short-term work results achieved, but also from how the use of these products affects people, machines and the ongoing operations **in the long term**.

Energy consumption (electricity/compressed air) of abrasive applications during day-to-day use represents a significant economic factor.

PFERD products and power tools that require less energy, for example through a significantly higher performance, are marked with the "**EnergySaving**" icon. Similarly, products which, due to reduced dimensions, can be used on smaller power tools with the same or better performance are also marked with this symbol.



**Energy Saving**

Waste is present in various forms in the plant. Whether it's of a single type, recyclable or even residual or hazardous waste – the waste generated leads to cost and effort.

PFERD products that produce less waste, for example by achieving the same or better stock removal or cutting performance with less mass of product or by an above-average service life, are marked with the "**WasteSaving**" icon.



**Waste Saving**

Time is money and thus represents an important economic factor. Even small changes can save a lot of time and money.

The "**TimeSaving**" icon denotes PFERD products and power tools that achieve the desired results substantially quicker through higher aggressiveness or performance. The icon also indicates products that save on unproductive idle periods, such as change-up times. Innovative solutions that make the job easier and enable users to work for a long time with minimal effort are also marked with the "**TimeSaving**" icon.



**Time Saving**

Through optimal and efficient use of existing resources, high savings can be achieved. It is important to consider not only the manufacturing process of a product, but also the entire life cycle – from the initial product idea to the end of use. In relation to power-driven products, studies have shown that by far the largest portion of resources is consumed during the use of the products in companies.



**Resource Saving**

The people forming the workforce are also a key resource. The performance of the users is crucial to productivity in the ongoing process and must therefore be maintained as much as possible.

PFERD solutions identified by the "**EnergySaving**", "**TimeSaving**", and "**WasteSaving**" icons, as well as one or more **PFERDERGONOMICS®** icons, also carry the "**ResourceSaving**" icon. These products are particularly cost-effective in operation and, at the same time, protect the users' health, safety, and performance.



PFERDMEDIA

For a free brochure and more information on **PFERDVALUE®**, please visit [pferdusa.com/pferdvalue](http://pferdusa.com/pferdvalue)

# PFERD on the go

## Come see us at the show!

Trade shows generate excellent opportunities: End-users can meet manufacturers. Professionals can find new solutions. And PFERD presents innovative new products to the world.

Visit the PFERD booth for a unique and impressive experience. Explore opportunities for improvements in your processes through high-performance product alternatives. Consult with our application experts in the booth. Arrange product testing in your facility. Witness for yourself the incredible performance of PFERD products in live demonstrations.

PFERD exhibits at dozens of local, regional, national and international metalworking trade shows every year. Come and visit us. Enjoy the hospitality of PFERD. Consider this your personal invitation. We can't wait to show the latest and greatest from PFERD. We know you will be impressed!



**PFERDMEDIA**

For a schedule of PFERD shows, please visit [pferdusa.com/tradeshows](http://pferdusa.com/tradeshows)







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### PFERDMEDIA

You can find an overview of all PFERD subsidiaries and trading partner representatives at [www.pferd.com](http://www.pferd.com)

# PFERD locally



## Canada

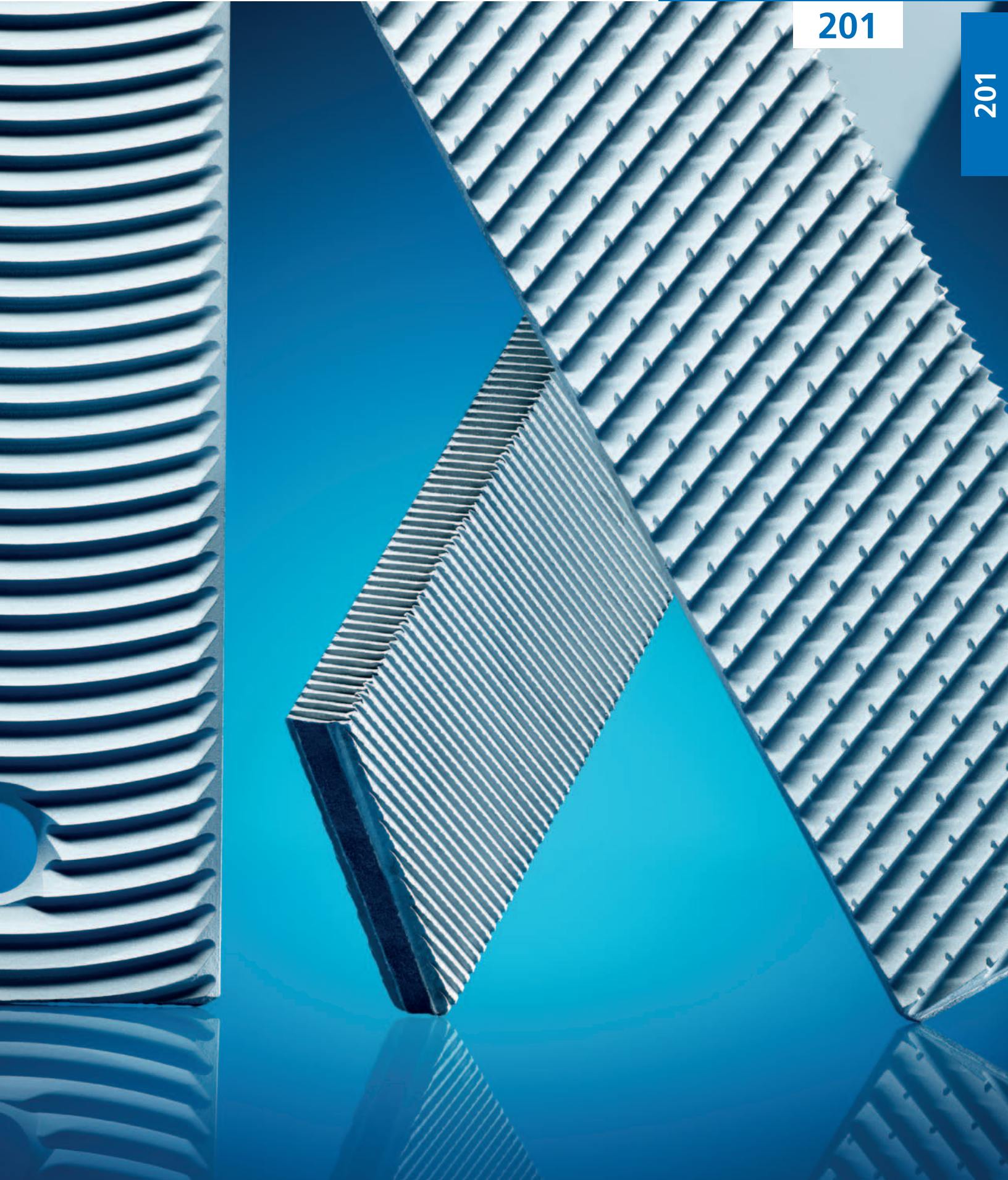
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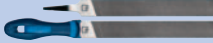











For more than 200 years, PFERD files have been renowned worldwide as a top quality product. With their consistently high cutting performance, ensuring an excellent surface quality even after long use, they reduce the cost of labour-intensive manual work and will thus provide significant economic benefits.

From two centuries of experience as partner to the metalworking industry, PFERD has developed a number of ideal file shapes and cuts for specific applications in industry and trades.

A sophisticated manufacturing technology and highly sensitive ISO 9001 certified quality control system ensure that all products meet our exceptional quality standards.

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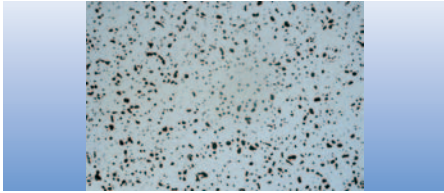
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**PFERDMEDIA** NEW

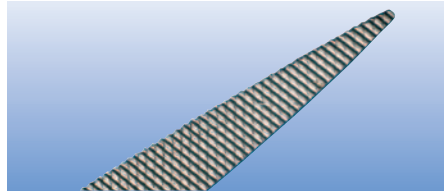
See what's new since we printed this book, or visit [pferdusa.com/new](http://pferdusa.com/new)

### The quality of PFERD files is determined by several criteria



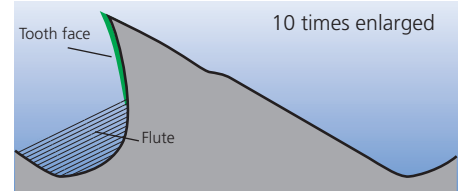
#### The prerequisite for the correct hardness is uniform steel structure

The steel structure is changed by the profiling, annealing and hardening process. The right carbon content must be maintained to ensure maximum cutting performance.



#### Exact shape and symmetrical cut

The blanks are shaped by forging, grinding and smoothing. Equally spaced teeth and uniform tooth height guarantees good filing performance. File type and angle of cut are determined by the application.



#### Ideal tooth shape

Individual tooth shapes for particular applications allow maximum stock removal. There is no standard tooth shape. Special test results have revealed which tooth shapes are the most favorable.

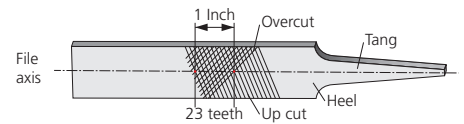
The photo shows a car body file tooth with the typically rounded tooth face and the chip clearance area.

### Number of teeth per Inch

| Length (without tang) [Inch] | Machinist's files<br>Teeth number ± 8 % |              |              | Sharpening files<br>Teeth number ± 5 % |      |            |                   |               |                            |              |
|------------------------------|---|--------------|--------------|--|------|------------|-------------------|---------------|----------------------------|--------------|
|                              | Bastard Cut 1                           | Second Cut 2 | Smooth Cut 3 | Regular                                | Slim | Extra slim | Double extra slim | Bastard Cut 1 | Mill files<br>Second Cut 2 | Smooth Cut 3 |
| 4                            | 43                                      | 56           | 71           | 51                                     | 58   | 66         | -                 | -             | -                          | -            |
| 5                            | -                                       | -            | -            | 48                                     | 56   | 61         | 64                | -             | -                          | -            |
| 6                            | 33                                      | 46           | 56           | 43                                     | 51   | 56         | 61                | 51            | 61                         | 71           |
| 7                            | -                                       | -            | -            | 41                                     | 48   | 53         | 58                | -             | -                          | -            |
| 8                            | 25                                      | 36           | 46           | 38                                     | 43   | 51         | 56                | 46            | 51                         | 56           |
| 10                           | 23                                      | 30           | 41           | 36                                     | 41   | 43         | -                 | 41            | 46                         | 51           |
| 12                           | 20                                      | 28           | 36           | -                                      | -    | -          | -                 | 36            | 41                         | 46           |
| 14                           | 18                                      | 25           | 33           | -                                      | -    | -          | -                 | 31            | 36                         | 41           |

The chart to the left shows the number of teeth of PFERD files listed in our catalogue 201. The figure shows the number of cuts per inch of file length, counted in the longitudinal axis. For a double-cut file, the teeth number is determined by the upcut (second course).

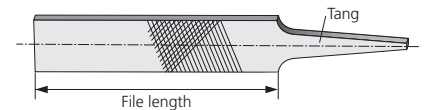
#### Determination of teeth number



#### Example

At a length of 10" bastard cut file has 23 teeth per inch. A 4" long file of the same cut has 43 teeth per inch of file length. The higher number of teeth found on shorter files is intended to provide the same ease of use (in terms of force input, guidability and stock removal) on surfaces and edges as a longer tool.

#### Dimensions



The cross-sectional dimensions indicated in the following tables are measured across the cut and may vary depending on cut type. PFERD files are manufactured in accordance to ISO standard specifications.

### Colour code for file cuts

Cuts are easily identified by colour-coded package labels.

**10 Hand**  
Planas paralelas

Inches | **bastard basto**  
**1112** | **10"** | **1**

Bastard = green

**10 Hand**  
Planas paralelas

Inches | **Second cut medio**  
**1112** | **10"** | **2**

Second = yellow

**10 Hand**  
Planas paralelas

Inches | **Smooth fino**  
**1112** | **10"** | **3**





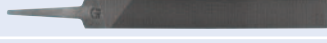

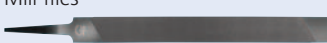

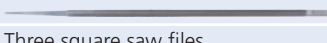
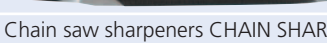
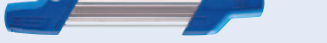

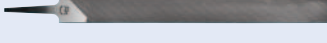



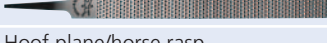
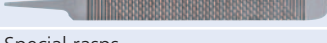



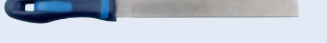

Smooth = red



# Files

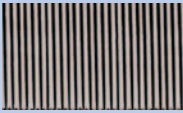
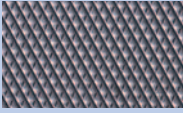


## Your quick product selection guide




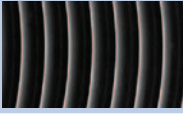


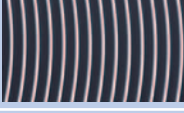
| General application   | Material   | Detailed applications  | Tool   | Page   |
|---|--|--|--|--|
| <b>Filing</b><br>                | <ul style="list-style-type: none"> <li>■ Steel</li> <li>■ Stainless steel (INOX)</li> <li>■ Cast iron</li> <li>■ Cast steel</li> <li>■ Non-ferrous metals</li> <li>■ Copper</li> <li>■ Bronze</li> <li>■ Brass</li> <li>■ Zinc</li> </ul>          | <ul style="list-style-type: none"> <li>■ Chamfering</li> <li>■ Deburring</li> <li>■ Roughing</li> <li>■ fine finishing</li> <li>■ Surface work</li> <li>■ Filing of breakthroughs</li> </ul> | <p>Files for the workshop</p>  <p>Files for aluminum</p>  <p>Milled tooth files</p>  <p>Precision files</p>  <p>Tungsten carbide files</p>  <p>Mill files</p>  | <p>7</p> <p>14</p> <p>21</p> <p>40</p> <p>23</p> <p>27</p> |
| <b>Sharpening</b><br>           | <ul style="list-style-type: none"> <li>■ Saw chains</li> <li>■ Saw blades</li> <li>■ Band saw blades</li> <li>■ Knives</li> <li>■ Machetes</li> </ul>  | <ul style="list-style-type: none"> <li>■ Sharpening of saw chains, blades and band saw blades</li> </ul>   | <p>Chain saw files</p>  <p>Three square saw files</p>  <p>Chain saw sharpeners CHAIN SHARP</p>    | <p>28</p> <p>24</p> <p>30</p>                              |
| <b>Car body work</b><br>       | <ul style="list-style-type: none"> <li>■ Sheet metal</li> <li>■ Non-ferrous metals</li> <li>■ Plastics</li> </ul>  | <ul style="list-style-type: none"> <li>■ Surface work</li> <li>■ Deburring</li> <li>■ Removing solder spots</li> <li>■ Removing weld spots</li> </ul>  | <p>Car body files</p>   | <p>20</p>  |
|   |  | <ul style="list-style-type: none"> <li>■ Peeling off thin paint layers</li> <li>■ Correcting paint faults</li> </ul>   | <p>Paint peeler</p>   | <p>20</p>  |
| <b>Soft materials work</b><br> | <ul style="list-style-type: none"> <li>■ Wood</li> <li>■ Plastics</li> <li>■ Soft stones</li> <li>■ Horn</li> </ul>  | <ul style="list-style-type: none"> <li>■ Roughing</li> <li>■ Fine finishing</li> <li>■ Surface work</li> <li>■ Deburring</li> <li>■ Chamfering</li> </ul>                                    | <p>Wood files</p>  <p>Wood rasps</p>  <p>Hoof plane/horse rasp</p>  <p>Special rasps</p>   | <p>33</p> <p>34</p> <p>36</p> <p>37</p>                    |
| <b>Hard materials work</b><br> | <ul style="list-style-type: none"> <li>■ Hardened steels</li> <li>■ Tungsten carbide</li> <li>■ Ceramic</li> <li>■ Glass</li> <li>■ Ferrite</li> <li>■ Nickel- and titanium-based alloys</li> <li>■ Fibre-reinforced plastics (GRP/CRP)</li> </ul> | <ul style="list-style-type: none"> <li>■ Precision filing</li> <li>■ Deburring, chamfering and breaking of edges</li> </ul>  | <p>Diamond files</p>   <p>Diamond machinist's files, grit size D 251</p>    | <p>42</p> <p>42</p>  |



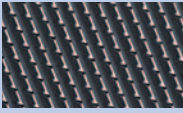
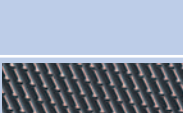

**American pattern files**

|                           |   |   |
|---------------------------|---|---|
| <b>Cut 0/<br/>ALU</b>     |  | Single cut.<br>For aluminum and soft steel.                             |
| <b>Cut 1/<br/>Bastard</b> |  | Cross cut.<br>Suited for coarse machining and for coarse stock removal. |
| <b>Cut 2/<br/>Second</b>  |  | Cross cut.<br>For universal coarse stock removal and prefinishing.      |
| <b>Cut 3/<br/>Smooth</b>  |  | Cross cut.<br>For fine work and prefinishing.                           |




**Car body files**

|               |   |   |
|---------------|---|---|
| <b>Cut 00</b> |    | Radial tooth cut.<br>Recommended for high stock removal.<br>Creates score-free surfaces.                      |
| <b>Cut 0</b>  |   | Radial tooth cut.<br>Recommended for high stock removal.<br>Creates score-free surfaces.                      |
| <b>Cut 1</b>  |  | Radial tooth cut.<br>Recommended for coarse stock removal and roughing.<br>Creates score-free surfaces.       |
| <b>Cut 2</b>  |  | Radial tooth cut.<br>For universal coarse stock removal and smoothing.<br>Creates score-free surfaces.        |
| <b>Cut 3</b>  |  | Radial tooth cut.<br>Recommended for fine stock removal and for prefinishing.<br>Creates score-free surfaces. |

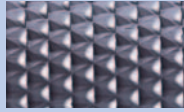
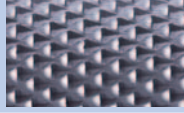

**Milled tooth files**

|              |   |   |
|--------------|---|---|
| <b>Cut 1</b> |  | Straight tooth cut.<br>Recommended for coarse stock removal when working on soft metals.<br>The shape of the milled tooth and large flutes prevent clogging problems.               |
| <b>Cut 2</b> |  | Straight tooth cut.<br>Recommended for universal coarse stock removal and prefinishing on soft metals.<br>The shape of the milled tooth and large flutes prevent clogging problems. |
| <b>Cut 3</b> |  | Straight tooth cut.<br>Recommended for coarse machining of soft metals.<br>The shape of the milled tooth and large flutes prevent clogging problems.                                |

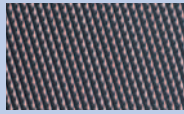
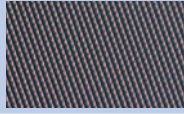


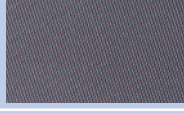

**Sharpening files**

|                           |  |  |
|---------------------------|--|--|
| <b>Cut 1/<br/>Bastard</b> |  | Single cut.<br>For universal sharpening. |
| <b>Cut 2/<br/>Second</b>  |  | Single cut.<br>For universal sharpening. |
| <b>Cut 3/<br/>Smooth</b>  |  | Single cut.<br>For universal sharpening. |

**Wood rasps**

|                           |   |   |
|---------------------------|---|---|
| <b>Cut 1/<br/>Bastard</b> |   | Rasp cut.<br>Recommended for coarse machining and for coarse stock removal. |
| <b>Cut 2/<br/>Second</b>  |   | Rasp cut.<br>For universal coarse stock removal and prefinishing.           |
| <b>Cut 3/<br/>Smooth</b>  |  | Rasp cut.<br>For fine work and prefinishing.                                |

**Swiss pattern/precision files**

|               |  |  |
|---------------|--|--|
| <b>Cut 00</b> |  | Cross cut.<br>Recommended for very coarse precision work.    |
| <b>Cut 0</b>  |  | Cross cut.<br>Recommended for very coarse precision work.    |
| <b>Cut 1</b>  |  | Cross cut.<br>Recommended for medium precision work.         |
| <b>Cut 2</b>  |  | Cross cut.<br>Recommended for medium to fine precision work. |
| <b>Cut 3</b>  |  | Cross cut.<br>Recommended for fine precision work.           |
| <b>Cut 4</b>  |  | Cross cut.<br>Recommended for very fine precision work.      |

### PF – The PERFECT FILE



PFERD also offers from its wide-ranging program a selection of the most commonly-used files in attractive protective sleeves for sales promotions.

Files in PERFECT FILE packaging are marked in the catalogue and in the product tables with a "P" at the end of the product EDP number.

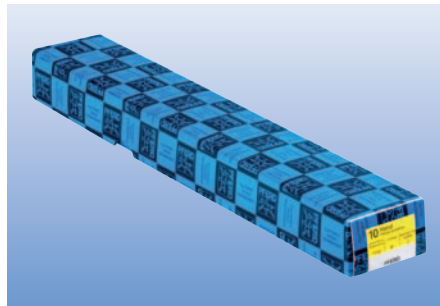
Machinist's files in PERFECT FILE packaging are highly recommended for sales-promoting presentations at a point of purchase.

Our PERFECT FILE files are clearly labelled to help the customers find the file they need more quickly and can be attractively presented with the PFERD TOOL-CENTER.

#### Advantages

- Each file is delivered with the ergonomic file handle.
- Protective, individual packaging perfectly suited to the product.
- Individual labelling with barcode.
- Easy to hang for direct sale on your sales wall.
- Application information allows quick selection of products.
- Popular types can be positioned effectively at a point of purchase.
- The superb product presentation of PFERD files supports you in selling brand-name quality tools.

### PFERD industrial packaging



The oldest hand tool in the world is traditionally rolled into paper which protects it against corrosion. PFERD packs all standard file deliveries in robust industrial packaging.

Depending on the file length, we offer packaging units of 5 or 10 pieces.

These files are delivered without a handle.

#### Advantages

- Robust packaging suited to the product.
- Coloured packaging labels mark the different file cuts.
- For the experienced user who has his own handle.

### PFERD TOOL-CENTER



On the TOOL-CENTER, the point of sale system from PFERD, you will find all the important information required for selecting the most appropriate tool. The PFERD information and symbol cards contain important tips about tools and applications.

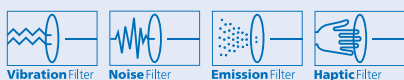
If you have questions, your local retailer or PFERD representative will be happy to assist you.

### PFERDVALUE® – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD products offer measurable added value.

Discover **PFERDERGONOMICS®** and **PFERDEFFICIENCY®**

As part of **PFERDERGONOMICS®**, PFERD offers ergonomically optimized products and power tools that contribute to greater safety and working comfort, and thus to health protection.

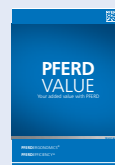


As part of **PFERDEFFICIENCY®**, PFERD offers innovative, high-performance solutions and power tools with outstanding added value.



#### PFERDMEDIA

For more information, a complete brochure is available. Please visit [pferdusa.com/pferdvalue](http://pferdusa.com/pferdvalue) to request a free copy or to download a pdf version.

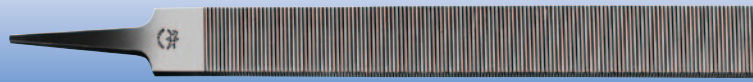


### PFERD PRAXIS

PFERD PRAXIS brochures contain valuable information on material properties, and technical tips on the use of PFERD products. Visit [pferdusa.com/info](http://pferdusa.com/info) to request a free copy or to download a pdf version.

- Steel
- Stainless steel (INOX)
- Aluminum
- Plastics & composites

### Aluminum flat




This file has fast cutting teeth specially designed for use on aluminum alloys, soft steel and various non-ferrous metals. Single cut, uniform in thickness, special tooth construction eliminates clogging.

#### Applications

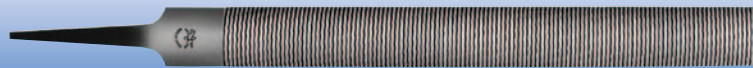
- Surface work
- Deburring
- Shaping and refining of rectangular shapes

#### PFERD specification number

1612 W

| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Cut 0 | Compatible handle EDP |  |
|-----------------|------------------------|-----------------------------|-----------------------|---|
| 10              | 31/32 x 1/4            | 17103                       | 11146                 | 10  |
| 12              | 1-5/32 x 9/32          | 17104                       | 11148                 | 5   |

### Aluminum half round




Like the flat aluminum, this file is made especially for use on aluminum and soft metals. The half round shape permits filing on concave surfaces and rounding out holes. The flat side is single cut and the half round side is spiral cut.

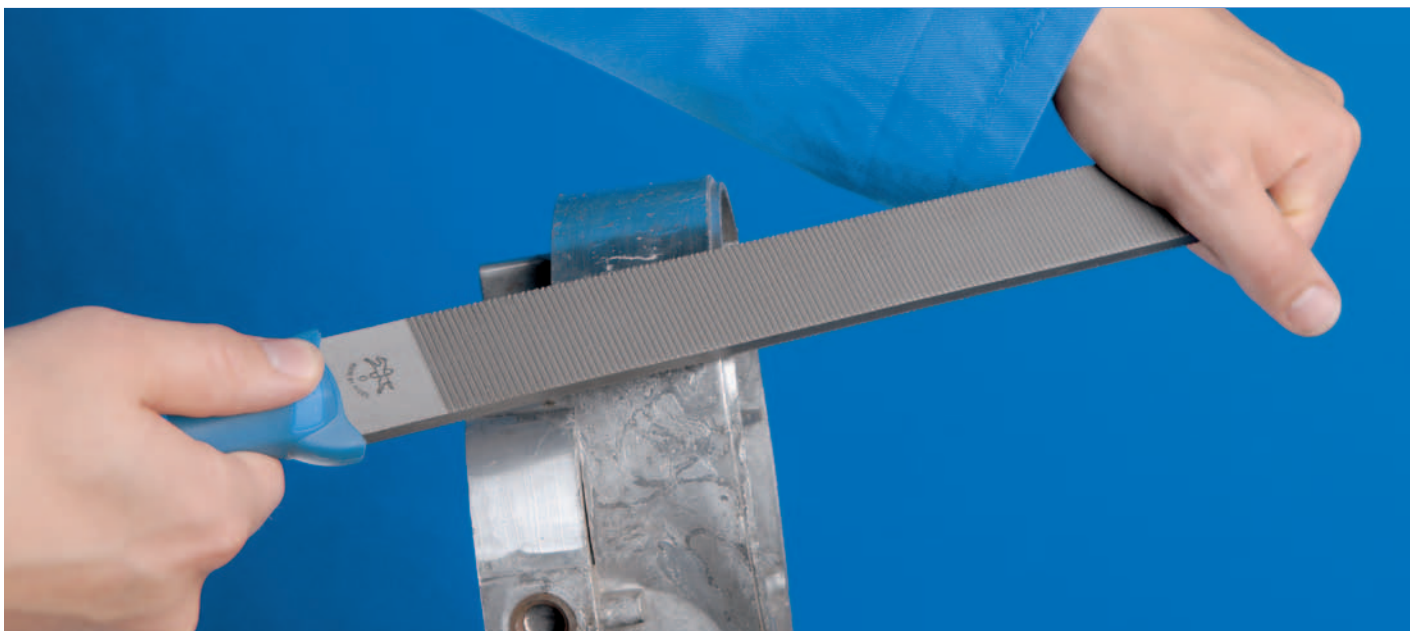
#### Applications

- Surface work
- Deburring
- Shaping and refining of rectangular and round through-holes
- Filing of curved shapes

#### PFERD specification number

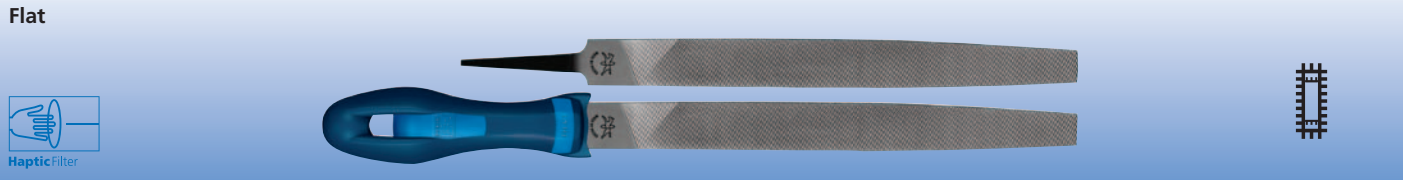
1652 W

| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Cut 0 | Compatible handle EDP |  |
|-----------------|------------------------|-----------------------------|-----------------------|---|
| 10              | 15/16 x 9/32           | 17107                       | 11146                 | 10  |
| 12              | 1-1/8 x 11/32          | 17108                       | 11148                 | 5   |



# American pattern files

## Machinist's files



### Flat



Tapered in width at the point and slightly tapered in thickness at the point, flat files are double cut on both sides and are single cut on both edges. Used extensively by machinists on ferrous and non-ferrous metals for rapid stock removal.

#### Applications

- Surface work
- Deburring
- Stock removal on rectangular shapes
- Shaping and refining of through-holes

#### Ordering note

EDPs ending in "P" include handle.

#### PFERD specification number

1122

| Length [Inches]           | Cross-section [Inches] | Cut and EDP number |                |                | Compatible handle EDP | Included handle EDP |    |
|---------------------------|------------------------|--------------------|----------------|----------------|-----------------------|---------------------|----|
|                           |                        | Bastard (cut 1)    | Second (cut 2) | Smooth (cut 3) |                       |                     |    |
| <b>Flat (plain)</b>       |                        |                    |                |                |                       |                     |    |
| 4                         | 13/32 x 3/32           | 11001              | 11002          | 11003          | 11143                 | –                   | 10 |
| 6                         | 5/8 x 5/32             | 11004              | 11005          | 11006          | 11144                 | –                   | 10 |
| 8                         | 25/32 x 7/32           | 11007              | 11008          | 11009          | 11146                 | –                   | 10 |
| 10                        | 31/32 x 1/4            | 11010              | 11011          | 11012          | 11146                 | –                   | 10 |
| 12                        | 1-5/32 x 9/32          | 11013              | 11014          | 11015          | 11148                 | –                   | 5  |
| 14                        | 1-11/32 x 5/16         | 11016              | –              | –              | 11148                 | –                   | 5  |
| <b>Flat (with handle)</b> |                        |                    |                |                |                       |                     |    |
| 8                         | 25/32 x 7/32           | 11007 P            | 11008 P        | 11009 P        | –                     | 11146               | 5  |
| 10                        | 31/32 x 1/4            | 11010 P            | 11011 P        | 11012 P        | –                     | 11146               | 5  |
| 12                        | 1-5/32 x 9/32          | 11013 P            | 11014 P        | 11015 P        | –                     | 11148               | 5  |



### Flat PLUS



Not only for professional applications, PLUS files are widely used in trades and DIY workshops due to their versatility. PLUS files are noted for outstanding stock removal due to spade-shaped teeth, requiring minimum effort in use. Broad chip breakers prevent loading problems when filing soft materials.

#### Applications

- Surface work
- Deburring
- Stock removal on rectangular shapes
- Shaping or refining of rectangular shapes

#### Ordering note

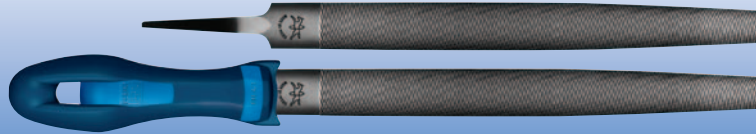
EDPs ending in "P" include handle.

#### PFERD specification number

PF 1112 PLUS

| Length [Inches]           | Cross-section [Inches] | Cut and EDP number PLUS Cut | Compatible handle EDP | Included handle EDP |   |
|---------------------------|------------------------|-----------------------------|-----------------------|---------------------|---|
| <b>Flat (with handle)</b> |                        |                             |                       |                     |   |
| 8                         | 25/32 x 7/32           | 11134 P                     | –                     | 11146               | 5 |
| 10                        | 31/32 x 1/4            | 11135 P                     | –                     | 11148               | 5 |
| 12                        | 1-5/32 x 9/32          | 11136 P                     | –                     | 11148               | 5 |

### Half round (tapered)



These files are used for filing out concave surfaces and crevices, and for rounding out holes. The flat side of the file is double cut for use on flat surfaces. The half round side is spiral cut which removes metal rapidly and leaves a smooth finish.

#### Applications


- Surface work
- Stock removal in radius areas
- Deburring
- Filing of through-holes
- Filing of curved shapes

#### Ordering note

EDPs ending in "P" include handle.

#### PFERD specification number

1152 SP

| Length [Inches] | Cross-section [Inches] | Cut and EDP number |                |                | Compatible handle EDP | Included handle EDP |  |
|-----------------|------------------------|--------------------|----------------|----------------|-----------------------|---------------------|---|
|                 |                        | Bastard (cut 1)    | Second (cut 2) | Smooth (cut 3) |                       |                     |   |

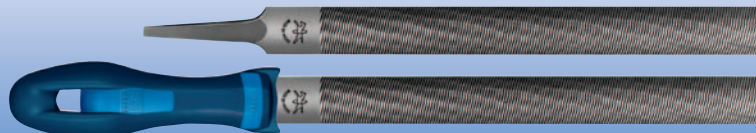
#### Half round (plain)

|    |                |       |       |       |       |   |    |
|----|----------------|-------|-------|-------|-------|---|----|
| 4  | 13/32 x 3/32   | 11150 | 11151 | 11152 | 11143 | – | 10 |
| 6  | 19/32 x 5/32   | 11020 | 11021 | 11022 | 11144 | – | 10 |
| 8  | 3/4 x 7/32     | 11023 | 11024 | 11025 | 11146 | – | 10 |
| 10 | 15/16 x 9/32   | 11026 | 11027 | 11028 | 11146 | – | 10 |
| 12 | 1-1/8 x 11/32  | 11029 | 11030 | 11031 | 11148 | – | 5  |
| 14 | 1-9/32 x 13/32 | 11032 | -     | -     | 11148 | – | 5  |

#### Half round (with handle)

|    |               |         |         |         |   |       |   |
|----|---------------|---------|---------|---------|---|-------|---|
| 8  | 3/4 x 7/32    | 11023 P | 11024 P | 11025 P | – | 11146 | 5 |
| 10 | 15/16 x 9/32  | 11026 P | 11027 P | 11028 P | – | 11146 | 5 |
| 12 | 1-1/8 x 11/32 | 11029 P | –       | –       | – | 11148 | 5 |

### Half round pipeline



Designed for filing pipeline welds and root passes, and for scale removal from pipeline.

#### Applications

- Designed for filing pipeline welds and root passes
- For scale removal from pipelines

#### Ordering note

EDP ending in "H" include handle.

#### PFERD specification number

1152

| Length [Inches] | Cross-section [Inches] | Cut and EDP number Bastard (cut 1) | Compatible handle EDP | Included handle EDP |  |
|-----------------|------------------------|------------------------------------|-----------------------|---------------------|---|
|-----------------|------------------------|------------------------------------|-----------------------|---------------------|---|

#### Half round pipeline

|    |               |       |       |   |   |
|----|---------------|-------|-------|---|---|
| 14 | 1-3/8 x 11/32 | 11155 | 11148 | – | 5 |
|----|---------------|-------|-------|---|---|

#### Half round pipeline (with handle)

|    |               |         |   |       |   |
|----|---------------|---------|---|-------|---|
| 14 | 1-3/8 x 11/32 | 11155 H | – | 11148 | 5 |
|----|---------------|---------|---|-------|---|

### Hand




This file has the same cross-sectional dimensions as the flat file but is blunt in shape (no taper). Double cut, it has one safe (uncut) edge which permits filing one surface without damaging an adjoining one.

#### Applications

- Surface work
- Deburring
- Stock removal on rectangular shapes

#### PFERD specification number

1112

| Length [Inches]     | Cross-section [Inches] | Cut and EDP number |                |                | Compatible handle EDP | Included handle EDP |  |
|---------------------|------------------------|--------------------|----------------|----------------|-----------------------|---------------------|---|
|                     |                        | Bastard (cut 1)    | Second (cut 2) | Smooth (cut 3) |                       |                     |   |
| <b>Hand (plain)</b> |                        |                    |                |                |                       |                     |   |
| 6                   | 5/8 x 5/32             | 11036              | 11037          | 11038          | 11144                 | –                   | 10  |
| 8                   | 25/32 x 7/32           | 11039              | 11040          | 11041          | 11146                 | –                   | 10  |
| 10                  | 31/32 x 1/4            | 11042              | 11043          | -              | 11146                 | –                   | 10  |
| 12                  | 1-5/32 x 9/32          | 11045              | -              | -              | 11148                 | –                   | 5   |

### Knife




Shaped like a knife blade, this file is commonly used on slots and keyways and for acute angle work in diemaking. Sides are double cut and the thin edge is cut but the back is safe (uncut).

#### Applications

- Surface work
- Deburring
- Shaping and refining of acute-angled shapes
- Stock removal on narrow shapes
- Filing of through-holes

#### PFERD specification number

1172

| Length [Inches]      | Cross-section [Inches] | Cut and EDP number |                |                | Compatible handle EDP | Included handle EDP |  |
|----------------------|------------------------|--------------------|----------------|----------------|-----------------------|---------------------|---|
|                      |                        | Bastard (cut 1)    | Second (cut 2) | Smooth (cut 3) |                       |                     |   |
| <b>Knife (plain)</b> |                        |                    |                |                |                       |                     |   |
| 8                    | 27/32 x 3/16           | 11055              | 11056          | 11057          | 11145                 | –                   | 10  |

### Long angle lathe



Long angle lathe files are used by lathe operators to deburr turned parts.

Opposed direction of the (single) cut on the front and back side forces the file away from the chuck during lathe work, improving safety.


Rectangular file with tang, cut on two sides, two edges uncut, available in special PFERD cut (single cut).

#### Application

Deburring

#### PFERD specification number

1612 DE

| Length [Inches] | Cross-section [Inches] | Cut and EDP number |                | Compatible handle EDP |  |
|-----------------|------------------------|--------------------|----------------|-----------------------|---|
|                 |                        | Bastard (cut 1)    | Second (cut 2) |                       |   |
| 10              | 31/32 x 1/4            | 17005              |                | 11146                 | 10  |
| 12              | 1-5/32 x 9/32          | 17006              |                | 11148                 | 5   |

### Round



This popular machinist file is designed for enlarging circular holes or rounded grooves that are too small for a half round file. It tapers toward the point making it adaptable for use on various size holes.

#### Applications


- Stock removal in radius areas
- Deburring
- Filing of through-holes
- Filing of interior radius shapes

#### Ordering note

EDPs ending in "P" include handle.

#### PFERD specification number

1162

| Length [Inches]            | Diameter [Inches] | Cut and EDP number |                |                | Compatible handle EDP | Included handle EDP |  |
|----------------------------|-------------------|--------------------|----------------|----------------|-----------------------|---------------------|---|
|                            |                   | Bastard (cut 1)    | Second (cut 2) | Smooth (cut 3) |                       |                     |   |
| <b>Round (plain)</b>       |                   |                    |                |                |                       |                     |   |
| 4                          | 5/32              | 11061              | 11062          | 11063          | 11143                 | –                   | 10  |
| 6                          | 7/32              | 11064              | 11065          | 11066          | 11144                 | –                   | 10  |
| 8                          | 5/16              | 11067              | 11068          | 11069          | 11145                 | –                   | 10  |
| 10                         | 3/8               | 11070              | 11071          | 11072          | 11145                 | –                   | 10  |
| 12                         | 1/2               | 11073              | 11074          | 11075          | 11147                 | –                   | 5   |
| 14                         | 5/8               | 11076              | -              | -              | 11147                 | –                   | 5   |
| <b>Round (with handle)</b> |                   |                    |                |                |                       |                     |   |
| 8                          | 5/16              | 11067 P            | 11068 P        | 11069 P        | –                     | 11145               | 5   |
| 10                         | 3/8               | 11070 P            | 11071 P        | 11072 P        | –                     | 11145               | 5   |
| 12                         | 1/2               | 11073 P            | –              | –              | –                     | 11147               | 5   |

### Square



Handy for use on slots, keyways, rectangular or square holes and for surface work, this file has four equal sides. Double cut, it tapers toward the point.

#### Applications


- Filing of shapes
- Filing of through-holes

#### Ordering note

EDPs ending in "P" include handle.

#### PFERD specification number

1142

| Length [Inches]             | Cross-section [Inches] | Cut and EDP number |                |                | Compatible handle EDP | Included handle EDP |  |
|-----------------------------|------------------------|--------------------|----------------|----------------|-----------------------|---------------------|---|
|                             |                        | Bastard (cut 1)    | Second (cut 2) | Smooth (cut 3) |                       |                     |   |
| <b>Square (plain)</b>       |                        |                    |                |                |                       |                     |   |
| 4                           | 5/32                   | 11081              | 11082          | 11083          | 11143                 | –                   | 10  |
| 6                           | 7/32                   | 11084              | 11085          | 11086          | 11144                 | –                   | 10  |
| 8                           | 5/16                   | 11087              | 11088          | 11089          | 11145                 | –                   | 10  |
| 10                          | 3/8                    | 11090              | 11091          | 11092          | 11145                 | –                   | 10  |
| 12                          | 1/2                    | 11093              | 11094          | –              | 11147                 | –                   | 5   |
| <b>Square (with handle)</b> |                        |                    |                |                |                       |                     |   |
| 8                           | 5/16                   | 11087 P            | 11088 P        | –              | –                     | 11145               | 5   |
| 10                          | 3/8                    | 11090 P            | 11091 P        | –              | –                     | 11145               | 5   |

### Three square



Three square files are triangular in cross-section, double cut and have fairly sharp corners that are slightly set and cut. These files are for general use by machinists for filing internal acute angles, for cleaning out square corners and filing taps and cutters.

#### Applications


- Surface work
- Deburring
- Filing of through-holes

#### Ordering note

EDPs ending in "P" include handle.

#### PFERD specification number

1132

| Length [Inches]                   | Cross-section [Inches] | Cut and EDP number |                |                | Compatible handle EDP | Included handle EDP |  |
|-----------------------------------|------------------------|--------------------|----------------|----------------|-----------------------|---------------------|---|
|                                   |                        | Bastard (cut 1)    | Second (cut 2) | Smooth (cut 3) |                       |                     |   |
| <b>Three square (plain)</b>       |                        |                    |                |                |                       |                     |   |
| 6                                 | 15/32                  | 11097              | 11098          | 11099          | 11144                 | –                   | 10  |
| 8                                 | 5/8                    | 11100              | 11101          | 11102          | 11145                 | –                   | 10  |
| 10                                | 3/4                    | 11103              | 11104          | 11105          | 11147                 | –                   | 10  |
| <b>Three square (with handle)</b> |                        |                    |                |                |                       |                     |   |
| 8                                 | 5/8                    | 11100 P            | 11101 P        | 11102 P        | –                     | 11145               | 5   |
| 10                                | 3/4                    | 11103 P            | 11104 P        | –              | –                     | 11147               | 5   |

### Tungsten point




Tungsten point files are very thin, making them particularly suitable for use on electrical contact points and in narrow grooves and slots. Once tips become worn, they can be broken off.

The punched tang eliminates the need for an additional handle.

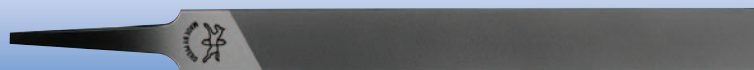
Rectangular file with flat handle, cut on two sides; available in cut 2.

#### PFERD specification number

1118 A

| Length [Inches] | Cut and EDP number<br>Second (cut 2) |  |
|-----------------|--------------------------------------|---|
| 4               | 17008                                | 10  |


### Veneer knife



Specially designed for sharpening veneer knives. Thin, rectangular shape with two round, safe edges.

#### PFERD specification number

1213 RUK

| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP |  |
|-----------------|------------------------|--------------------------------------|-----------------------|---|
| 8               | 25/32 x 1/8            | 17044                                | 11146                 | 10  |



### Warding




Widely used by locksmiths in filing the wards in locks and keys, this file is also favored by machinists for narrow slotting and working on intricate shapes. Double cut, it is uniform but very thin in thickness and tapers in width toward the point.

#### Applications

- Surface work
- Deburring
- Working on intricate shapes
- Narrow slotting

#### PFERD specification number

1127

| Length [Inches] | Cross-section [Inches] | Cut and EDP number |                |                | Compatible handle EDP |  |
|-----------------|------------------------|--------------------|----------------|----------------|-----------------------|---|
|                 |                        | Bastard (cut 1)    | Second (cut 2) | Smooth (cut 3) |                       |   |
| 4               | 15/32 x 3/64           | 11107              | 11108          | 11109          | 11143                 | 10  |
| 6               | 5/8 x 5/64             | 11110              | 11111          | 11112          | 11143                 | 10  |

This set comes in a rugged, weather-resistant PVC roll-up pouch for optimum protection. An indispensable item for the tool box of every mobile tradesman or fitter.

#### Industry/target group

- Industry
- Trades
- DIY sector

#### PFERD specification number


520 WRU

#### PFERDERGONOMICS®



#### Machinist's files in plastic pouch



| Length [Inches] | Content (each file with appropriate ergonomic handle)  | EDP number |  |
|-----------------|--|------------|---|
| 8               | File set 520 WRU: 8" hand bastard, square bastard, half round bastard, round bastard, half round wood rasp second cut              | 16077      | 1   |
| 8               | File set 531 WRU: 8" hand bastard, three square bastard, square bastard, tapered half round bastard, round bastard                 | 16078      | 1   |
| 8               | File set 532 WRU: 8" hand second cut, three square second cut, square second cut, tapered half round second cut, round second cut  | 16079      | 1   |
| 10              | File set 541 WRU: 10" hand bastard, three square bastard, square bastard, tapered half round bastard, round bastard                | 16080      | 1   |
| 10              | File set 542 WRU: 10" hand second cut, three square second cut, square second cut, tapered half round second cut, round second cut | 16081      | 1   |

These files are specifically designed to meet the needs of DIY users. Its professional quality makes this product very versatile.

Due to their high precision and cutting performance, these files meet the highest standards of quality and longevity.

Supplied in an attractive cardboard box. Each file comes with matching ergonomic handle.

Each set consists of one of each file:

- 8" universal file rasp
- 8" half round file
- 8" all purpose file

#### PFERD specification number


PF-Set 300 200 mm

#### PFERDERGONOMICS®



#### File set



| Length [Inches] | Content (each file with appropriate ergonomic handle) | EDP number |  |
|-----------------|---|------------|---|
| 8               | 8" file set – home/hobby 3 pcs (PF-Set 300)           | 16070      | 1   |

# American pattern files

## Special files

PFERD special files are specially suitable for roughing and sharpening. Due to their high quality, they can be used by professional as well

as by DIY users. These files achieve high stock removal rates and a long service life.

PFERD special files come with PF packaging and ergonomic file handle.


### Hobby file



Rectangular file, tanged, with different cuts on three sides and ergonomic file handle. Cross

cut 1 on front side for roughing, single cut 2 on back side for sharpening and one cut edge.

**Application**  
Roughing and sharpening

| Length [Inches] | Cross-section [Inches] | Cut              | EDP number | Included handle EDP |  |
|-----------------|------------------------|------------------|------------|---------------------|---|
| 8               | 1 x 5/32               | Cross 1/single 2 | 16053 P    | 11146               | 5   |


### File rasp



Rectangular file, tanged, with different cuts on three sides and ergonomic file handle. Cross

cut 1 on front side for roughing, rasp cut 1 on back side for rasping and one cut edge.

**Application**  
Roughing and sharpening

| Length [Inches] | Cross-section [Inches] | Cut            | EDP number | Included handle EDP |  |
|-----------------|------------------------|----------------|------------|---------------------|--|
| 8               | 25/32 x 13/64          | Cross 1/rasp 1 | 16056 P    | 11146               | 5  |


### Farmer's own rotary mower



Rectangular file, tanged, single cut 2 on two sides, with rounded, uncut narrow edges and

ergonomic file handle. Often referred to as a lawnmower file.

**Application**  
Sharpening of cutting tools

| Length [Inches] | Cross-section [Inches] | Cut      | EDP number | Included handle EDP |  |
|-----------------|------------------------|----------|------------|---------------------|---|
| 8               | 15/32 x 1/8            | Single 2 | 17125 P    | 11146               | 5   |

### Fitter's file



Rectangular file with different milled cuts, tanged and with ergonomic file handle. Straight cut with chip breaker on front side, radial cut on back side, uncut edges.

**Applications**

- General use on various materials, even on synthetic resin fillers or wood containing nails
- Roughing, deburring and filing of soldered seams

| Length [Inches] | Cross-section [Inches] | Cut                 | EDP number | Included handle EDP |  |
|-----------------|------------------------|---------------------|------------|---------------------|---|
| 10              | 15/32 x 1/8            | Radial 1/straight 2 | 16058      | 11146               | 5   |

Key files are small tools for light, delicate filing tasks, especially in tool- and mould-making. Also commonly used on locks and keys, they are well-suited for electricians, mechanics and anyone engaged in precision work.

**Applications**

- Deburring
- Shaping and refining rectangular shapes
- Filing of through-holes
- Surface machining

**Hand  
1117**



| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP |    |
|-----------------|------------------------|--------------------------------------|-----------------------|----|
| 4               | 25/64 x 1/16           | 11117                                | 11143                 | 10 |
| 6               | 5/8 x 5/64             | 11119                                | 11143                 | 10 |

**Flat  
1127**



| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP |    |
|-----------------|------------------------|--------------------------------------|-----------------------|----|
| 4               | 25/64 x 1/16           | 11140                                | 11143                 | 10 |
| 6               | 5/8 x 5/64             | 11111                                | 11143                 | 10 |

**Three square  
1137**



| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP |    |
|-----------------|------------------------|--------------------------------------|-----------------------|----|
| 4               | 13/64                  | 11121                                | 11143                 | 10 |

**Square  
1147**



| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP |    |
|-----------------|------------------------|--------------------------------------|-----------------------|----|
| 4               | 1/8                    | 11123                                | 11143                 | 10 |

**Half round  
1157**



| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP |    |
|-----------------|------------------------|--------------------------------------|-----------------------|----|
| 4               | 11/32 x 1/8            | 11125                                | 11143                 | 10 |

**Round  
1167**



| Length [Inches] | Diameter [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP |    |
|-----------------|-------------------|--------------------------------------|-----------------------|----|
| 4               | 1/8               | 11127                                | 11143                 | 10 |

# American pattern files

## Key file sets



### Key file set 265 A



#### Contents


Six key files in selected shapes:

- Hand
- Flat
- Three square
- Square
- Half round
- Round

With quick-mounting handle in plastic pouch.

#### PFERD specification number

265 A

| Length [Inches] | Cut and EDP number<br>Second (cut 2) |  |
|-----------------|--------------------------------------|---|
| 4               | 17009                                | 1   |

### Key file set 265 B



#### Contents


Six key files in selected shapes:

- Hand
- Flat
- Three square
- Square
- Half round
- Round

All files with mounted wooden handles, in plastic pouch.

#### PFERD specification number

265 B

| Length [Inches] | Cut and EDP number<br>Second (cut 2) |  |
|-----------------|--------------------------------------|---|
| 4               | 17012                                | 1   |

### Key file set 265 K



#### Contents


Six key files in selected shapes:

- Hand
- Flat
- Three square
- Square
- Half round
- Round

All files with mounted wooden handle, in metal box.

#### PFERD specification number

265 K

| Length [Inches] | Cut and EDP number<br>Second (cut 2) |  |
|-----------------|--------------------------------------|---|
| 4               | 17010                                | 1   |

### Chain saw files



Round files for hand sharpening of saw chains with precise spiral cut for extreme sharpening and a particularly long tool life. The saw teeth sharpen quickly and without causing grooves. They allow cost-effective sharpening that is gentler than mechanical maintenance, without the thermal strain caused by friction.

PFERD offers two cut types. The "Classic line" spiral cut is impressive, due to the high degree of stock removal and aggressive sharpening behaviour.

The finer spiral cut of the "Premium line" provides increased stock removal, with a smoother filing action.


Can be delivered in various diameters, suitable for all commercially available saw chains. Available in packaging units of 6, 60, 300 and 600 pieces, in a practical box, or in units of 12 or 40 pieces, in a promotional plastic pouch.

#### Recommendation for use

Two to three light filing strokes are enough for normal sharpening. Stock removal is kept to the necessary minimum to preserve the chain and its service life.

#### PFERD specification number

412-8

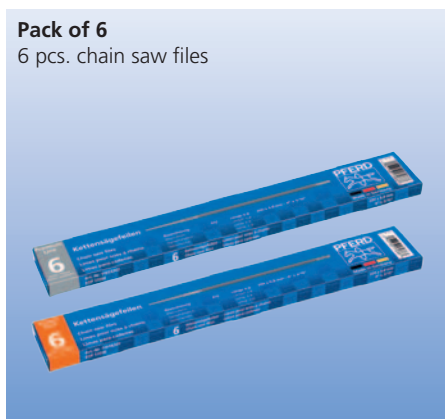
| Length [Inches] | Diameter [Inches] | Chain pitch [Inches] | Line and EDP number |  | Compatible handle EDP |  |
|-----------------|-------------------|----------------------|---------------------|--|-----------------------|--|
|                 |                   |                      | Classic line        | Premium line <span style="color: red; font-weight: bold;">NEW</span> |                       |  |
| 8               | 5/32              | 1/4                  | 17047               | 17074  | 17046                 | 6  |
| 8               | 11/64             | 3/8 LP*              | 17057               | 17075  | 17046                 | 6  |
| 8               | 3/16              | .325                 | 17038               | 17076  | 17046                 | 6  |
| 8               | 13/64             | 3/8                  | 17048               | 17077  | 17045, 17046          | 6  |
| 8               | 7/32              | 3/8, .404            | 17039               | 17078  | 17045, 17046          | 6  |
| 8               | 1/4               | 1/2                  | 17040               | –  | 17045, 17046          | 6  |
| 8               | 5/16              | 3/4                  | 17061               | –  | 17045, 17046          | 6  |

\*LP = Low Profile

### Packing system for PFERD chain saw files

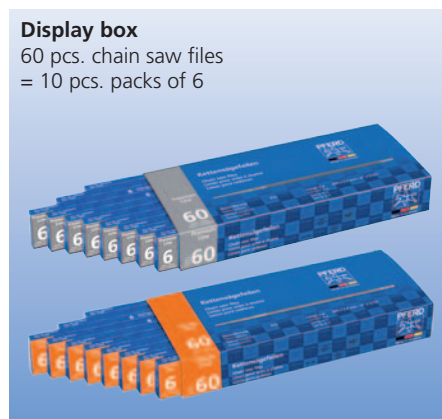
#### Pack of 6

6 pcs. chain saw files



#### Display box

60 pcs. chain saw files  
= 10 pcs. packs of 6



# Sharpening files

## Chain saw files

Two round files with "classic line" spiral cut in a promotional plastic pack to protect them from dirt and damage. The overlapping opening of the pack on the back means that it keeps the files secure.


One box contains twenty plastic packs with two files each (40 files total).

Deliverable file diameter: 5/32", 3/16", 7/32".

**PFERD specification number**  
4122 SK

### Chain saw files, skin packed 2-pack sleeve



| Length [Inches] | Diameter [Inches] | Chain pitch [Inches] | Line and EDP number<br>Classic line |  |
|-----------------|-------------------|----------------------|-------------------------------------|---|
| 8               | 5/32              | 1/4; 3/8 LP*         | 17058                               | 40  |
| 8               | 3/16              | .325                 | 17059                               | 40  |
| 8               | 7/32              | 3/8; 404             | 17063                               | 40  |

\* LP = Low Profile

Three round files with "classic line" spiral cut in a promotional plastic pack to protect them from dirt and damage. The opening of the pack on the front makes it easier to remove and repack the files.

One box contains four plastic packs with three files each (12 files total).


Deliverable file diameter: 5/32", 3/16", 7/32".

**PFERD specification number**  
4122 SK

### Chain saw files, skin packed 3-pack sleeve

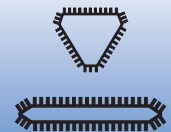
**NEW**



| Length [Inches] | Diameter [Inches] | Chain pitch [Inches] | Line and EDP number<br>Classic line |  |
|-----------------|-------------------|----------------------|-------------------------------------|---|
| 8               | 5/32              | 1/4; 3/8 LP*         | 17130                               | 12  |
| 8               | 3/16              | .325                 | 17132                               | 12  |
| 8               | 7/32              | 3/8; 404             | 17134                               | 12  |

\* LP = Low Profile

### Chisel bit files




For servicing and sharpening saw chains with a square gullet. For edge grinding saw chains. Available as a three square or flat file.

The three square type is particularly suited to sharpening 3/8" chains.

The flat type fulfills two functions: it can be used to sharpen the blade and also to reduce the depth gauge. Particularly recommended for beginners.

**PFERD specification number**  
DKT  
FLST

| Length [Inches] | Shape        | EDP number | Compatible handle EDP | Chain pitch [Inches] |  |
|-----------------|--------------|------------|-----------------------|----------------------|---|
| 7               | Three square | 17081      | 11146                 | .325                 | 12  |
| 7               | Flat         | 17082      | 11146                 | .325                 | 12  |

**Wooden handle for round chain saw files**



The special wooden handle has an angular contact surface which maintains a 35° filing angle for accurate, uniform sharpening of all chain teeth.

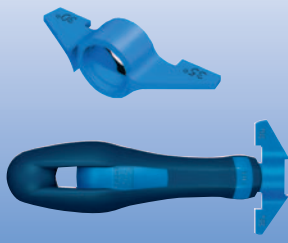
Compatible for the following file diameters:

- 13/64"
- 7/32"
- 1/4"
- 5/16"

**PFERD specification number**  
 HKSF-100

| Type | EDP number |     |
|------|------------|-----|
| Wood | 17045      | 100 |

**Plastic handle and filing angle guides**



The plastic chain saw file handle fits all diameters of PFERD chain saw files.

Defining an angle of 30° and 35°, the gauge mounts on the pin of the plastic file handle. Please observe your saw chain specifications.

**PFERD specification number**  
 FH 1 KSF  
 KSSL

**PFERDERGONOMICS®**



| Type                                      | EDP number |    |
|---|------------|----|
| <b>Plastic handle for chain saw files</b> |            |    |
| Plastic                                   | 17046      | 10 |
| <b>Filing angle guides</b>                |            |    |
| 25° - 30° guide                           | 17090      | 10 |
| 30° - 35° guide                           | 17091      | 10 |



# Sharpening files

## CHAIN SHARP



### CHAIN SHARP CS-X Saw chain sharpener



The new generation of saw chain sharpeners, CHAIN SHARP CS-X, features improved file position, optimized shape and simpler handling.

Available in four types, which are adapted to various chain pitches. This guarantees the highest degree of precision and optimum sharpening results.

The device creates a sharpening angle of 30°. The specified depth gauge distance can be found in the table.

#### Saw chain sharpeners consist of the following

- one sharpening device
- one depth gauge file
- two chain saw files

#### Advantages

- Change from the right to the left tooth by flipping the device – no retrofitting required
- Optimised shape for more precise guiding
- Changing the files is easy due to the improved shape of the device

The sharpening device can be delivered with detailed operating instructions in a transparent, reusable plastic pouch, which protects against damage and dirt.

#### PFERD specification number

CS-X

#### PFERDERGONOMICS®



#### PFERDEFFICIENCY®



#### PFERDMEDIA

To see it in action, please visit [pferdusa.com/CSX](http://pferdusa.com/CSX)

| Chain saw file dia.<br>[Inches] | Chain pitch<br>[Inches] | Depth gauge distance<br>[Inches] | EDP number | Replacement<br>depth gauge file | Replacement round file |              |   |
|---------------------------------|-------------------------|----------------------------------|------------|---------------------------------|------------------------|--------------|---|
|                                 |                         |                                  |            |                                 | Classic line           | Premium line |   |
| 5/32                            | 3/8 LP*                 | 0.025                            | 17300      | 17310                           | 17047                  | 17064        | 1 |
| 3/16                            | .325                    | 0.025                            | 17301      | 17310                           | 17038                  | 17066        | 1 |
| 13/64                           | 3/8                     | 0.025                            | 17303      | 17310                           | 17048                  | 17067        | 1 |
| 7/32                            | .404                    | 0.030                            | 17304      | 17310                           | 17039                  | 17068        | 1 |

\* LP = Low Profile

## Depth gauge files

### Replacement depth gauge file for CHAIN SHARP CS-X



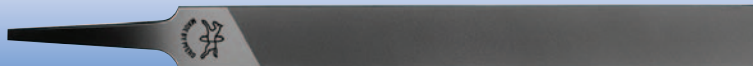
Rectangular file, cut on two sides. Matching the appropriate chain saw sharpeners.

#### PFERD specification number

4132

| For use with               | Length<br>[Inches] | Cross-section<br>[Inches] | EDP number |    |
|----------------------------|--------------------|---------------------------|------------|----|
| All CHAIN SHARP CS-X sizes | 8                  | 23/64 x 15/64             | 17310      | 10 |

### Depth gauge files (flat) for saw chain



Flat files are used to maintain the height of depth gauges on saw chain.

Rectangular file, tanged, with two rounded uncut edges, cut on two sides. Available in two lengths.

#### PFERD specification number

1213 RUK

| Length<br>[Inches] | Cross-section<br>[Inches] | Cut and EDP number<br>Second (cut 2) | Compatible<br>handle EDP |    |
|--------------------|---------------------------|--------------------------------------|--------------------------|----|
| 6                  | 5/8 x 3/32                | 17043                                | 11143                    | 10 |
| 8                  | 25/32 x 1/8               | 17044                                | 11146                    | 10 |




### Mill, tapered



Mill files are suitable both as engineering and sharpening files. Useful for filing where a smooth finish is important. Also good for polishing and deburring work in lathes.

Mill files are widely applicable for sharpening tools and implements. Two square edges. Single cut on sides and edges. All sizes slightly tapered in width.

**PFERD specification number**  
1212 SP

| Length [Inches] | Cross-section [Inches] | Cut and EDP number |                |                | Compatible handle EDP | Included handle EDP |  |
|-----------------|------------------------|--------------------|----------------|----------------|-----------------------|---------------------|---|
|                 |                        | Bastard (cut 1)    | Second (cut 2) | Smooth (cut 3) |                       |                     |   |

#### Mill, tapered (plain)

|    |               |       |       |       |       |   |    |
|----|---------------|-------|-------|-------|-------|---|----|
| 6  | 19/32 x 7/64  | 19001 | 19002 | 19003 | 11144 | – | 10 |
| 8  | 25/32 x 9/64  | 19004 | 19005 | 19006 | 11146 | – | 10 |
| 10 | 31/32 x 11/64 | 19007 | 19008 | 19009 | 11146 | – | 10 |
| 12 | 1-5/32 x 7/32 | 19010 | 19011 | 19012 | 11148 | – | 10 |

### Mill, one round edge



Same as regular mill files except that they have one round edge. Single cut on sides and edges.

Round edges are used where rounded gullets are preferred, as opposed to sharp corners or square gullets.

**PFERD specification number**  
1212 gr

| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP | Included handle EDP |  |
|-----------------|------------------------|--------------------------------------|-----------------------|---------------------|---|
|-----------------|------------------------|--------------------------------------|-----------------------|---------------------|---|

#### Mill, one round edge (plain)

|   |              |       |       |   |    |
|---|--------------|-------|-------|---|----|
| 8 | 25/32 x 9/64 | 19017 | 11146 | – | 10 |
|---|--------------|-------|-------|---|----|


### Mill, two round edges



Same as regular mill files except that they have two round edges. Single cut on sides and edges.

Round edges are used where rounded gullets are preferred, as opposed to sharp corners or squared gullets.

**PFERD specification number**  
1212 r

| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP | Included handle EDP |  |
|-----------------|------------------------|--------------------------------------|-----------------------|---------------------|---|
|-----------------|------------------------|--------------------------------------|-----------------------|---------------------|---|

#### Mill, two round edges (plain)

|    |               |       |       |   |    |
|----|---------------|-------|-------|---|----|
| 8  | 25/32 x 9/64  | 19019 | 11146 | – | 10 |
| 10 | 31/32 x 11/64 | 19020 | 11146 | – | 10 |

# Sharpening files

## Taper saw files

Triangular in shape and tapered toward the point, these single cut files are used primarily for sharpening handsaws, circular saws, narrow band, cross-cut and buck saws.

All have cut edges or corners to maintain saw gullets. Made in four cross sections: regular, slim, extra slim and double extra slim.

### Files recommended for various point handsaws

#### Points File

|        |               |
|--------|---------------|
| 5,5-12 | 7" taper      |
| 6      | 7" or 8" slim |
| 7      | 6" or 7" slim |

#### Points File

|    |  |
|----|--|
| 8  | 6" slim, 7" ex. slim, 8" dbl. ex. slim |
| 9  | 6" extra slim, 7" double extra slim    |
| 10 | 5" or 6" extra slim                    |


#### Points File

|       |                                     |
|-------|-------------------------------------|
| 11    | 5" extra slim, 6" double extra slim |
| 12    | 5" extra slim                       |
| 13,14 | 5" double extra slim                |

### Regular taper




PFERD specification number  
1232

| Length [Inches]              | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP | Included handle EDP |  |
|------------------------------|------------------------|--------------------------------------|-----------------------|---------------------|---|
| <b>Regular taper (plain)</b> |                        |                                      |                       |                     |   |
| 6                            | 15/32                  | 17018                                | 11144                 | –                   | 10  |
| 10                           | 23/32                  | 17021                                | 11145                 | –                   | 10  |

### Slim taper




PFERD specification number  
1237

| Length [Inches]           | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP | Included handle EDP |  |
|---------------------------|------------------------|--------------------------------------|-----------------------|---------------------|---|
| <b>Slim taper (plain)</b> |                        |                                      |                       |                     |   |
| 4                         | 7/32                   | 17022                                | 11143                 | –                   | 10  |
| 5                         | 9/32                   | 17023                                | 11143                 | –                   | 10  |
| 6                         | 11/32                  | 17024                                | 11144                 | –                   | 10  |
| 7                         | 13/32                  | 17025                                | 11145                 | –                   | 10  |
| 8                         | 15/32                  | 17026                                | 11145                 | –                   | 10  |

### Extra slim taper




PFERD specification number  
1238

| Length [Inches]                 | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP | Included handle EDP |  |
|---------------------------------|------------------------|--------------------------------------|-----------------------|---------------------|---|
| <b>Extra slim taper (plain)</b> |                        |                                      |                       |                     |   |
| 4                               | 3/16                   | 17027                                | 11143                 | –                   | 10  |
| 6                               | 9/32                   | 17029                                | 11144                 | –                   | 10  |

### Double extra slim taper



PFERD specification number  
1239

| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP |  |
|-----------------|------------------------|--------------------------------------|-----------------------|---|
| 5               | 3/16                   | 17032                                | 11143                 | 10  |
| 8               | 5/16                   | 17035                                | 11144                 | 10  |


## Cant and band saw files

### Cant saw



This blunt type file is used for sharpening small circular saws, buck saw blades and cross-cut saws. Single cut.

PFERD specification number  
1230

| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP |  |
|-----------------|------------------------|--------------------------------------|-----------------------|---|
| 8               | 7/8 x 1/2              | 17014                                | 11145                 | 10  |


### Band saw



This tapered triangular file with cut edges or corners is especially designed to sharpen narrow band saw teeth and maintain round gullets. Single cut.

**Application**  
Sharpening of band saws

PFERD specification number  
1231

| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Second (cut 2) | Compatible handle EDP |  |
|-----------------|------------------------|--------------------------------------|-----------------------|---|
| 6               | 15/32                  | 17117                                | 11144                 | 10  |
| 7               | 1/2                    | 17118                                | 11145                 | 10  |
| 8               | 9/16                   | 17119                                | 11145                 | 10  |

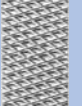
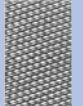
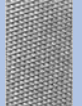
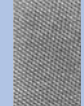



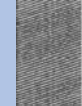

# Precision files

## Table of file cuts

PFERD precision files meet the most exacting standards of dimensional accuracy, cutting performance and longevity. Compared to machinist's files, precision files are smaller, easier

to handle, and possess a more precise geometry. They are employed in jig, fixture and tool making, specifically in the fabrication of moulds and dies (e.g., for punching, forming, forging


and stamping in volume production environments). In addition, precision files are needed in assembling and building complex devices and machines to the highest precision standards.

| Table of file cuts<br>Precision files       |  |  |  |  |  |  |  |  |  |  |
|---|--|---|---|---|---|---|---|---|---|---|
| Cuts per inch                               |  | 30  | 41  | 51  | 64  | 79  | 97  | 117   | 142   | 173   |
| File types                                  | Cuts   | Swiss cut 00 (cuts/inch)  | Swiss cut 0 (cuts/inch)   | Swiss cut 1 (cuts/inch)   | Swiss cut 2 (cuts/inch)   | Swiss cut 3 (cuts/inch)   | Swiss cut 4 (cuts/inch)   | Swiss cut 5 (cuts/inch)   | Swiss cut 6 (cuts/inch)   |   |
|   | Tang files<br>No. 800 - 875<br>4", 6" and 8" |   | 41  | 51  | 64  | 79  | 97  | 117   | 142   | 173   |
| Tang files<br>No. 800 - 875<br>10"          |  | 30  | 41  | 51  | 64  | 79  | 97  | 117   | 142   |   |
| CORINOX files<br>No. 800 - 860<br>6" and 8" |  | 41  | 51  | –   | 79  | –   | –   | –   | –   |   |
| Needle files<br>No. 2401 - 2416             |  | 51  | 64  | 79  | 97  | 117   | 142   | –   | –   |   |
| CORINOX needle files<br>No. 2301 - 2310     |  | –   | 64  | –   | 97  | –   | –   | –   | –   |   |
| Handy files<br>No. 2601 - 2610              |  | 41  | –   | 64  | –   | –   | –   | –   | –   |   |
| Riffler files<br>No. 900P - 996P<br>6"      |  | –   | 64  | –   | 97  | –   | 142   | –   | –   |   |
| Riffler files<br>No. 710P - 795P<br>7-1/4"  |  | –   | 41  | –   | 64  | –   | –   | –   | –   |   |
| Riffler files<br>No. 410P - 480P<br>12"     |  | –   | 30  | –   | 51  | –   | –   | –   | –   |   |

## Swiss pattern machinist's files


Pottance, hand-type  
800



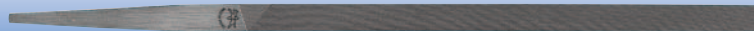
| Length [Inches] | Cross-section [Inches] | Swiss cut and EDP number |       |       |       |       |       | Compatible handle EDP |  |
|-----------------|------------------------|--------------------------|-------|-------|-------|-------|-------|-----------------------|---|
|                 |                        | 00                       | 0     | 1     | 2     | 3     | 4     |                       |   |
| 4               | 1/2 x 1/8              | 12609                    | 12610 | 12611 | 12612 | 12613 | 12614 | 11143                 | 12  |
| 6               | 5/8 x 5/32             | 12615                    | 12616 | 12617 | 12618 | 12619 | 12620 | 11144                 | 12  |
| 8               | 25/32 x 7/32           | 12622                    | 12623 | 12624 | 12625 | 12626 | 12627 | 11146                 | 12  |


**Pillar, regular  
810**



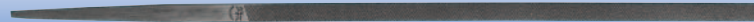
| Length<br>[Inches] | Cross-section<br>[Inches] | Swiss cut and EDP number |       |       | Compatible<br>handle EDP |  |
|--------------------|---------------------------|--------------------------|-------|-------|--------------------------|---|
|                    |                           | 00                       | 0     | 2     |                          |   |
| 6                  | 1/2 x 5/32                | 12689                    | 12690 | 12692 | 11144                    | 12  |
| 8                  | 9/16 x 3/16               | 12696                    | 12697 | 12699 | 11146                    | 12  |
| 10                 | 5/8 x 7/32                | 12702                    | 12703 | 12705 | 11146                    | 12  |


**Pillar, slim  
815**



| Length<br>[Inches] | Cross-section<br>[Inches] | Swiss cut and EDP number |       |       | Compatible<br>handle EDP |  |
|--------------------|---------------------------|--------------------------|-------|-------|--------------------------|---|
|                    |                           | 00                       | 0     | 2     |                          |   |
| 6                  | 5/16 x 1/8                | 12724                    | 12725 | 12727 | 11143                    | 12  |
| 8                  | 3/8 x 3/16                | 12730                    | 12731 | 12733 | 11144                    | 12  |
| 10                 | 1/2 x 3/16                | 12735                    | 12736 | 12737 | 11144                    | 12  |


**Pillar, extra slim  
820**



| Length<br>[Inches] | Cross-section<br>[Inches] | Swiss cut and EDP number |       |       | Compatible<br>handle EDP |  |
|--------------------|---------------------------|--------------------------|-------|-------|--------------------------|---|
|                    |                           | 00                       | 0     | 2     |                          |   |
| 6                  | 1/4 x 1/8                 | 12747                    | 12748 | 12750 | 11143                    | 12  |
| 8                  | 5/16 x 1/8                | 12753                    | 12754 | 12756 | 11143                    | 12  |


**Warding, flat, thin  
830**



| Length<br>[Inches] | Cross-section<br>[Inches] | Swiss cut and EDP number |       | Compatible<br>handle EDP |  |
|--------------------|---------------------------|--------------------------|-------|--------------------------|---|
|                    |                           | 0                        | 2     |                          |   |
| 6                  | 5/8 x 3/32                | 12894                    | 12895 | 11144                    | 12  |

**Half round  
835**



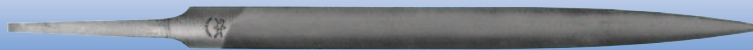
| Length<br>[Inches] | Cross-section<br>[Inches] | Swiss cut and EDP number |       |       |       |       |       | Compatible<br>handle EDP |  |
|--------------------|---------------------------|--------------------------|-------|-------|-------|-------|-------|--------------------------|---|
|                    |                           | 00                       | 0     | 1     | 2     | 3     | 4     |                          |   |
| 4                  | 1/2 x 1/8                 | 12567                    | 12568 | 12569 | 12570 | 12571 | 12572 | 11143                    | 12  |
| 6                  | 5/8 x 3/16                | 12574                    | 12575 | 12576 | 12577 | 12578 | 12579 | 11144                    | 12  |
| 8                  | 7/8 x 1/4                 | 12581                    | 12582 | 12583 | 12584 | 12585 | –     | 11146                    | 12  |
| 10                 | 1 x 1/4                   | 12587                    | 12588 | 12589 | –     | –     | –     | 11146                    | 12  |

# Precision files

## Swiss pattern machinist's files



### Half round, slim 840



| Length<br>[Inches] | Cross-section<br>[Inches] | Swiss cut and EDP number |       |       |       |       | Compatible<br>handle EDP |    |
|--------------------|---------------------------|--------------------------|-------|-------|-------|-------|--------------------------|----|
|                    |                           | 00                       | 0     | 1     | 2     | 4     |                          |    |
| 6                  | 1/2 x 1/8                 | 12594                    | 12595 | 12596 | 12597 | 12599 | 11144                    | 12 |

### Round 845



| Length<br>[Inches] | Diameter<br>[Inches] | Swiss cut and EDP number |       |       |       | Compatible<br>handle EDP |    |
|--------------------|----------------------|--------------------------|-------|-------|-------|--------------------------|----|
|                    |                      | 0                        | 1     | 2     | 3     |                          |    |
| 4                  | 3/16                 | 12785                    | –     | 12787 | –     | 11143                    | 12 |
| 6                  | 1/4                  | 12790                    | 12791 | 12792 | 12793 | 11144                    | 12 |
| 8                  | 5/16                 | 12797                    | 12798 | 12799 | 12800 | 11145                    | 12 |

### Three square 855



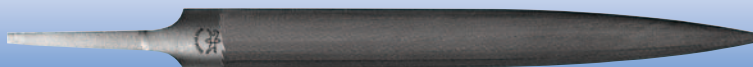
| Length<br>[Inches] | Cross-section<br>[Inches] | Swiss cut and EDP number |       |       |       | Compatible<br>handle EDP |    |
|--------------------|---------------------------|--------------------------|-------|-------|-------|--------------------------|----|
|                    |                           | 0                        | 1     | 2     | 3     |                          |    |
| 4                  | 1/4                       | –                        | 12868 | 12869 | 12870 | 11143                    | 12 |
| 6                  | 3/8                       | 12873                    | 12874 | 12875 | 12876 | 11144                    | 12 |
| 8                  | 9/16                      | 12879                    | 12880 | 12881 | 12882 | 11145                    | 12 |

### Square 860



| Length<br>[Inches] | Cross-section<br>[Inches] | Swiss cut and EDP number |       |       |       | Compatible<br>handle EDP |    |
|--------------------|---------------------------|--------------------------|-------|-------|-------|--------------------------|----|
|                    |                           | 0                        | 1     | 2     | 3     |                          |    |
| 6                  | 1/4                       | 12848                    | 12849 | 12850 | 12851 | 11144                    | 12 |
| 8                  | 5/16                      | 12854                    | 12855 | 12856 | 12857 | 11145                    | 12 |


### Crossing 865



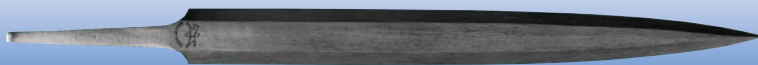
| Length<br>[Inches] | Cross-section<br>[Inches] | Swiss cut and EDP number | Compatible<br>handle EDP |    |
|--------------------|---------------------------|--------------------------|--------------------------|----|
|                    |                           | 2                        |                          |    |
| 6                  | 5/8 x 3/16                | 12542                    | 11144                    | 12 |


**Knife  
870**



| Length<br>[Inches] | Cross-section<br>[Inches] | Swiss cut and EDP number |       | Compatible<br>handle EDP |  |
|--------------------|---------------------------|--------------------------|-------|--------------------------|---|
|                    |                           | 0                        | 2     |                          |   |
| 6                  | 11/16 x 3/16              | 12654                    | 12656 | 11144                    | 12  |
| 8                  | 7/8 x 3/16                | 12659                    | 12661 | 11144                    | 12  |

**Barrette  
875**



| Length<br>[Inches] | Cross-section<br>[Inches] | Swiss cut and EDP number |       | Compatible<br>handle EDP |  |
|--------------------|---------------------------|--------------------------|-------|--------------------------|---|
|                    |                           | 0                        | 2     |                          |   |
| 6                  | 5/8 x 3/16                | 12508                    | 12510 | 11144                    | 12  |
| 8                  | 7/8 x 3/16                | 12512                    | 12513 | 11146                    | 12  |



# Precision files


## Swiss pattern CORINOX machinist's files


CORINOX machinist's files are designed for use on stainless steels and exotic alloys. With a surface hardness of 1,200 HV (Vickers Scale), 70 HRC (Rockwell Scale), these files offer

excellent wear resistance and long service life. Their specially coated surface leaves no corrosive residue on the workpiece and effectively resists loading.


Can be cleaned with file card (see page 46).


**CORINOX files, hand  
COR 800**






| Length [Inches] | Cross-section [Inches] | Swiss cut and EDP number |       |       | Compatible handle EDP |  |
|-----------------|------------------------|--------------------------|-------|-------|-----------------------|---|
|                 |                        | 00                       | 0     | 2     |                       |   |
| 6               | 5/8 x 5/32             | 15100                    | 15101 | -     | 11144                 | 12  |
| 8               | 25/32 x 7/32           | 15103                    | 15104 | 15105 | 11146                 | 12  |
| 10              | 31/32 x 1/4            | 15133                    | 15134 | 15135 | 11146                 | 12  |


**CORINOX files, pillar  
COR 810**

| Length [Inches] | Cross-section [Inches] | Swiss cut and EDP number |       |       | Compatible handle EDP |  |
|-----------------|------------------------|--------------------------|-------|-------|-----------------------|---|
|                 |                        | 00                       | 0     | 2     |                       |   |
| 6               | 1/2 x 5/32             | 15106                    | 15107 | -     | 11144                 | 12  |
| 8               | 9/16 x 7/32            | 15109                    | 15110 | 15111 | 11146                 | 12  |


**CORINOX files, half round  
COR 835**


| Length [Inches] | Cross-section [Inches] | Swiss cut and EDP number |       | Compatible handle EDP |  |
|-----------------|------------------------|--------------------------|-------|-----------------------|---|
|                 |                        | 0                        | 2     |                       |   |
| 6               | 9/32 x 5/32            | 15113                    | -     | 11144                 | 12  |
| 8               | 3/4 x 7/32             | 15116                    | 15117 | 11146                 | 12  |


**CORINOX files, round  
COR 845**




| Length [Inches] | Diameter [Inches] | Swiss cut and EDP number |       | Compatible handle EDP |  |
|-----------------|-------------------|--------------------------|-------|-----------------------|---|
|                 |                   | 0                        | 2     |                       |   |
| 8               | 5/16              | 15122                    | 15123 | 11145                 | 12  |

**CORINOX files, three square  
COR 855**

| Length [Inches] | Cross-section [Inches] | Swiss cut and EDP number |       | Compatible handle EDP |  |
|-----------------|------------------------|--------------------------|-------|-----------------------|---|
|                 |                        | 0                        | 2     |                       |   |
| 8               | 5/8                    | 15128                    | 15129 | 11145                 | 12  |



**CORINOX files, square  
COR 860**



| Length<br>[Inches] | Cross-section<br>[Inches] | Swiss cut and EDP number |       | Compatible<br>handle EDP |    |
|--------------------|---------------------------|--------------------------|-------|--------------------------|----|
|                    |                           | 0                        | 2     |                          |    |
| 6                  | 7/32                      | 15131                    | 15132 | 11144                    | 12 |

**Swiss pattern CORINOX needle files**

CORINOX files have an exceptional **surface hardness of 1,200 HV** (Vickers Scale), 70 HRC (Rockwell Scale). This makes them particularly suitable for use on difficult-to-file materials

such as high-grade steels (e.g., V2A, V4A, high-temperature steels, rare alloys), fibre-reinforced plastics, etc. Due to their high surface hardness, CORINOX files are characterized by

an outstanding wear resistance and durability. Chips can be removed by knocking the file gently against a hard object.

**CORINOX needle files**



CORINOX needle files are used for ultra-fine, intricate stock removal on harder, temperature-resistant materials (NiCo alloys), e.g., for corrective work on tool dies. With their high precision, these files meet unsurpassed standards of quality and cutting performance. CORINOX needle files do not load up and are noted for their unusual wear resistance and longevity. High precision files, available in various cross-sections and cut densities.

**Workpiece materials**

- High-grade steels
- Stainless steels
- Heat resistant alloys
- Fibre-reinforced plastics

**Industry/target group**

- Tool and mould making
- Pattern making
- Turbine production
- Turbine maintenance
- Aircraft construction

**Application**

Correcting and reworking jobs

**Recommendation for use**

Due to their forged tang, these files can be used with or without needle file holders, see page 46.

| Length<br>[Inches] | PFERD specification<br>number | Cut and EDP number |       |    |
|--------------------|-------------------------------|--------------------|-------|----|
|                    |                               | 0                  | 2     |    |
| 7                  | CORINOX 2306                  | 15201              | 15203 | 12 |
| 7                  | CORINOX 2301                  | 15211              | 15213 | 12 |
| 7                  | CORINOX 2307                  | 15221              | 15223 | 12 |
| 7                  | CORINOX 2308                  | 15231              | 15233 | 12 |
| 7                  | CORINOX 2310                  | 15241              | 15243 | 12 |
| 7                  | CORINOX 2302                  | 15251              | 15253 | 12 |

# Precision files

## Swiss pattern needle files

For die makers and other fine tool makers. Twelve different shapes each with long knurled handle for firm grip. For the comfort and protection of tool and die maker's hands, bonded plastic handles are now available on all

swiss pattern needle files (see pages 45-46 for information). This new handle design eliminates the need for makeshift handles or tape, and makes detail filing easier and safer by eliminating cramped

fingers and slipping, which can lead to scratches or cuts on the filer's hands. All are double cut.



| Length [Inches] | Cross-section [Inches] | Shank dia. [Inches] | Swiss cut and EDP number |       |  |
|-----------------|------------------------|---------------------|--------------------------|-------|---|
|                 |                        |                     | 0                        | 2     |   |
| 5-1/2           | 13/64 x 3/64           | 7/64                | 12011                    | 12050 | 12  |
| 6-1/4           | 7/32 x 3/64            | 1/8                 | 12012                    | 12051 | 12  |



| Length [Inches] | Cross-section [Inches] | Shank dia. [Inches] | Swiss cut and EDP number |       |  |
|-----------------|------------------------|---------------------|--------------------------|-------|---|
|                 |                        |                     | 0                        | 2     |   |
| 5-1/2           | 13/64 x 3/64           | 7/64                | 12029                    | 12068 | 12  |
| 6-1/4           | 7/32 x 3/64            | 1/8                 | 12030                    | 12069 | 12  |




| Length [Inches] | Cross-section [Inches] | Shank dia. [Inches] | Swiss cut and EDP number |       |  |
|-----------------|------------------------|---------------------|--------------------------|-------|---|
|                 |                        |                     | 0                        | 2     |   |
| 5-1/2           | 3/16 x 5/64            | 7/64                | 12026                    | 12065 | 12  |
| 6-1/4           | 13/64 x 5/64           | 1/8                 | 12027                    | 12066 | 12  |



| Length [Inches] | Cross-section [Inches] | Shank dia. [Inches] | Swiss cut and EDP number |       |  |
|-----------------|------------------------|---------------------|--------------------------|-------|---|
|                 |                        |                     | 0                        | 2     |   |
| 5-1/2           | 11/64                  | 7/64                | 12008                    | 12047 | 12  |
| 6-1/4           | 9/64                   | 1/8                 | 12009                    | 12048 | 12  |



| Length [Inches] | Cross-section [Inches] | Shank dia. [Inches] | Swiss cut and EDP number |       |  |
|-----------------|------------------------|---------------------|--------------------------|-------|---|
|                 |                        |                     | 0                        | 2     |   |
| 5-1/2           | 3/32                   | 7/64                | 12005                    | 12044 | 12  |
| 6-1/4           | 3/32                   | 1/8                 | 12006                    | 12045 | 12  |

**Round  
2410**



| Length<br>[Inches] | Diameter<br>[Inches] | Shank dia.<br>[Inches] | Swiss cut and EDP number |       |       |    |
|--------------------|----------------------|------------------------|--------------------------|-------|-------|----|
|                    |                      |                        | 0                        | 2     | 4     |    |
| 5-1/2              | 7/64                 | 7/64                   | 12002                    | 12041 | 12078 | 12 |
| 6-1/4              | 1/8                  | 1/8                    | 12003                    | 12042 | 12079 | 12 |

**Knife  
2405**

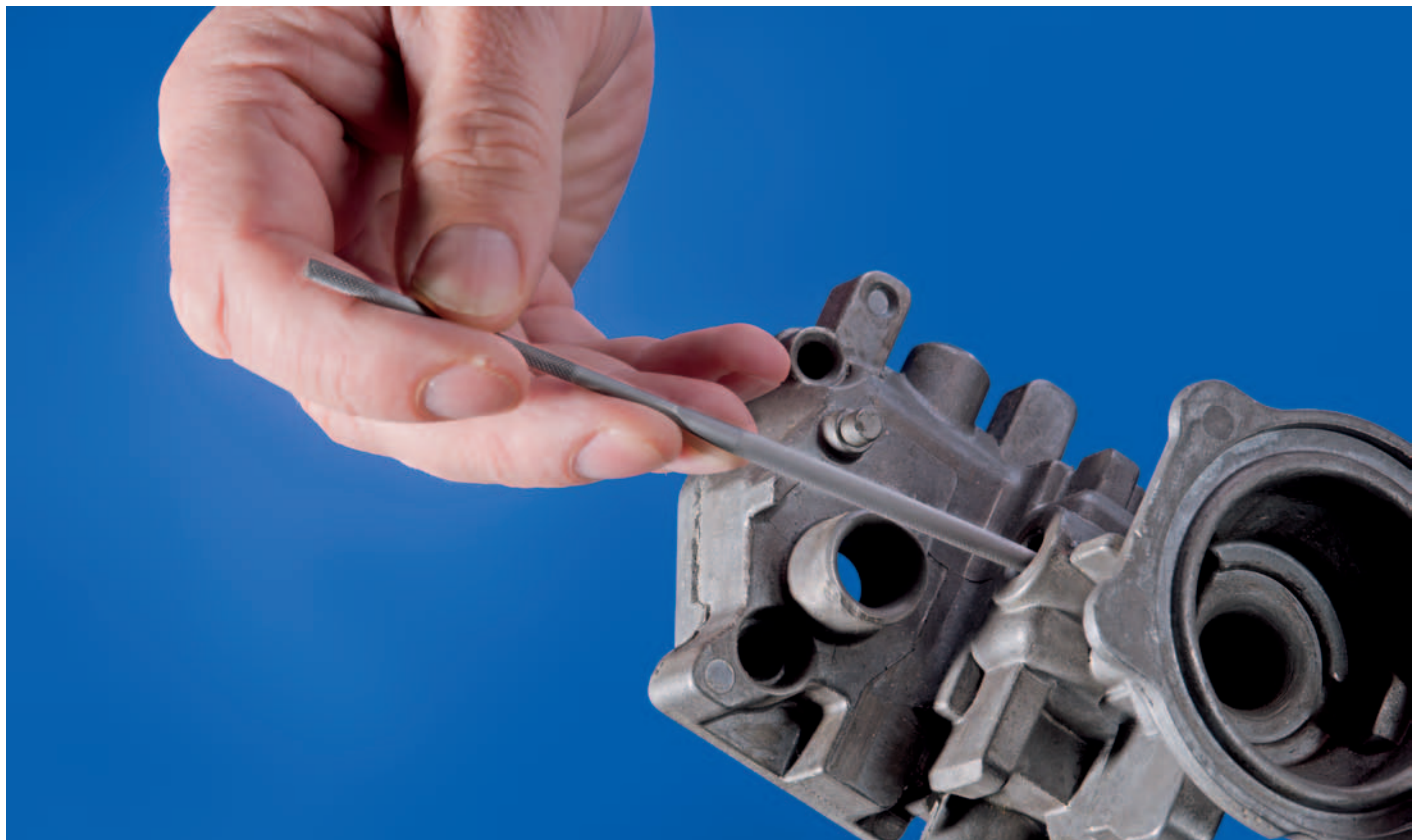


| Length<br>[Inches] | Cross-section<br>[Inches] | Shank dia.<br>[Inches] | Swiss cut and EDP number |       |       |    |
|--------------------|---------------------------|------------------------|--------------------------|-------|-------|----|
|                    |                           |                        | 0                        | 2     | 4     |    |
| 5-1/2              | 7/32 x 1/16               | 7/64                   | 12014                    | 12053 | -     | 12 |
| 6-1/4              | 15/64 x 5/64              | 1/8                    | 12015                    | 12054 | 12091 | 12 |

**Half round  
2402**




| Length<br>[Inches] | Cross-section<br>[Inches] | Shank dia.<br>[Inches] | Swiss cut and EDP number |       |    |
|--------------------|---------------------------|------------------------|--------------------------|-------|----|
|                    |                           |                        | 0                        | 2     |    |
| 5-1/2              | 13/64 x 1/16              | 7/64                   | 12017                    | 12056 | 12 |
| 6-1/4              | 15/64 x 5/64              | 1/8                    | 12018                    | 12057 | 12 |




# Precision files

## Swiss pattern needle files


**Barrette 2411** 

| Length [Inches] | Cross-section [Inches] | Shank dia. [Inches] | Swiss cut and EDP number |       |  |
|-----------------|------------------------|---------------------|--------------------------|-------|---|
|                 |                        |                     | 0                        | 2     |   |
| 5-1/2           | 13/64 x 5/64           | 7/64                | 12020                    | 12059 | 12  |
| 6-1/4           | 7/32 x 5/64            | 1/8                 | 12021                    | 12060 | 12  |


**Flat with round edges crochet 2415** 

| Length [Inches] | Cross-section [Inches] | Shank dia. [Inches] | Swiss cut and EDP number |       |  |
|-----------------|------------------------|---------------------|--------------------------|-------|---|
|                 |                        |                     | 0                        | 2     |   |
| 6-1/4           | 7/32 x 3/64            | 1/8                 | -                        | 12145 | 12  |

**Hand-type with round edges 2416** 

| Length [Inches] | Cross-section [Inches] | Shank dia. [Inches] | Swiss cut and EDP number |       |  |
|-----------------|------------------------|---------------------|--------------------------|-------|---|
|                 |                        |                     | 0                        | 2     |   |
| 6-1/4           | 7/32 x 3/64            | 1/8                 | 12036                    | 12075 | 12  |

**Crossing oval 2409** 

| Length [Inches] | Cross-section [Inches] | Shank dia. [Inches] | Swiss cut and EDP number |       |  |
|-----------------|------------------------|---------------------|--------------------------|-------|---|
|                 |                        |                     | 0                        | 2     |   |
| 6-1/4           | 9/64 x 3/32            | 1/8                 | -                        | 12135 | 12  |

## Needle file sets




### Contents

12 needle files, including one piece each of the following profiles:

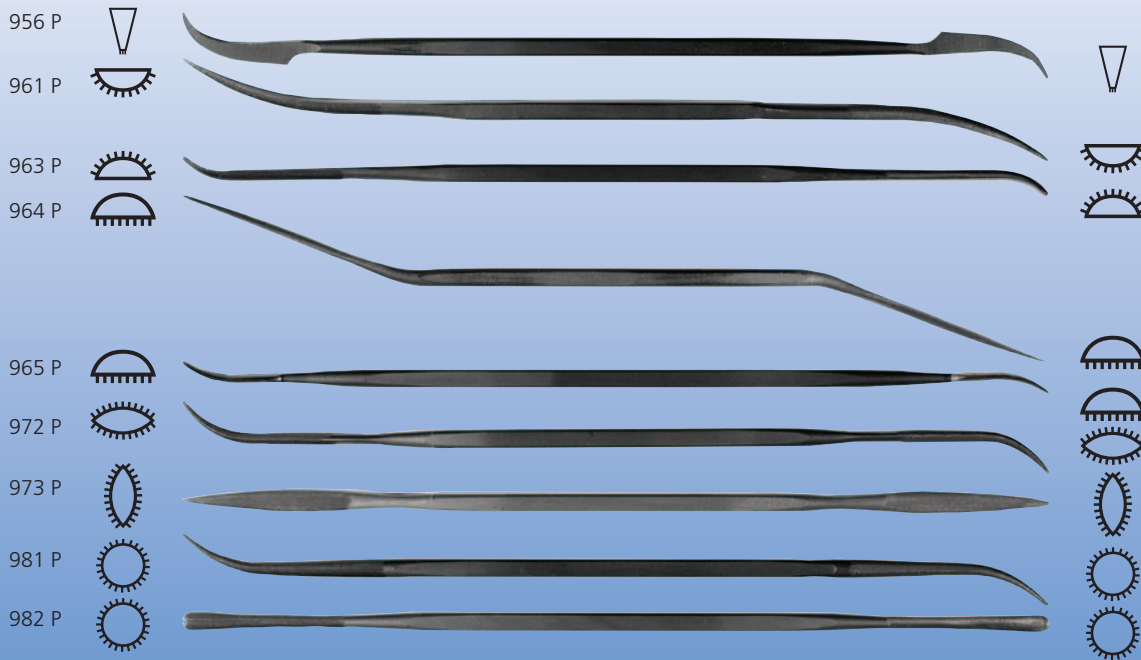
- Flat
- Hand
- Crossing
- Three square
- Square
- Round

- Knife
- Half round
- Barrette
- Flat with round edges
- Hand type with round edges
- Crossing oval

**PFERD specification number**  
266

| Size [Inches] | Swiss cut and EDP number |       |  |
|---------------|--------------------------|-------|---|
|               | 0                        | 2     |   |
| 6-1/4         | 12039                    | 12150 | 1   |


### Series 956 P-982 P



Rifflers are indispensable tools for mould, die and tool makers, mechanics, goldsmiths, engravers, model builders etc.

#### Recommendation for use

Riffler files can be used with or without riffler file holder (see page 46).

| Length [Inches] | PFERD specification number | Cross-section [Inches] | Swiss cut and EDP number<br>2 | Compatible holder |  |
|-----------------|----------------------------|------------------------|-------------------------------|-------------------|---|
| 6               | 956 P                      | 1/16 x 5/32            | 18017                         | 18053             | 12  |
| 6               | 961 P                      | 5/32 x 3/32            | 18021                         | 18053             | 12  |
| 6               | 963 P                      | 3/16 x 1/16            | 18015                         | 18053             | 12  |
| 6               | 964 P                      | 3/16 x 1/16            | 18019                         | 18053             | 12  |
| 6               | 965 P                      | 13/64 x 1/16           | 18018                         | 18053             | 12  |
| 6               | 972 P                      | 9/64 x 5/64            | 18025                         | 18053             | 12  |
| 6               | 973 P                      | 9/64 x 5/64            | 18023                         | 18053             | 12  |
| 6               | 981 P                      | 11/64                  | 18014                         | 18053             | 12  |
| 6               | 982 P                      | 7/64                   | 18020                         | 18053             | 12  |

Please contact PFERD for additional shapes.

# Milled tooth files

## Car body files

### PFERD car body files – perfect for more than just automotive body work

These files are ideal for **any type of sheet metal work** requiring a particularly smooth and scratch-free finish. Since the file leaves no scratch marks, the filed surface can be painted immediately, without any intermediate polishing.

In the hands of the professional user, PFERD milled car body files provide exceptional stock removal rates and unsurpassed surface quality due to the following features:

- positive rake angle
- uniquely convex surface
- unsurpassed sharpness of teeth



PFERDMEDIA

To see it in action, please visit [pferdusa.com/carbody](http://pferdusa.com/carbody)

### Ideal tooth geometry

The teeth of our car body files are milled from the solid metal, distinct from the usual cutting process. Each tooth is designed to ensure that the chip rolls up before the rounded tooth face and is forced into the large chip space.

A special finishing treatment produces razor-sharp tooth edges for outstanding stock removal performance.

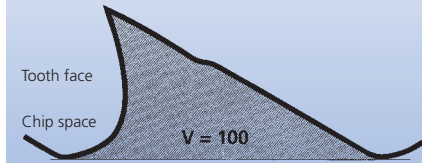
Our range comprises six different cuts.

### Convex shape prevents formation of scratch marks

One key advantage of these car body files is their convex cross section. The cutting area is not flat, but higher in the middle than around the file edges. The height difference is about 1/64". This special feature prevents the edges of the file from coming into contact with the workpiece, thus preventing undesired scratches in the product surface.

**PFERD specification number**  
299 B / 299 E

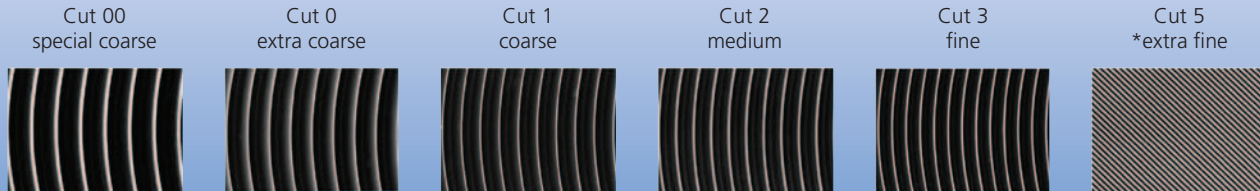
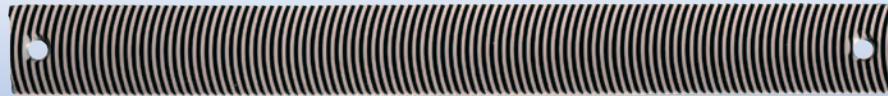
**Cross section of a file tooth**  
10 times enlarged




**Cross section of a car body file**  
Convex shape



### Car body files



| Length [Inches] | Cross-section [Inches] | Cut | Number of teeth per Inch | EDP number |  |
|-----------------|------------------------|-----|--------------------------|------------|---|
| 12              | 1-5/32 x 3/16          | 1   | 9                        | 14001      | 1   |
| 12              | 1-5/32 x 3/16          | 2   | 10                       | 14002      | 1   |
| 12              | 1-5/32 x 3/16          | 3   | 12                       | 14003      | 1   |
| 14              | 1-11/32 x 1/4          | 00  | 7                        | 14004      | 1   |
| 14              | 1-11/32 x 3/16         | 0   | 8                        | 14005      | 1   |
| 14              | 1-11/32 x 3/16         | 1   | 9                        | 14006      | 1   |
| 14              | 1-11/32 x 3/16         | 2   | 10                       | 14007      | 1   |
| 14              | 1-11/32 x 3/16         | 3   | 12                       | 14008      | 1   |
| 14              | 1-11/32 x 3/16         | 5   | 20                       | 14000      | 1   |

\* Extra fine cut available in chisel cut file.


### Adjustable holders for car body files



This ergonomic holder permits convenient tensioning of car body file blades to match the surface contour of the workpiece. Lightweight but rugged die-cast aluminum structure, available in two sizes. The file bending radius can be steplessly adjusted via the tensioning system.



**PFERD specification number**  
BH 125

| Compatible for file length [Inches] | EDP number |  |
|-------------------------------------|------------|---|
| 12                                  | 14012      | 1   |
| 14                                  | 14013      | 1   |


### Car body files, tanged type



Rectangular, curved longitudinal and transverse (crowned) file with tang, cut on one side,

available in various cuts. These files require no file holder. They can be used with a handle.

**PFERD specification number**  
299 C

| Length [Inches] | Cross-section [Inches] | Number of teeth per Inch | Cut and EDP number |                | Compatible handle EDP |  |
|-----------------|------------------------|--------------------------|--------------------|----------------|-----------------------|--|
|                 |                        |                          | Bastard (cut 1)    | Smooth (cut 3) |                       |  |
| 14              | 1-3/8 x 5/16           | 15                       | 14009              | –              | 11148                 | 5  |
| 14              | 1-3/8 x 5/16           | 18                       | –                  | 14010          | 11148                 | 5  |

## Paint peeler

### Paint peeler



Paint peelers are used for fine finishing work on very small coated surfaces. Their compact design makes them suitable for use in hard-to-reach areas. The crowned shape prevents scratches. Precision-cut, razor-sharp teeth with an ideal geometry provide a very high quality score-free surface finish. Peeled surfaces can be painted or processed right away. The blade can be used on both sides and is mounted in a plastic holder. The peeling depth is fine-adjustable via two set screws.


#### Industry/target group

- Automotive sector
- Body work and trailer construction

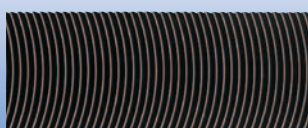
#### Applications

- Correcting defects in paintwork, e.g., foreign matter, dust particles or air bubbles
- Peeling off very thin paint layers

**PFERD specification number**  
LAH

| Size [Inches] | EDP number |  |
|---------------|------------|---|
| 2 x 1-1/2     | 14014      | 1   |


### Replacement file for paint peeler



Replacement file for paint peeler.

**PFERD specification number**  
LAHF 50



| Length [Inches] | Cross-section [Inches] | Cut and EDP number Smooth (cut 3) |  |
|-----------------|------------------------|-----------------------------------|---|
| 2               | 1-1/2 x 3/16           | 14015                             | 10  |

# Milled tooth files

## Babbitt files

Milled tooth files are suitable for use on soft metals such as tin or lead based babbitts, non-hardened steel, grey cast iron, copper and brass. The highly abrasive milled tooth geometry prevents loading problems.

### Babbitt, flat




Rectangular file with tang, cut on three sides (angular cut with chip breaker on the flat sides, straight cut on the wide edge). Available in various lengths and cuts.

#### Applications

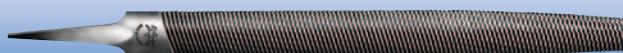
- Work on surfaces
- Deburring
- Shaping and refining rectangular shapes

#### PFERD specification number

290

| Length [Inches] | Cross-section [Inches] | Cut and EDP number |                | Compatible handle EDP |  |
|-----------------|------------------------|--------------------|----------------|-----------------------|---|
|                 |                        | Bastard (cut 1)    | Second (cut 2) |                       |   |
| 10              | 1-1/32 x 9/32          | 13001              | -              | 11146                 | 5   |
| 12              | 1-7/32 x 5/16          | 13003              | 13004          | 11148                 | 5   |
| 14              | 1-3/8 x 11/32          | 13006              | -              | 11146                 | 5   |

### Babbitt, half round, hollow




Half round, hollow tapered file, tanged, angular cut with chip breaker on half round side only. Available in two lengths.

#### Applications

- Use in radius areas
- Deburring
- Filing of half round sections

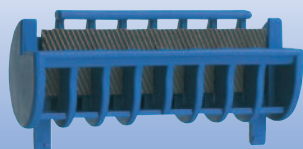
#### PFERD specification number

295

| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Bastard (cut 1) | Compatible handle EDP |  |
|-----------------|------------------------|---------------------------------------|-----------------------|---|
| 10              | 7/8 x 9/32             | 13009                                 | 11146                 | 5   |
| 12              | 1-1/16 x 11/32         | 13011                                 | 11148                 | 5   |

## Edge sharpener

### Edge sharpener



### Replacement files



This general-use chamfer file is ideal for removing burrs from workpiece edge areas.

The special mounting system of PFERD universal chamfer files ensures easy tool control and a precisely rectangular application to the workpiece.

Rectangular file in special plastic holder, angular cut on both sides.

#### Industry/target group


- Industry
- DIY

#### Applications

- Precision deburring of edges
- Sharpening ski edges
- Removing burrs, squaring and reconditioning chain saw bar

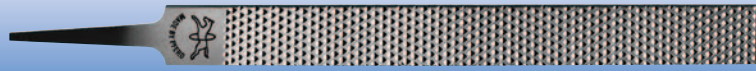
#### PFERD specification number

UKF  
KF 110

| Description      | Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Cut 2 |  |
|------------------|-----------------|------------------------|-----------------------------|---|
| Edge sharpener   | 4-1/2           | 1-1/4 x 1/4            | 13025                       | 1   |
| Replacement file | 4-1/2           | 1-1/4 x 1/4            | 13026                       | 10  |



### Wood rasps, hand




Rectangular rasp with tang, cut on three sides, flat sides with rasp cut, one edge with file cut, one edge uncut. Available in various cuts and lengths.

#### Applications

- Surface work
- Shaping and refining of rectangular shapes
- Chamfering

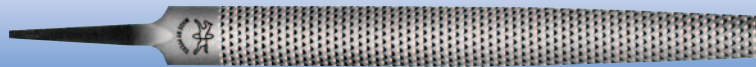
**PFERD specification number**  
1512

| Length [Inches] | Cross-section [Inches] | Cut and EDP number |                | Compatible handle EDP | Included handle EDP |  |
|-----------------|------------------------|--------------------|----------------|-----------------------|---------------------|---|
|                 |                        | Bastard (cut 1)    | Second (cut 2) |                       |                     |   |

#### Wood rasps, hand (plain)

|    |               |       |       |       |   |    |
|----|---------------|-------|-------|-------|---|----|
| 8  | 25/32 x 13/64 | –     | 15003 | 11146 | – | 10 |
| 10 | 1 x 1/4       | 15004 | 15005 | 11146 | – | 10 |

### Wood rasps, half round




Half round rasp, tapered, tanged, with rasp cut on two sides. Available in various cuts and lengths.

#### Applications

- Surface work
- Stock removal in radius areas
- Filing of half round profiles
- Chamfering

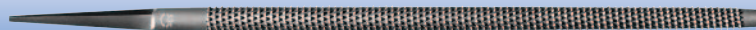
**PFERD specification number**  
1552

| Length [Inches] | Cross-section [Inches] | Cut and EDP number |                | Compatible handle EDP | Included handle EDP |  |
|-----------------|------------------------|--------------------|----------------|-----------------------|---------------------|---|
|                 |                        | Bastard (cut 1)    | Second (cut 2) |                       |                     |   |

#### Wood rasps, half round (plain)

|    |                |       |       |       |   |    |
|----|----------------|-------|-------|-------|---|----|
| 8  | 25/32 x 15/64  | 15008 | 15009 | 11146 | – | 10 |
| 10 | 31/32 x 9/32   | 15011 | 15012 | 11146 | – | 10 |
| 12 | 1-5/32 x 11/32 | 15014 | –     | 11148 | – | 5  |

### Wood rasps, round




Round rasp, tapered, tanged, with circumferential rasp cut. Available in two lengths.

#### Applications

- Shaping and refining radii
- Filing on internal radius profiles

**PFERD specification number**  
1562

| Length [Inches] | Diameter [Inches] | Cut and EDP number |  | Compatible handle EDP | Included handle EDP |  |
|-----------------|-------------------|--------------------|--|-----------------------|---------------------|---|
|                 |                   | Second (cut 2)     |  |                       |                     |   |

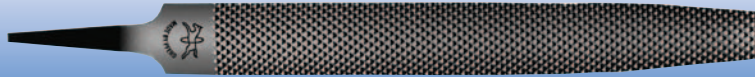
#### Wood rasps, round (plain)

|    |      |       |  |       |   |    |
|----|------|-------|--|-------|---|----|
| 8  | 5/16 | 15016 |  | 11145 | – | 10 |
| 10 | 3/8  | 15017 |  | 11145 | – | 10 |

# Wood files and rasps

## Wood rasps


### Cabinet rasps



Half round rasp, tapered, tanged, flatter and wider than a half round wood rasp, rasp cut on two sides. Available in two lengths.

- Applications**
- Surface work
  - Shaping and refining radii
  - Filing of half round shapes

**PFERD specification number**  
1558

| Length [Inches] | Cross-section [Inches] | Cut and EDP number |                |                | Compatible handle EDP |  |
|-----------------|------------------------|--------------------|----------------|----------------|-----------------------|---|
|                 |                        | Bastard (cut 1)    | Second (cut 2) | Smooth (cut 3) |                       |   |
| 8               | 1-3/32 x 3/16          | 15019              | -              | -              | 11146                 | 5   |
| 10              | 1-1/4 x 7/32           | 15021              | 15022          | 15047          | 11146                 | 5   |

## Wood files


### Cabinet file



Half round file, tapered, tanged, flatter and wider than a standard half round file, special file cut on two sides.

- Applications**
- Surface work
  - Shaping and refining radii
  - Filing of half round shapes

**PFERD specification number**  
1158

| Length [Inches] | Cross-section [Inches] | Cut and EDP number<br>Bastard (cut 1) | Compatible handle EDP |  |
|-----------------|------------------------|---------------------------------------|-----------------------|---|
| 10              | 1-1/4 x 13/64          | 15036                                 | 11146                 | 5   |





Hoof rasps have been manufactured since the late 18th century and were among the first PFERD tools.

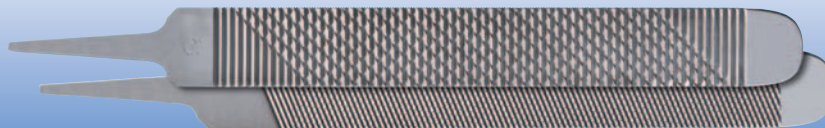


With this new hoof plane, PFERD presents an innovative, extremely effective and cost-efficient product for smoothing and shaping horse hooves.



Its outstanding cutting performance ensures fast results while minimizing physical effort and back strain during use. At the same time, rapid stock removal and a high-grade surface finish are guaranteed.

### Hoof plane



Unlike conventional products, this hoof plane does not have rasp cut or cross cut faces but possesses milled teeth on both sides (one fine, one coarse side). It can be used for planing the hoof surface, trimming the hoof wall and filing the toe. Thanks to the high material quality employed, even hoof nails can be dressed with this tool

after shoeing – neither the nails nor the steel of the horseshoe will cause its teeth to become blunt. Supplied as a rectangular file with tang, teeth on all four sides.

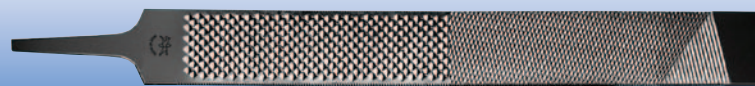
#### PFERDEFFICIENCY®



**PFERD specification number**  
3515

| Length [Inches] | Cross-section [Inches] | Cut and EDP number Milled | Compatible handle EDP |   |
|-----------------|------------------------|---------------------------|-----------------------|---|
| 14              | 1-3/4 x 1/4            | 15040                     | 11147                 | 5 |

### Horse rasp, tanged type



Rectangular rasp, tanged, cut on four sides. One flat side with rasp cut, one flat side with cross cut, two edges with file cut.

**PFERD specification number**  
3510

| Length [Inches] | Cross-section [Inches] | Cut and EDP number Rasp/file 1 | Compatible handle EDP |   |
|-----------------|------------------------|--------------------------------|-----------------------|---|
| 14              | 1-3/4 x 3/16           | 15039                          | 11147                 | 5 |

# Wood files and rasps

## Special rasps



### Sculptor's file rasp, half round



Sculptor's file rasps are used in areas which can not be reached with an ordinary rasp, e.g., on carved woodwork, sculptures and ornaments.

Each of these tools features two different cuts (file and rasp cut) for particular versatility in use.

The sculptor's file rasp consists of a body with two bent forged-on ends providing different cuts.

#### Workpiece materials

- Wood
- Horn
- Soft stone

#### Industry/target group


- Pattern-making
- Trades
- Arts and crafts
- Model making

#### Application

Refining of casting patterns, carved woodwork, sculptures

#### PFERD specification number

3553

| Length [Inches] | Cut and EDP number<br>Second (cut 2) |  |
|-----------------|--------------------------------------|---|
| 8               | 15029                                | 5   |



### Staircase maker's file rasp



Staircase maker's file rasps are designed for work in hard-to-reach areas.

Among other uses, they are ideal for touch-up work on handrails and ornaments. The fine, sharp rasp cut is for preliminary work. The file cut on the opposite end is for finishing.

#### Workpiece materials

- Wood
- Plastics
- Soft stone/masonry
- Horn

#### Industry/target group

- Staircase maker's trade
- Pattern making
- Arts and crafts

#### Application

Refining of hand rails, ornaments, casting patterns, carved woodwork, sculptures

#### PFERD specification number

3554

| Length [Inches] | Cut and EDP number<br>Second (cut 2) |   |
|-----------------|--------------------------------------|---|
| 10              | 15031                                | 5 |

Staircase maker's rasps are intended for work in hard-to-reach areas.

These tools have a half round cross-section. Their intensely curved shape makes them ideal for work on diverse radii.

Half round, bent file body, rasp cut on the curved side.

#### Workpiece materials

- Wood
- Plastics
- Soft stone/masonry

#### Industry/target group

- Staircase maker's trade
- Model and pattern making
- Arts and crafts

#### Application

Refining of hand rails, ornaments, casting patterns, carved woodwork, sculptures

#### PFERD specification number

3556

### Staircase maker's rasp



| Length [Inches] | Cut and EDP number<br>Second (cut 2) |   |
|-----------------|--------------------------------------|---|
| 10              | 15032                                | 2 |

Needle rasps are intended for use in hard-to-reach places.

With their forged shanks, needle files can be used with or without file handle.

This set features the full range of available needle rasps in a plastic pouch.

The plastic pouch keeps the tools neatly arranged and protects them from dirt and mechanical damage.

#### Contents

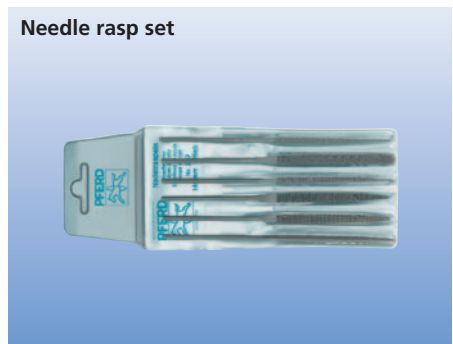
All needle rasps in this set are 5-1/2 inch long, Swiss cut 2:

- Flat
- Hand
- Three square
- Square
- Round
- Half round

#### PFERD specification number

2527

### Needle rasp set



| Length [Inches] | Swiss cut and EDP number<br>2 |   |
|-----------------|-------------------------------|---|
| 5-1/2           | 15065                         | 1 |

# Diamond files

## Diamond machinist's files

Diamond is termed "superhard" because it is significantly harder than conventional abrasive grains, e.g., aluminum oxide or silicon carbide. Diamond is a natural material, but can also be produced synthetically.

At extremely high pressures and temperatures, pure carbon (C) synthesizes to diamond.

Diamond grit is electroplated onto precision-forged and ground file blanks. The durable monolayer abrasive coating with its uniform density and good grip properties ensure outstanding file performance.

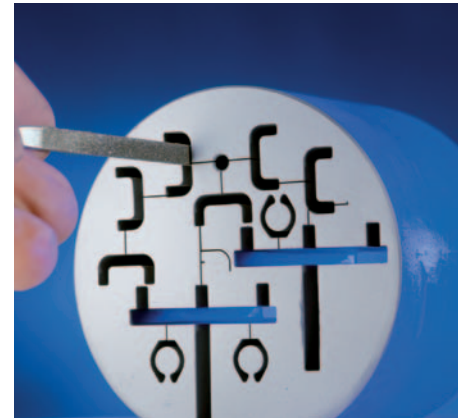
Diamond files are suitable for use on hardened steels and hard metals components such as cutting, punching, press/extrusion and profiling dies, as well as for filing workpieces made of glass, ceramics, and fibre-reinforced plastics.

### Recommendations for use

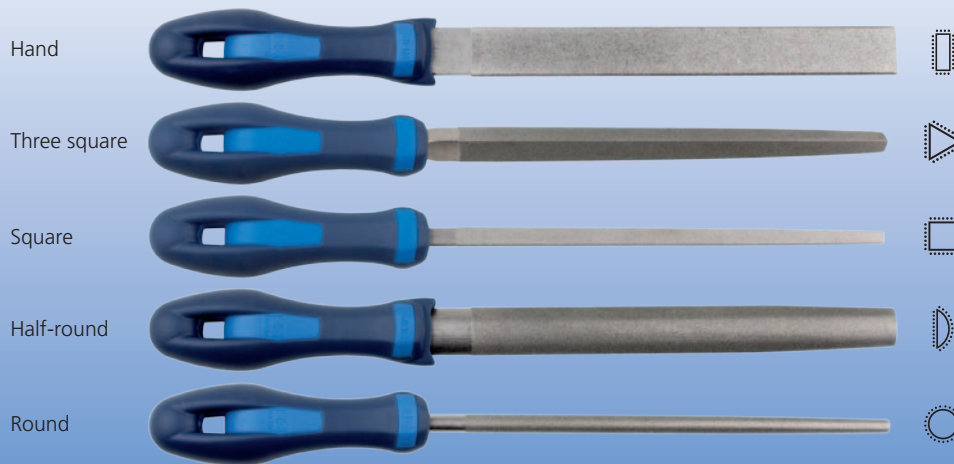
- Apply only slight pressure to the file, especially in workpiece edge areas!
- Loaded diamond files can usually be cleaned in kerosene or other cleaning fluids (e.g., anti-static plastic cleaner) using a file brush. Often it will suffice to knock the file against a hard object. Avoid contact with grease when using files!
- Use a coarse grit for roughing, medium grit for general purpose filing, and fine grit for finishing applications.

Grit sizes are stated according to the FEPA grading scale.

| Grit size   | FEPA          | Recommended applications |
|-------------|---------------|--------------------------|
| Fine        | D 91          | Finishing                |
| Medium      | D 126         | General purpose filing   |
| Coarse      | D 151 / D 181 | Roughing                 |
| Very coarse | D 251         | Roughing                 |



### Diamond machinist's files



Diamond machinist's files are used in the fabrication of large tools, jigs and fixtures. Their fairly coarse grit (D 251) also makes them suitable for filing filled and reinforced plastics.


Diamond machinist's files are supplied with ergonomic handle.

Available in five shapes and various grit sizes.

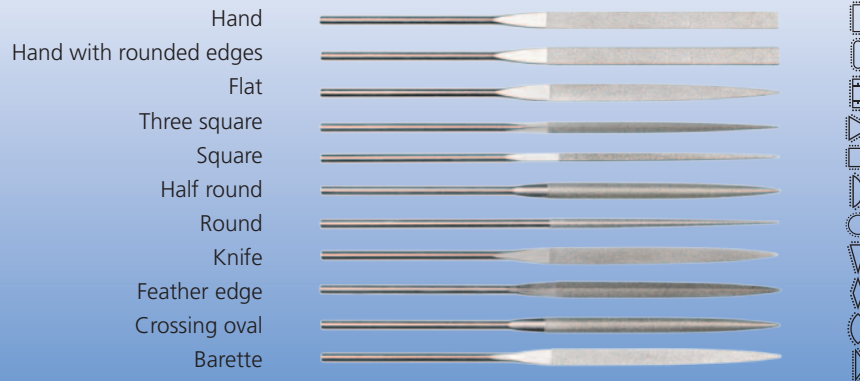
Other lengths and grit sizes can be supplied by special order – please inquire.

**Industry/target group**

Tool making

| Shape        | PFERD specification number | Length [Inches] | Coating length | Grit size and EDP number |                   |  |
|--------------|----------------------------|-----------------|----------------|--------------------------|-------------------|---|
|              |                            |                 |                | D 151 Coarse             | D 251 Very coarse |   |
| Hand         | DF 1112                    | 8               | 7-1/4          | 04060                    | 04065             | 1   |
| Three square | DF 1132                    | 8               | 7-1/4          | 04061                    | 04066             | 1   |
| Square       | DF 1142                    | 8               | 7-1/4          | 04062                    | –                 | 1   |
| Half round   | DF 1152                    | 8               | 7-1/4          | 04063                    | 04068             | 1   |
| Round        | DF 1162                    | 8               | 7-1/4          | 04064                    | –                 | 1   |

### Diamond needle files




Diamond needle files are designed for general use in tool and die making.

These 5-1/2" needle files are available in eleven shapes and three grit sizes. They can

be combined with the quick-mounting handle EDP 16174 or our needle file holder EDP 16075 (plastic) or 16076 (wood). Please see pages 45 and 46 for handle details.

Other lengths and grit sizes can be supplied by special order – please inquire.

**Industry/target group**  
Tool making

| Shape                   | PFERD specification number | Length [Inches] | Coating length [Inches] | Shank dia [inches] | Grit size and EDP number |              |              |  |
|-------------------------|----------------------------|-----------------|-------------------------|--------------------|--------------------------|--------------|--------------|---|
|                         |                            |                 |                         |                    | D 91 fine                | D 126 medium | D 181 coarse |   |
| Hand                    | DF 4112                    | 5-1/2           | 2-3/4                   | 1/8                | 04027                    | 04014        | 04001        | 1   |
| Hand with rounded edges | DF 4112R                   | 5-1/2           | 2-3/4                   | 1/8                | 04028                    | 04015        | 04002        | 1   |
| Flat                    | DF 4122                    | 5-1/2           | 2-3/4                   | 1/8                | 04029                    | 04016        | 04003        | 1   |
| Three square            | DF 4132                    | 5-1/2           | 2-3/4                   | 1/8                | 04030                    | 04017        | 04004        | 1   |
| Square                  | DF 4142                    | 5-1/2           | 2-3/4                   | 1/8                | 04031                    | 04018        | 04005        | 1   |
| Half round              | DF 4152                    | 5-1/2           | 2-3/4                   | 1/8                | 04032                    | 04019        | 04006        | 1   |
| Round                   | DF 4162                    | 5-1/2           | 2-3/4                   | 1/8                | 04033                    | 04020        | 04007        | 1   |
| Knife                   | DF 4172                    | 5-1/2           | 2-3/4                   | 1/8                | 04034                    | 04021        | 04008        | 1   |
| Feather edge            | DF 4182                    | 5-1/2           | 2-3/4                   | 1/8                | 04035                    | 04022        | 04009        | 1   |
| Crossing oval           | DF 4192                    | 5-1/2           | 2-3/4                   | 1/8                | 04036                    | 04023        | –            | 1   |
| Barette                 | DF 4102T                   | 5-1/2           | 2-3/4                   | 1/8                | 04037                    | 04024        | 04011        | 1   |

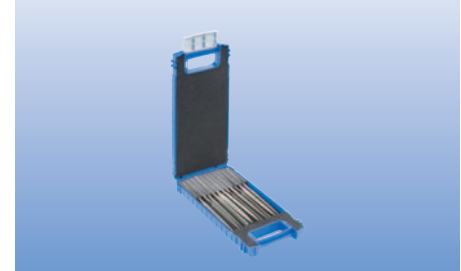
Diamond needle file sets are supplied in a sturdy, practical plastic box, which protects the tools from damage. This is ideal for keeping on the tool trolley or workbench.


#### Contents

1 file each of the following:

- Hand
- Three square
- Square
- Half round
- Round

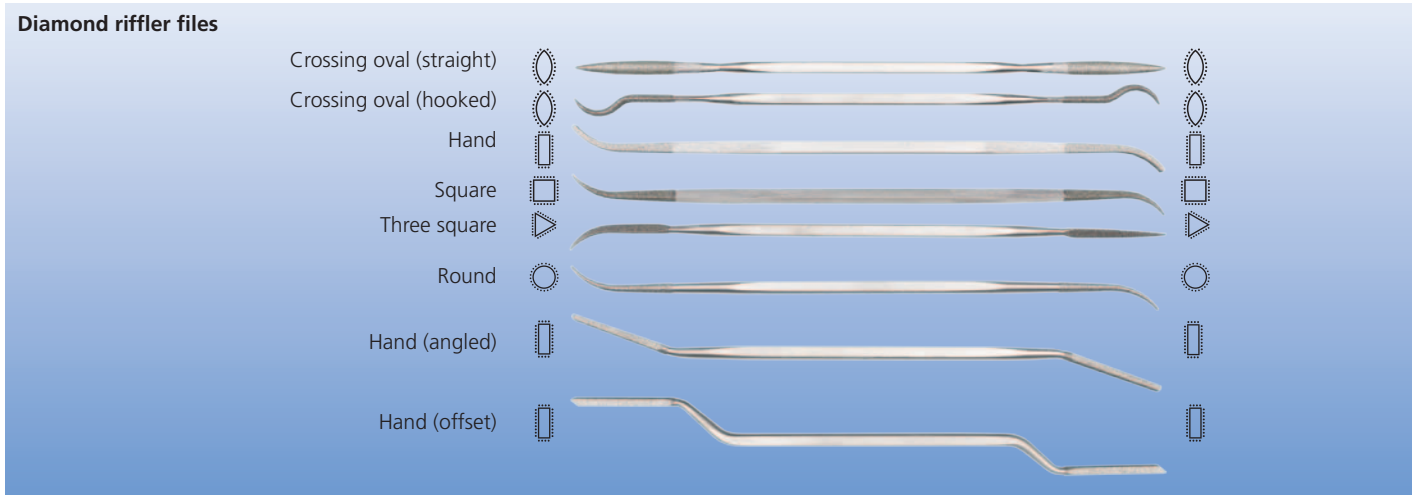
#### Sets of diamond needle files



| Length [Inches] | PFERD specification number | Grit size and EDP number |              |              | No. of files |  |
|-----------------|----------------------------|--------------------------|--------------|--------------|--------------|---|
|                 |                            | D 91 fine                | D 126 medium | D 181 coarse |              |   |
| 5-1/2           | DF 4205                    | 04038                    | 04025        | 04012        | 5            | 1   |

# Diamond files

## Diamond riffler files



Diamond riffler files are used for work in hard-to-reach areas and on complex shapes.

They can be used with the riffler file holder EDP 18053.

Other lengths and grit sizes can be supplied by special order – please inquire.

Diamond riffler files are available in a length of 6", in eight shapes and three grit sizes.

Please see page 46 for handle details.

| Shape                    | PFERD specification number | Length [Inches] | Coating length [Inches] | Grit size and EDP number |              |  |
|--------------------------|----------------------------|-----------------|-------------------------|--------------------------|--------------|---|
|                          |                            |                 |                         | D 91 fine                | D 126 medium |   |
| Crossing oval (straight) | DF 15                      | 6               | 2 x 1                   | –                        | 04046        | 1   |
| Crossing oval (hooked)   | DF 16                      | 6               | 2 x 1                   | 04053                    | 04047        | 1   |
| Hand                     | DF 18                      | 6               | 2 x 1                   | 04054                    | 04048        | 1   |
| Square                   | DF 20                      | 6               | 2 x 1                   | 04055                    | 04049        | 1   |
| Three square             | DF 22                      | 6               | 2 x 1                   | 04056                    | 04050        | 1   |
| Round                    | DF 24                      | 6               | 2 x 1                   | 04057                    | 04051        | 1   |
| Hand (angled)            | DF 914                     | 6               | 2 x 1                   | –                        | 04058        | 1   |
| Hand (offset)            | DF 918                     | 6               | 2 x 1                   | –                        | 04059        | 1   |




Set of diamond riffler files

Diamond riffler file sets are supplied in a sturdy, practical plastic box, which protects the tools from damage. This is ideal for keeping on the tool trolley or workbench.

### Contents

1 file each of the following:

- Crossing oval (hooked)
- Hand
- Square
- Three square
- Round

| Length [Inches] | PFERD specification number | Grit size and EDP number D 126 medium | No. of files |  |
|-----------------|----------------------------|---------------------------------------|--------------|---|
| 6               | DF 1624                    | 04080                                 | 5            | 1   |



### Advantages

- Optimum grip.
- Ergonomic shape.
- Soft exterior plastic with hard and rugged internal core.
- Large, rounded contact surfaces.

### Maximum user safety

- Protects hand from contact with sharp edges and corners.
- Angular collar prevents files from rolling.

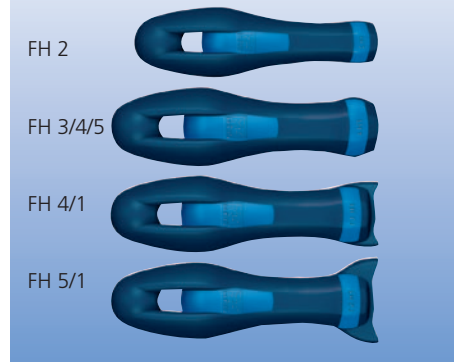
Ergonomic file handles from PFERD guarantee maximum working safety. The shape and design principle protect hands from sharp edges and corners. The angular collar prevents the file rolling away during work. The combination of two high-grade plastic components in the file handle makes the file comfortable and easy to grip and guide over the workpiece.

We will be happy to send you more information about the topic of health and safety on request.

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### Ergonomic file handles



| Compatible for file length [Inches] | Compatible for                              | PFERD specification number | EDP number |  |
|-------------------------------------|---|----------------------------|------------|---|
| 4 - 6                               | Key files and very narrow tangs             | FH 2                       | 11143      | 10  |
| 4 - 6                               | Regular tangs                               | FH 3                       | 11144      | 10  |
| 8 - 10                              | Three square, square, round, special shapes | FH 4                       | 11145      | 10  |
| 8 - 10                              | Hand, flat, half round section              | FH 4/1                     | 11146      | 10  |
| 12 - 14                             | Hand, flat, half round section              | FH 5/1                     | 11148      | 10  |
| 12 - 14                             | Three square, square, round, special shapes | FH 5                       | 11147      | 10  |


### Advantages

- Proven PFERD file handle made of strong plastics.
- Air chambers help absorb hand moisture.
- Enlarged handle front reduces fatigue and improves safety.
- Good force transmission and grip control.

Available in four different types to accommodate most tanged files.

### Plastic file handles



| Compatible for file length [Inches] | Compatible for                  | PFERD specification number | EDP number |  |
|-------------------------------------|---------------------------------|----------------------------|------------|---|
| 4 - 6                               | Key files and very narrow tangs | PH 08                      | 11130      | 10  |
| 4 - 6                               | Regular tangs                   | PH 09                      | 11131      | 10  |
| 8 - 10                              | All tangs                       | PH 11                      | 11132      | 10  |
| 12 - 14                             | All tangs                       | PH 13                      | 11133      | 10  |


Quick-mounting handle for needle files, diamond files and smaller machinist's and precision files.

File tangs are securely clamped by twisting the two halves of the handle in opposite directions.

PFERD specification number  
SH 220

### Plastic file handle, quick-mounting type



| Description                   | Overall length [Inches] | Compatible for file length [Inches] | Compatible for shank dia. [mm] | EDP number |  |
|-------------------------------|-------------------------|-------------------------------------|--------------------------------|------------|---|
| Quick Mounting Plastic Handle | 3-1/2                   | 5-1/2, 6-1/4, 7, 8                  | 3.0, 3.25, 3.5, 3.75           | 16174      | 10  |

# File holders and accessories

## File holders, file card and brush, plastic sleeves

### Needle file holders

EDP 16075




EDP 16076



Quick-mounting handles for needle files or rasps.

**PFERD specification number**  
NFH

| Description                | Compatible for file length [Inches] | EDP number |  |
|----------------------------|-------------------------------------|------------|---|
| Needle File Holder Plastic | 5-1/2, 6-1/4, 7                     | 16075      | 10  |
| Needle File Holder Wood    | 5-1/2, 6-1/4, 7                     | 16076      | 10  |

### Riffler file holders




#### Advantages

- Provides optimum safety and grip control.
- One end of the file is safely covered by the handle at all times
- Fast and easy tool change
- For multiple use

Available in two different types.

**PFERD specification number**  
RFH

| For file length [Inches] | EDP number |  |
|--------------------------|------------|---|
| 6                        | 18053      | 10  |

### File card and brush




For easy cleaning of chip-loaded files.

Rugged wooden handle with wear-resistant steel wire filing.

**Application**  
Cleaning of files

**PFERD specification number**  
HB


| Description         | EDP number |  |
|---------------------|------------|---|
| File card           | 17146      | 5   |
| File card and brush | 17147      | 5   |

### Plastic sleeves (empty)



With eyelet for hanging up files without handles. For displaying on sales stands.

**PFERD specification number**  
KH

| Sleeves for file length [Inches] | EDP number |  |
|----------------------------------|------------|---|
| 4                                | 16095      | 1   |
| 6                                | 16096      | 1   |
| 8                                | 16097      | 1   |
| 10                               | 16098      | 1   |
| 12                               | 16099      | 1   |

Hand deburrer for efficient deburring, chamfering and refining of different materials and contours. Hard-to-reach places, holes, inner and outer diameters, threads and keyways can be easily worked on by hand.

The three different, easily changeable deburrers (blades, mini-blades and countersinks) are easy to control and use with the special holder. The tools fit outstandingly well with the contours of workpieces.

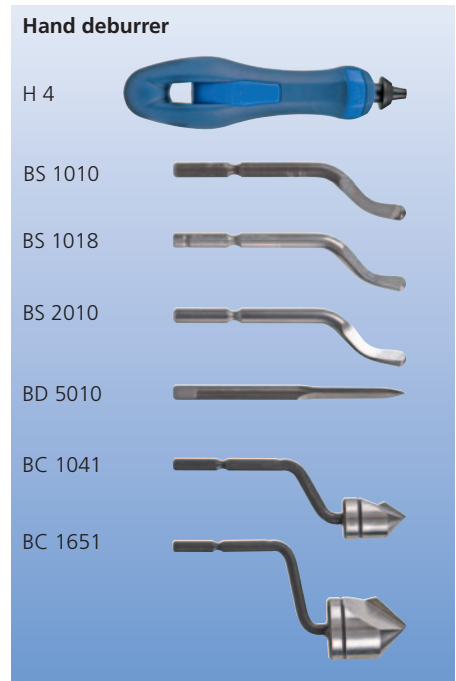
The pivot-mounted adapter system makes handling and changing the deburrer very easy.

The ergonomic file handle protects hands against sharp edges and prevents the tool from rolling away.

PFERD offers:

- Three deburring blades for work on
  - steel, aluminum
  - non-ferrous metals and cast iron
  - plastics and other soft materials
- One mini-blade for general work on very small geometries of different materials
- Two pivot-bearing deburring countersinks for general use on bores of different materials

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| Description                   | EDP number | Shank dia [Inches] | max. width [mm] | max. width [Inches] | Use for                        |  |
|-------------------------------|------------|--------------------|-----------------|---------------------|--------------------------------|--|
| <b>Holder for deburrer</b>    |            |                    |                 |                     |                                |  |
| H 4                           | 19500      | -                  | -               | -                   | All types                      | 1  |
| <b>Deburring blades</b>       |            |                    |                 |                     |                                |  |
| BS 1010                       | 19510      | 1/8                | 3.0             | 1/8                 | Steel, aluminum                | 10   |
| BS 1018                       | 19512      | 1/8                | 3.0             | 1/8                 | Plastics, other hard materials | 10   |
| BS 2010                       | 19514      | 1/8                | 3.0             | 1/8                 | Non-ferrous metals, cast iron  | 10   |
| <b>Mini-blades</b>            |            |                    |                 |                     |                                |  |
| BD 5010                       | 19520      | 1/8                | 2.0             | 1/16                | General use                    | 1  |
| <b>Deburring countersinks</b> |            |                    |                 |                     |                                |  |
| BC 1041                       | 19530      | 1/8                | 10              | 3/8                 | General use                    | 1  |
| BC 1651                       | 19532      | 1/8                | 16              | 5/8                 | General use                    | 1  |





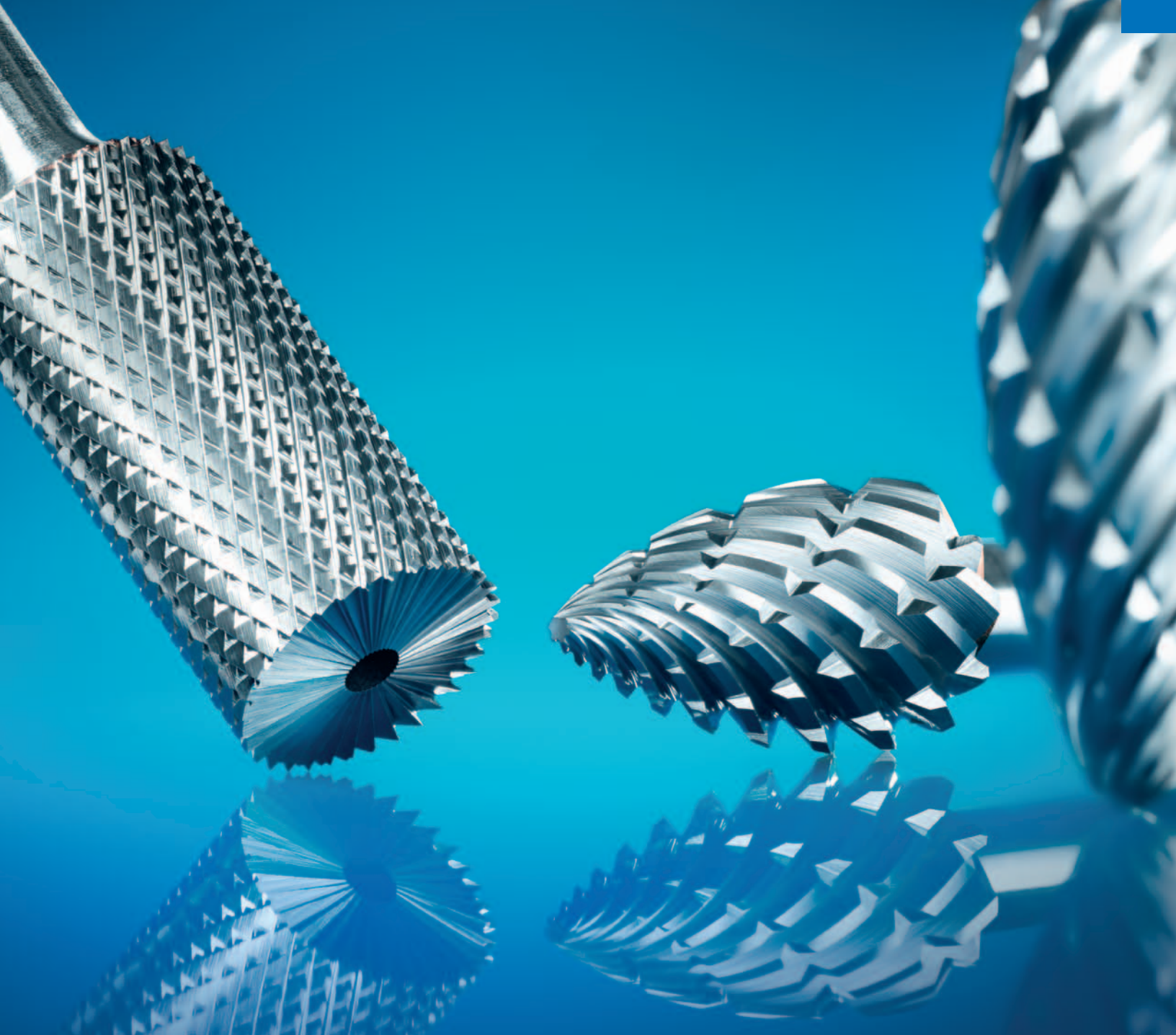
TRUST BLUE

Carbide burs, router bits  
and bi-metal hole saws



202

202



# Carbide burs, router bits and bi-metal hole saws

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PFERDMEDIA

**NEW**

See what's new since we printed this book, or visit [pferdusa.com/new](http://pferdusa.com/new)

PFERD carbide burs are manufactured in compliance with the highest quality standards. The broad product range offers the best bur solution for every application. Outstanding quality, long service life and excellent stock removal performance allow for economical work with diverse materials, delivering excellent results. PFERD quality is certified according to ISO 9001.

### Technical customer support

Our sales consultants, customer service and technical support agents will be glad to assist you by phone or on-site to optimize your bur applications. Please contact us:

**Canada Phone: (905) 501-1555**

**Toll-Free: (866) 245-1555**

**USA Phone: (262) 255-3200**

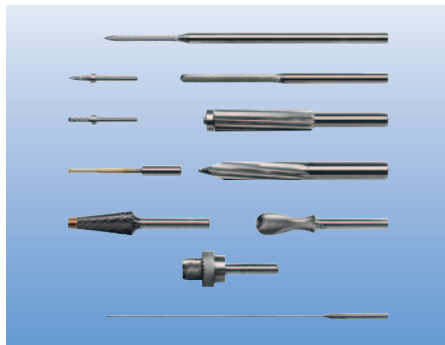
**Toll-Free: (800) 342-9015**

You will find our worldwide contact information at [www.pferd.com](http://www.pferd.com).

### Special products made to order

If our extensive stock range does not present the ideal solution for your particular application, we can produce burs specifically to meet your requirements.

We will take into account your machining tasks and requirements, drawings relating to cuts, shank diameters, special lengths, special shapes and coatings. Please contact us as listed above.



### Safety recommendations



= Wear eye protection!



= Use ear protection!



= Read the instructions!  
(Please observe the recommended RPM, in particular for burs with long shanks!)



= Read the Safety Data Sheets (SDS) before using any materials!

### Use of burs on automated equipment

Carbide burs from PFERD can be used on automated equipment such as robotics and CNC machine centres. Our technical sales force can assist you in selecting the best bur for your application. We will work with you to optimize the parameters of your machining equipment to achieve desired surface finish, product performance and cost efficiency.



### PFERD product packaging

All PFERD burs are easily identified by laser-imprinted EDP number, SCTI number and cut information on the shank. Each bur is packed individually in a sturdy reliable plastic box that protects the quality of the cutting edges. The packaging unit contains technical information, the EDP number and the production lot number. Enhanced labeling technology ensures that the imprinted label information will remain readable permanently.

#### Advantages

- Easy identification of bur
- Bur cutting edges are protected
- Package protects against impact
- Keeps bur protected from contaminants
- Package and label are abrasion, oil and dirt resistant

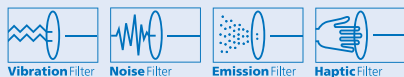


### PFERDVALUE® – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD products offer measurable added value.

Discover **PFERDERGONOMICS®** and **PFERDEFFICIENCY®**

As part of **PFERDERGONOMICS®**, PFERD offers ergonomically optimized products and power tools that contribute to greater safety and working comfort, and thus to health protection.

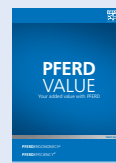


As part of **PFERDEFFICIENCY®**, PFERD offers innovative, high-performance solutions and power tools with outstanding added value.



#### PFERDMEDIA

For more information, a complete brochure is available. Please visit [pferdusa.com/pferdvalue](http://pferdusa.com/pferdvalue) to request a free copy or to download a pdf version.



#### PFERDMEDIA

For more information, please visit [pferdusa.com/carbideburs](http://pferdusa.com/carbideburs)

# Carbide burs, router bits and bi-metal hole saws



## Your quick product selection guide




| Application   | Workpiece material/colour code  |  |   |
|---|---|--|---|
| Deburring, chamfering, milling out for the preparation of build-up welding, machining of welded joints, machining of contours, cleaning cast material | Steel, cast steel   | Non-hardened, non heat-treated steels up to 1,200 N/mm <sup>2</sup> (< 38 HRC)   | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel |
|   |   | Hardened, heat-treated steels over 1,200 N/mm <sup>2</sup> (> 38 HRC)  | Tool steels, tempering steels, alloyed steels, cast steel   |
|   | Stainless steel (INOX)  | Rust- and acid-resistant steels  | Austenitic and ferritic stainless steels  |
|   | Non-ferrous metals  | Soft non-ferrous metals, non-ferrous metals  | Aluminum  |
|   |   |  | Brass, copper, zinc   |
|   |   | Hard non-ferrous metals  | Aluminum alloys, brass, copper, zinc  |
|   |   |  | Bronze, titanium/titanium alloys hard aluminum alloys (high Si content)                               |
| High-temperature-resistant materials  | Nickel-based and cobalt-based alloys, (engine and turbine construction) |  |   |
| Cast iron   | Grey cast iron, white cast iron   | Cast iron with flake graphite, with nodular graphite/nodular cast iron, white annealed cast iron, black cast iron                |   |
| Milling out, machining of contours  | Plastics, other materials   | Fibre-reinforced plastics (GRP/CRP) fibre content ≤ 40%, fibre-reinforced plastics (GRP/CRP) fibre content > 40%, thermoplastics |   |
| Trimming, contour milling, cutting out holes  |   |  |   |

### Special applications



#### Chamfering, bevelling or radiusing edges

| High-performance application   | Page  |
|--|-------|
| Carbide burs, EDGE cut        | 43-44 |
| Universal application  | Page  |
| Carbide bur shape K, shape N  | 44-45 |

#### Broken teeth

| High-performance application  | Page  |
|---|-------|
| Carbide burs, TOUGH cut  | 27-30 |

#### Hard-to-reach places

| High-performance application   | Page         |
|--|--------------|
| Carbide burs with long shank  | 28-30, 48-57 |
| Universal application  | Page         |
| Spindle extensions            | 60           |



| Characteristics      | High-performance line – bur cuts | Page  | Universal line – bur cuts | Page  |
|----------------------|----------------------------------|-------|---------------------------|-------|
| Coarse stock removal | STEEL cut                        | 8-11  | Double cut                | 46-58 |
|                      | HICOAT® HC-FEP                   | 36-37 |                           |       |
| Fine stock removal   | MICRO cut                        | 31-34 | Single cut                |       |
| Coarse stock removal | STEEL cut                        | 8-11  | Double cut                |       |
|                      | HICOAT® HC-FEP                   | 36-37 |                           |       |
| Fine stock removal   | MICRO cut                        | 31-34 | -                         |       |
| Coarse stock removal | INOX cut                         | 12-16 | Diamond cut               | 46-59 |
| Fine stock removal   | MICRO cut                        | 31-34 | -                         |       |
| Coarse stock removal | HICOAT® HC-NFE                   | 39-40 | -                         | 46-59 |
|                      | ALU/NF cut                       | 17-21 |                           |       |
| Fine stock removal   | HICOAT® HC-NFE                   | 39-40 | -                         |       |
|                      | ALU/NF cut                       | 17-21 |                           |       |
| Coarse stock removal | ALU/NF cut                       | 17-21 | -                         |       |
| Fine stock removal   | ALU/NF cut                       | 17-21 | Single cut                |       |
| Coarse stock removal | HICOAT® HC-NFE                   | 39-40 | -                         |       |
|                      | ALU/NF cut                       | 17-21 |                           |       |
| Fine stock removal   | HICOAT® HC-NFE                   | 39-40 | -                         |       |
|                      | ALU/NF cut                       | 17-21 |                           |       |
| Coarse stock removal | ALU/NF cut                       | 17-21 | Single cut<br>Diamond cut |       |
| Fine stock removal   | ALU/NF cut                       | 17-21 | Single cut                |       |
| Coarse stock removal | HICOAT® HC-HT                    | 38    | Diamond cut               |       |
| Fine stock removal   | MICRO cut                        | 31-34 | -                         |       |
| Coarse stock removal | CAST cut                         | 22-25 | Double cut                | 46-58 |
| Fine stock removal   | MICRO cut                        | 31-34 | Single cut                |       |
| Coarse stock removal | ALU/NF cut                       | 17-21 | -                         | -     |
|                      | HICOAT® HC-NFE                   | 39-40 |                           |       |
| Fine stock removal   | ALU/NF cut                       | 17-21 | -                         |       |
| Coarse stock removal | PLAST cut                        | 61-62 | -                         |       |

### Cutting out holes

| Universal application   | Page  |
|---|-------|
| Bi-metal hole saws<br> | 63-64 |

### Customer-specific carbide bur solutions

**PFERD support**

For applications with high impact loads and tooth chipping problems, our sales consultants, customer service and technical support agents will be glad to assist you by phone or on-site.

Please contact us.





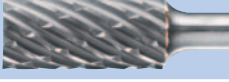

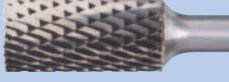
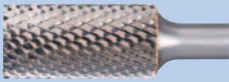
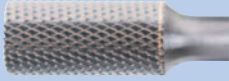

**Canada Phone: (905) 501-1555**  
**Toll-Free: (866) 245-1555**  
**USA Phone: (262) 255-3200**  
**Toll-Free: (800) 342-9015**


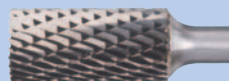
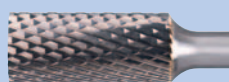



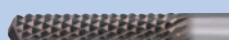
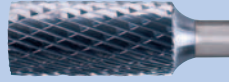




# Carbide burs

## PFERD-cuts and applications



| High-performance line carbide bur cuts   |  |
|--|--|
| <b>STEEL cut</b><br>        | <ul style="list-style-type: none"> <li>Extremely high stock removal performance on steel and cast steel</li> <li>Smooth milling</li> <li>Reduced vibration and less noise</li> </ul>   |
| <b>INOX cut</b><br>         | <ul style="list-style-type: none"> <li>Extremely high stock removal performance on all austenitic, rust- and acid-resistant steels, stainless steel (INOX)</li> <li>Substantially reduced vibration and less noise</li> <li>Prevents heat discolouration on workpiece due to the reduced heat generation</li> </ul>                                |
| <b>ALU/NF cut</b><br>       | <ul style="list-style-type: none"> <li>High stock removal performance on aluminum and aluminum alloys, light metals, non-ferrous metals and plastics</li> <li>Smooth milling</li> </ul>  |
| <b>NON-FERROUS cut*</b><br> | <ul style="list-style-type: none"> <li>High stock removal performance on non-ferrous metals, brass, copper, plastics and fibre-reinforced plastics</li> <li>Universally usable</li> </ul>  |
| <b>CAST cut</b><br>        | <ul style="list-style-type: none"> <li>Extremely high stock removal performance on cast iron</li> <li>Smooth milling</li> <li>Reduced vibration and less noise</li> </ul>  |
| <b>EDGE cut</b><br>       | <ul style="list-style-type: none"> <li>Creates exact edge shapes – with either 30°- or 45°-chamfering or a defined radius of 1/8" (3 mm)</li> <li>Safe and comfortable to guide</li> </ul>   |
| <b>TOUGH cut</b><br>      | <ul style="list-style-type: none"> <li>High stock removal performance on cast iron, steel &lt; 55 HRC</li> <li>High stock removal</li> <li>Extreme impact resistance</li> <li>Also suitable for use with high surface contact angles &gt; 1/3 and under impact loads</li> </ul>  |
| <b>TOUGH-S cut*</b><br>   | <ul style="list-style-type: none"> <li>High stock removal performance on cast iron, steel &lt; 55 HRC</li> <li>High stock removal. Similar to TOUGH cut, but with smoother milling and shorter chips</li> <li>Extreme impact resistance</li> <li>Also suitable for use with high surface contact angles &gt; 1/3 and under impact loads</li> </ul> |
| <b>MICRO cut</b><br>      | <ul style="list-style-type: none"> <li>Good stock removal on almost all materials &lt; 68 HRC</li> <li>High surface quality</li> <li>Reduced vibration and less noise</li> </ul>   |
| Universal line carbide bur cuts  |  |
| <b>Coarse cut*</b><br>    | <ul style="list-style-type: none"> <li>Machining of light metals, non-ferrous metals, steel and cast iron</li> <li>High stock removal</li> </ul>   |

| Universal line carbide bur cuts  |  |
|--|--|
| <b>Single cut</b><br>  | <ul style="list-style-type: none"> <li>Coarse machining of cast iron, steel &lt; 60 HRC, stainless steel (INOX), nickel-based alloys and titanium alloys</li> <li>High stock removal</li> <li>Good surface</li> </ul>  |
| <b>Double cut</b><br>  | <ul style="list-style-type: none"> <li>Similar to single cut, but with cross cut</li> <li>Machining of cast iron, steel &lt; 60 HRC, stainless steel (INOX), nickel-based alloys and titanium alloys</li> <li>High stock removal</li> </ul>  |
| <b>Diamond cut</b><br>   | <ul style="list-style-type: none"> <li>Machining of stainless steel (INOX), steel &lt; 60 HRC and high-temperature-resistant materials such as nickel-based and cobalt-based alloys</li> <li>High stock removal with short chips</li> <li>Good surface</li> </ul>  |
| <b>Fine cut*</b><br>   | <ul style="list-style-type: none"> <li>Fine machining of cast iron, steel &lt; 60 HRC, stainless steel (INOX) and high-temperature-resistant materials such as nickel-based and cobalt-based alloys</li> <li>Good surface finish</li> </ul>  |
| Carbide router bits for plastics/composites  |  |
| <b>PLAST cut</b><br>   | <ul style="list-style-type: none"> <li>Trimming and contour milling of workpieces from less hard glass- and carbon-fibre-reinforced duroplastics (GRP and CRP ≤ 40% fibre content) and fibre-reinforced thermoplastics</li> <li>Minimized delamination and fraying through straight cut</li> <li>Suitable for use on machines and on robots</li> <li>Router bits with special tip designs for a wide range of tasks</li> <li>Reduced vibration and less noise</li> </ul>   |
| <b>FVK cut*</b><br>  | <ul style="list-style-type: none"> <li>Trimming and contour milling of workpieces from hard glass- and carbon-fibre-reinforced duroplastics (GRP and CRP &gt; 40%)</li> <li>Bits with end cut or with center drill tips allow combined drilling and cutting tasks</li> </ul>   |
| <b>FVKS cut*</b><br>   | <ul style="list-style-type: none"> <li>Similar to FVK cut</li> <li>Suitable for use on machines and on robots with high feed rates</li> <li>Smooth milling</li> <li>Bits with end cut or with center drill tips allow combined drilling and cutting tasks</li> </ul>   |
| HICOAT® coatings   |  |
| <br><br> | <ul style="list-style-type: none"> <li>In general, all PFERD tungsten carbide burs are also available with HICOAT® coatings</li> <li>Improved anti-adhesion characteristics</li> <li>Effective chip discharge</li> <li>Lower thermal loads</li> <li>Increased service life</li> <li>Coating types <ul style="list-style-type: none"> <li>HC-FEP for iron and steel materials</li> <li>HC-HT for high-temperature-resistant materials</li> <li>HC-NFE for use on aluminum and non-ferrous metals</li> </ul> </li> </ul> |

\*Note: Non-catalogue item. Please contact us for additional information and ordering requirements.

PFERD tungsten carbide burs are designed for machining materials of virtually any strength. They are manufactured in compliance with the highest quality standards.

### Advantages

- Highest stock removal performance through optimum matching of tungsten carbide, geometry, cut and coating
- Improved comfort with reduced operator fatigue due to innovative cuts for high-performance applications
- Very long service life and high stock removal rates due to application-oriented design
- Reduced wear of the power tool due to impact-free work without chatter marks, thanks to the high concentricity

### Application examples

- Deburring
- Contouring
- Milling in preparation for build-up welding
- Weld dressing
- Milling of acute-angled surfaces
- Inner contour work, i.e. peripheral and face milling
- Chamfering, bevelling and radiusing edges

### Recommendations for use

Optimum power output and RPM of the power source (air-powered or electric machine, flexible shaft system) are necessary conditions for cost-effective use of carbide burs.

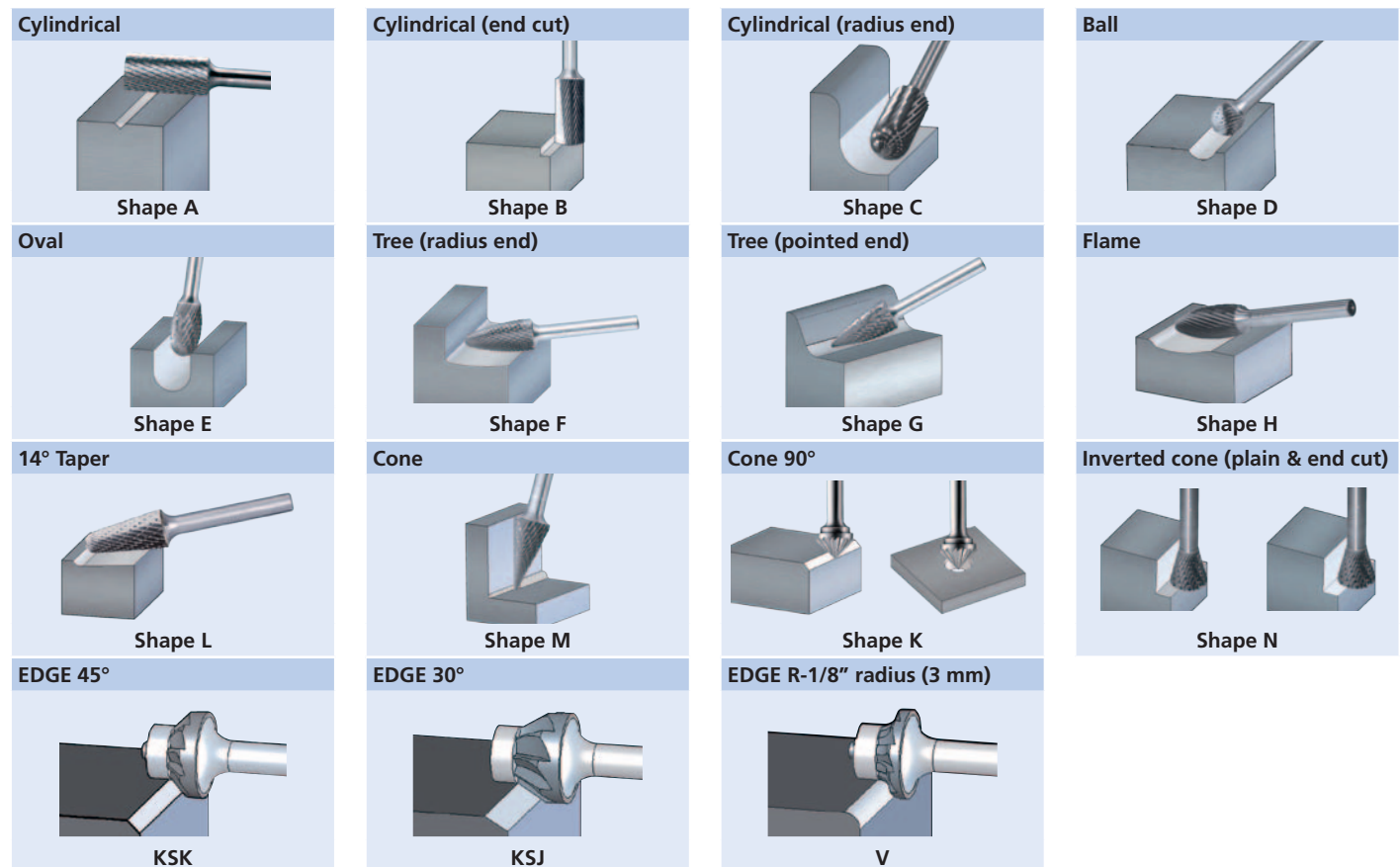
- Use highest recommended speeds. Please observe our recommendations for operating/cutting speed.
- For stationary use or when countersinking with 360° use of the bur, work in these instances at 3,000 RPM or less.
- Only use power tools with rigid clamping systems as impacts and chattering on the bur lead to premature wear.
- Always observe proper clamping depth. In general the minimum clamping depth is 2/3 of the shaft length.
- For the cost-effective use of burs with a diameter > 1/4" a power output of 300 - 500 watts is required when used at higher cutting speeds. When using burs with coarse cuts (e.g. ALU/NF cut), even higher power outputs of 500 - 1,500 watts are advantageous.
- For low stock removal (deburring, chamfering, surface finishing), the rotational speed can be substantially increased up to 100% (exception: carbide burs with long shanks).
- For materials which do not conduct heat well, such as stainless steel (INOX), titanium alloys, etc., follow the rotational speed



recommendations in order not to damage the bur. Avoid making the bur's shank turn blue.

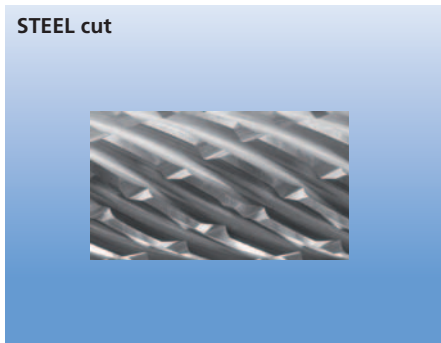
- The bur contact surface to the workpiece should not exceed more than 30% of the circumference. Failure to comply with this recommendation will result in rough milling behaviour and possibly in broken teeth. If this cannot be avoided, we recommend using TOUGH burs (see pages 26-30).
- Burs with a HICOAT® coating are particularly well suited to work with very greasy materials. Alternatively, the use of a lubricant, such as cutting oil, grease, kerosene or similar, is recommended to prevent the cut from clogging up. See pages 35-40 for HICOAT® burs.
- In general, burs are used counterrotationally or with a side to side motion. Pass the bur rapidly over the workpiece in the direction of rotation to achieve fine finishes.

### Overview applications and shapes



# Carbide burs – High-performance line

**NEW** for use on steel and cast steel




With its innovative STEEL cut, PFERD has developed unique burs for machining steel and cast steel, distinguished by **smooth but very aggressive operating action**, ensuring safe and precise work.

Extremely **high stock removal rates** improve productivity through **significant time savings** and **reduced labor costs**.



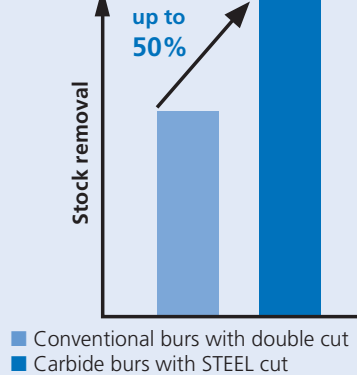
## Advantages

- Innovative tooth geometry delivers very aggressive operating action, generating large chips and very high removal rates
- Significant time savings through extremely high stock removal performance
- Protection of the workpiece and bur through much lower thermal loads
- Comfortable and ergonomic working through quieter operation with reduced vibration and less noise



**PFERDMEDIA**  
To see it in action, please visit [pferdusa.com/vsteelburs](http://pferdusa.com/vsteelburs)

## Performance values for application on steel and cast steel



**PFERDERGONOMICS®** recommends burs with STEEL cut as an innovative solution for comfortable working with reduced vibration and lower noise.



**PFEREFFICIENCY®** recommends burs with STEEL cut for long, fatigue-free and resource saving work, with perfect results in the shortest possible time.



## Recommended rotational speed range [RPM]

To determine the recommended rotational speed range, please proceed as follows:

- 1 Refer to the table for the cutting speed range
- 2 Select the required bur diameter
- 3 The cutting speed range and the bur diameter determine the recommended rotational speed range [RPM]

| Workpiece material/colour code |   | Characteristics  | Cut   | 1 Cutting speed    |
|--------------------------------|---|--|-------|--------------------|
| Steel, cast steel              | Non-hardened, non-heat treated steels up to 38 HRC (< 1,200 N/mm <sup>2</sup> ) | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steels | STEEL | 1,500 - 2,500 SFPM |
|                                | Hardened, heat-treated steels exceeding 38 HRC (> 1,200 N/mm <sup>2</sup> )     | Tool steels, tempering steels, alloyed steels, cast steels   |       |                    |

### Example

Carbide bur, STEEL cut,  
bur diameter: 1/2".  
Cutting speed: 1,500 - 2,500 SFPM  
Rotational speed: **12,000 - 20,000 RPM**

| 2 Bur dia. [Inches] | 3 Cutting speed [SFPM] |        |
|---------------------|------------------------|--------|
|                     | 1,500                  | 2,500  |
|                     | Rotational speed [RPM] |        |
| 1/4                 | 24,000                 | 40,000 |
| 3/8                 | 14,000                 | 24,000 |
| 1/2                 | 12,000                 | 20,000 |
| 5/8                 | 9,000                  | 15,000 |



Cylindrical bur with plain end (uncut).

**PFERD specification number**

ZYA

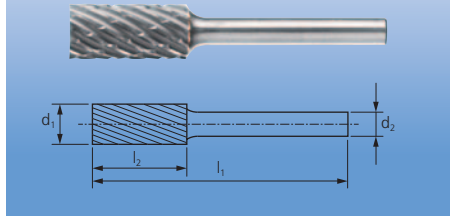
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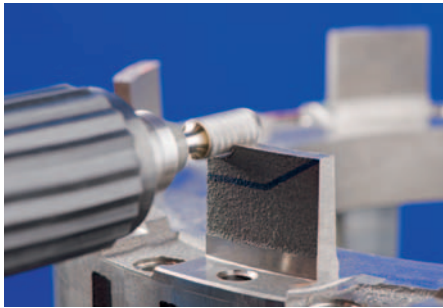
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**Cylindrical (plain end)  
Shape A**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>STEEL</b> |  |
|---|-------------|---------------------------------|-------------------------------------|---|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |   |   |
| 1/4 x 5/8   | SA-1        | 1/4                             | 1-15/16                             | 24038                                   | 1   |
| 3/8 x 3/4   | SA-3        | 1/4                             | 2-1/2                               | 24068                                   | 1   |
| 1/2 x 1   | SA-5        | 1/4                             | 2-3/4                               | 24108                                   | 1   |
| 5/8 x 1   | SA-6        | 1/4                             | 2-3/4                               | 24118                                   | 1   |



Cylindrical bur with radius end.

**PFERD specification number**

WRC

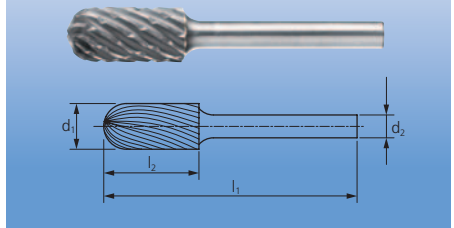
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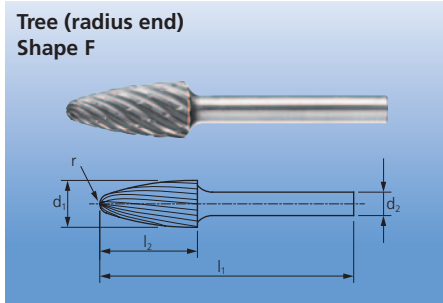
**Cylindrical (radius end)  
Shape C**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>STEEL</b> |  |
|---|-------------|---------------------------------|-------------------------------------|---|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |   |   |
| 1/4 x 5/8   | SC-1        | 1/4                             | 1-15/16                             | 24398                                   | 1   |
| 3/8 x 3/4   | SC-3        | 1/4                             | 2-1/2                               | 24428                                   | 1   |
| 1/2 x 1   | SC-5        | 1/4                             | 2-3/4                               | 24468                                   | 1   |
| 5/8 x 1   | SC-6        | 1/4                             | 2-3/4                               | 24478                                   | 1   |

# Carbide burs – High-performance line

**NEW** for use on steel and cast steel



Tree-shaped bur with radius end.

**PFERD specification number**  
RBF

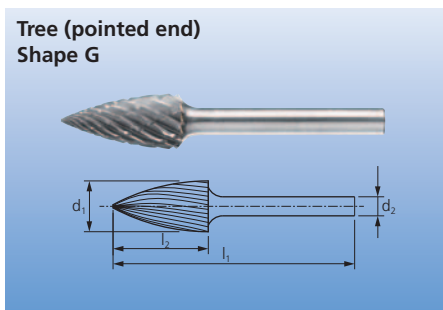
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| Bur dia. x length<br>$d_1$ x $l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>STEEL</b> |   |
|--|-------------|---------------------------------|-------------------------------------|---|---|
| <b>Shank dia. 1/4"</b>                         |             |                                 |                                     |   |   |
| 1/4 x 5/8                                      | SF-1        | 1/4                             | 1-15/16                             | 24698                                   | 1 |
| 3/8 x 3/4                                      | SF-3        | 1/4                             | 2-1/2                               | 24708                                   | 1 |
| 1/2 x 1  | SF-5        | 1/4                             | 2-3/4                               | 24728                                   | 1 |
| 5/8 x 1  | SF-6        | 1/4                             | 2-3/4                               | 24748                                   | 1 |



Tree-shaped bur with pointed end.

**PFERD specification number**  
SPG

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| Bur dia. x length<br>$d_1$ x $l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>STEEL</b> |   |
|--|-------------|---------------------------------|-------------------------------------|---|---|
| <b>Shank dia. 1/4"</b>                         |             |                                 |                                     |   |   |
| 1/4 x 5/8                                      | SG-1        | 1/4                             | 1-15/16                             | 24788                                   | 1 |
| 3/8 x 3/4                                      | SG-3        | 1/4                             | 2-1/2                               | 24808                                   | 1 |
| 1/2 x 1  | SG-5        | 1/4                             | 2-3/4                               | 24818                                   | 1 |
| 5/8 x 1  | SG-6        | 1/4                             | 2-3/4                               | 24838                                   | 1 |

Taper bur with radius end.

**PFERD specification number**

KEL

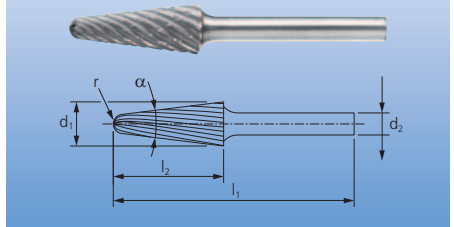
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


**PFERDEFFICIENCY®**



**14° Taper (radius end)  
Shape L**





| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Angle<br>$\alpha$ | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>STEEL</b><br> |  |
|---|-------------|---------------------------------|-------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                   |                                     |  |   |
| 1/4 x 5/8   | SL-1        | 1/4                             | 14°               | 1-15/16                             | 25138  | 1   |
| 3/8 x 1-1/16                                      | SL-3        | 1/4                             | 14°               | 3                                   | 25158  | 1   |
| 1/2 x 1-1/8                                       | SL-4        | 1/4                             | 14°               | 3-1/16                              | 25168  | 1   |
| 5/8 x 1-5/16                                      | SL-6        | 1/4                             | 14°               | 3-1/4                               | 25188  | 1   |

**5 piece carbide bur set – STEEL cut  
1/4" shank (plastic case)**

Contains 5 pcs. burs with 1/4" shank dia. and STEEL cut.

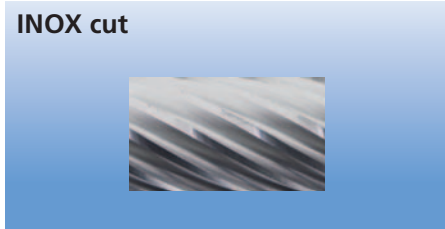
**5 piece carbide bur set  
STEEL cut**



| Set contents<br>shape    | Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Cut type and set EDP number   |                                   |  |
|--------------------------|---|-------------|---|-----------------------------------|---|
|                          |   |             | <b>STEEL</b><br> | Individual<br>bur EDP's<br>in set |   |
| Cylindrical (plain end)  | 1/2 x 1   | SA-5        | 26553   | 24108                             | 1   |
| Cylindrical (radius end) | 1/2 x 1   | SC-5        |   | 24468                             | 1   |
| Tree (radius end)        | 1/2 x 1   | SF-5        |   | 24728                             | 1   |
| Tree (pointed end)       | 1/2 x 1   | SG-5        |   | 24818                             | 1   |
| 14° Taper (radius end)   | 1/2 x 1-1/8                                       | SL-4        |   | 25168                             | 1   |

# Carbide burs – High-performance line

**NEW** for use on stainless steel (INOX)

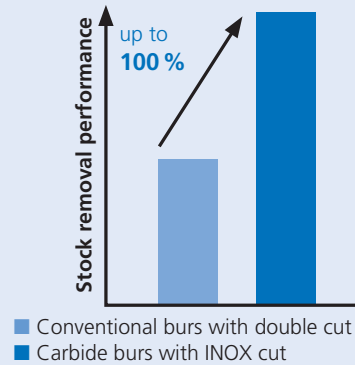


PFERD has developed innovative burs with INOX cut for work on stainless steel (INOX). The INOX cut is characterized by an extremely high stock removal performance on all austenitic as well as rust- and acid-resistant steels. It creates significantly less vibration than a comparable double cut.

## Advantages

- Outstanding stock removal performance and service life due to the innovative tooth geometry
- Achieves high surface qualities through optimum chip formation
- Prevents heat discolouration in the material due to the reduced heat generation

## Performance values for applications on stainless steel (INOX)



**PFERDERGONOMICS®** recommends burs with INOX cut as an innovative solution for comfortable working with significantly reduced vibration and lower noise.



**PFEREFFICIENCY®** recommends burs with INOX cut for long, fatigue-free and resource saving work, with perfect results in the shortest possible time.



## Recommended rotational speed range [RPM]

To determine the recommended rotational speed range, please proceed as follows:

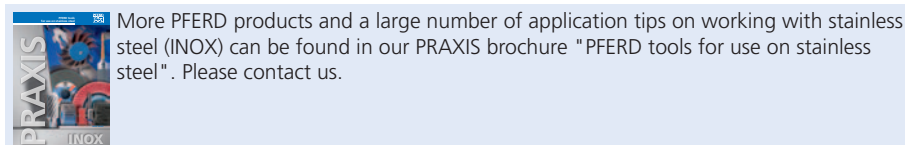
- 1 Refer to the table for the cutting speed range
- 2 Select the required bur diameter
- 3 The cutting speed range and the bur diameter determine the recommended rotational speed range [RPM]

| Workpiece material/colour code |                                 |  | Characteristics      | Cut  | 1 Cutting speed    |
|--------------------------------|---------------------------------|--|----------------------|------|--------------------|
| Stainless steel (INOX)         | Rust- and acid-resistant steels | Austenitic and ferritic stainless steels | Coarse stock removal | INOX | 1,500 - 2,000 SFPM |

## Example

Carbide bur, INOX cut,  
bur diameter: 1/2".  
Cutting speed: 1,500 - 2,000 SFPM  
**Rotational speed: 12,000 - 16,000 RPM**

| 2 Bur dia. [Inches] | 3 Cutting speed [SFPM] |        |
|---------------------|------------------------|--------|
|                     | 1,500                  | 2,000  |
|                     | Rotational speed [RPM] |        |
| 1/8                 | 48,000                 | 64,000 |
| 1/4                 | 24,000                 | 32,000 |
| 3/8                 | 14,000                 | 19,000 |
| 1/2                 | 12,000                 | 16,000 |



More PFERD products and a large number of application tips on working with stainless steel (INOX) can be found in our PRAXIS brochure "PFERD tools for use on stainless steel". Please contact us.



## PFERDMEDIA

To see it in action, please visit [pferdusa.com/vinoxburs](http://pferdusa.com/vinoxburs)





Cylindrical bur with plain end (uncut).

**PFERD specification number**

ZYA

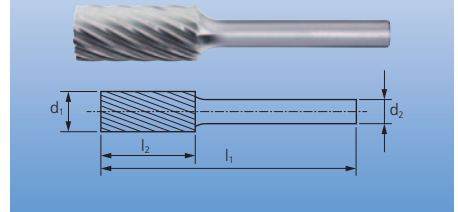
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**PFEREFFICIENCY®**



**Cylindrical (plain end)  
Shape A**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br>INOX<br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |  |   |
| 1/8 x 1/2   | SA-43       | 1/8                             | 1-1/2                               | 23127  | 1   |
| 1/4 x 1/2   | SA-51       | 1/8                             | 1-11/16                             | 23137  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/4 x 5/8   | SA-1        | 1/4                             | 1-15/16                             | 24037  | 1   |
| 3/8 x 3/4   | SA-3        | 1/4                             | 2-1/2                               | 24067  | 1   |
| 1/2 x 1   | SA-5        | 1/4                             | 2-3/4                               | 24107  | 1   |



Cylindrical bur with radius end.

**PFERD specification number**

WRC

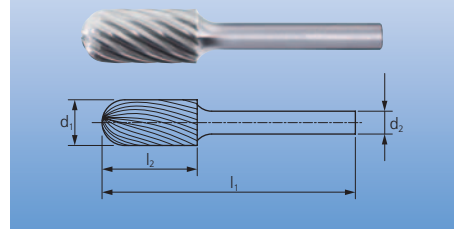
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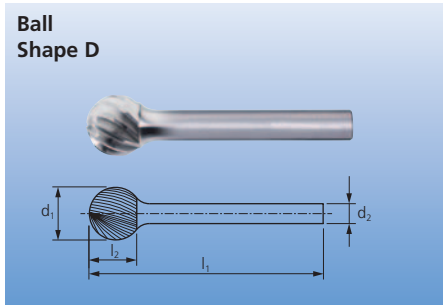
**Cylindrical (radius end)  
Shape C**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br>INOX<br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |  |   |
| 1/8 x 1/2   | SC-42       | 1/8                             | 1-1/2                               | 23197  | 1   |
| 1/4 x 1/2   | SC-51       | 1/8                             | 1-11/16                             | 23207  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/4 x 5/8   | SC-1        | 1/4                             | 1-15/16                             | 24397  | 1   |
| 3/8 x 3/4   | SC-3        | 1/4                             | 2-1/2                               | 24427  | 1   |
| 1/2 x 1   | SC-5        | 1/4                             | 2-3/4                               | 24467  | 1   |

# Carbide burs – High-performance line

**NEW** for use on stainless steel (INOX)



Ball-shaped bur.

**PFERD specification number**  
KUD

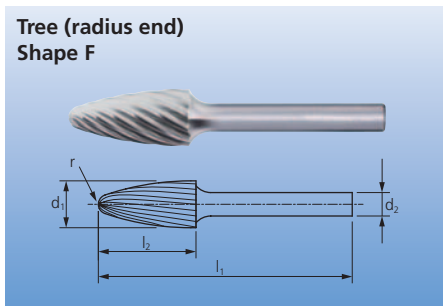
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**PFERDEFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>INOX</b> |   |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |  |   |
| 1/8 x 3/32  | SD-42       | 1/8                             | 1-1/2                               | 23247                                  | 1 |
| 1/4 x 3/16  | SD-51       | 1/8                             | 1-3/8                               | 23257                                  | 1 |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/4 x 3/16  | SD-1        | 1/4                             | 1-15/16                             | 24527                                  | 1 |
| 3/8 x 5/16  | SD-3        | 1/4                             | 2-1/16                              | 24567                                  | 1 |
| 1/2 x 7/16  | SD-5        | 1/4                             | 2-3/16                              | 24587                                  | 1 |



Tree-shaped bur with radius end.

**PFERD specification number**  
RBF

**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>INOX</b> |   |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |  |   |
| 1/8 x 1/2   | SF-42       | 1/8                             | 1-1/2                               | 23317                                  | 1 |
| 1/4 x 1/2   | SF-51       | 1/8                             | 1-11/16                             | 23327                                  | 1 |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/4 x 5/8   | SF-1        | 1/4                             | 1-15/16                             | 24697                                  | 1 |
| 3/8 x 3/4   | SF-3        | 1/4                             | 2-1/2                               | 24707                                  | 1 |
| 1/2 x 1   | SF-5        | 1/4                             | 2-3/4                               | 24727                                  | 1 |

Tree-shaped bur with pointed end.

**PFERD specification number**  
SPG

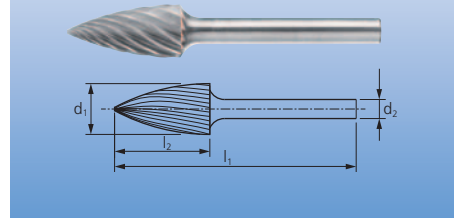
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**Tree (pointed end)**  
**Shape G**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>INOX</b> |   |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |  |   |
| 1/8 x 1/4   | SG-41       | 1/8                             | 1-1/2                               | 23357                                  | 1 |
| 1/4 x 1/2   | SG-51       | 1/8                             | 1-11/16                             | 23387                                  | 1 |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/4 x 5/8   | SG-1        | 1/4                             | 1-15/16                             | 24787                                  | 1 |
| 3/8 x 3/4   | SG-3        | 1/4                             | 2-1/2                               | 24807                                  | 1 |
| 1/2 x 1   | SG-5        | 1/4                             | 2-3/4                               | 24817                                  | 1 |



Taper bur with radius end.

**PFERD specification number**  
KEL

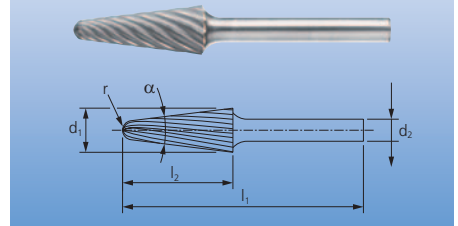
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**14° Taper (radius end)**  
**Shape L**





| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Angle<br>$\alpha$ | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>INOX</b> |   |
|---|-------------|---------------------------------|-------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                   |                                     |  |   |
| 1/8 x 1/2   | SL-42       | 1/8                             | 14°               | 1-1/2                               | 23457                                  | 1 |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                   |                                     |  |   |
| 1/4 x 5/8   | SL-1        | 1/4                             | 14°               | 1-15/16                             | 25137                                  |   |
| 3/8 x 1-1/16                                      | SL-3        | 1/4                             | 14°               | 3                                   | 25157                                  | 1 |
| 1/2 x 1-1/8                                       | SL-4        | 1/4                             | 14°               | 3-1/16                              | 25167                                  | 1 |

# Carbide burs – High-performance line

**NEW** for use on stainless steel (INOX)



**5 piece carbide bur set – INOX cut**  
**1/4" shank (plastic case)**  
 Contains 5 pcs. burs with 1/4" shank dia. and INOX cut.

| Set contents shape       | Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI no. | Cut type and set EDP number  |                             |  |
|--------------------------|---|----------|--|-----------------------------|---|
|                          |   |          | INOX<br> | Individual bur EDP's in set |   |
| Cylindrical (plain end)  | 1/2 x 1   | SA-5     | 26554  | 24107                       | 1   |
| Cylindrical (radius end) | 1/2 x 1   | SC-5     |  | 24467                       | 1   |
| Tree (radius end)        | 1/2 x 1   | SF-5     |  | 24727                       | 1   |
| Tree (pointed end)       | 1/2 x 1   | SG-5     |  | 24817                       | 1   |
| 14° Taper (radius end)   | 1/2 x 1-1/8                                       | SL-4     |  | 25167                       | 1   |



### ALU/NF cut



PFERD has optimized the ALU/NF cut especially for stock removal of aluminum. This cut is characterized by its high stock removal performance on all grades of aluminum.

### Note

You can find the coated tungsten carbide ALU/NF cut under carbide burs HICOAT®, coating HC-NFE, on pages 39-40.

Please request a copy of the PRAXIS “PFERD tools for use on aluminum” for instructions and further information on working with aluminum.

### Application examples

- Contouring
- Bore deburring
- Milling in preparation of build-up welding
- Recommended for milling work (deburring, weld dressing, contouring etc.). Also suitable for work on small and miniature components in mould, machine and model construction.

### Advantages of ALU/NF cut

- Reduces loading
- Long service life
- Large chip volume and high stock removal performance
- Can be used with cutting rates of up to 3,600 SFPM
- Smooth running
- Designed for maximum stock removal of non-ferrous metals, brass, copper, hard aluminum alloys, plastics, fibre-reinforced plastics and rubber



### Recommendations for use

The use of grinding oil prevents chips adhering during work on soft aluminum alloys. This increases the service life and improves the finish of the workpiece.

### Recommended rotational speed range [RPM]

To determine the recommended cutting speed [SFPM], please proceed as follows:

- 1 Select the workpiece material to be machined
- 2 Determine the characteristics of your application
- 3 Establish the cutting speed range

To determine the recommended rotational speed [RPM], please proceed as follows:

- 4 Select the required bur diameter
- 5 The cutting speed range and the bur diameter determine the recommended rotational speed range [RPM]

| 1 Workpiece material/colour code |  | 2 Characteristics  | Cut    | 3 Cutting speed    |
|----------------------------------|--|--|--------|--------------------|
| Non-ferrous metals               | Soft non-ferrous metals  | Aluminum alloys, brass, copper, zinc                     | ALU/NF | 2,000 - 3,600 SFPM |
|                                  |  |  | ALU/NF | 3,000 - 3,600 SFPM |
|                                  | Hard non-ferrous metals  | Bronze, titanium, hard aluminum alloys (high Si content) | ALU/NF | 2,000 - 3,600 SFPM |
|                                  |  |  | ALU/NF | 3,000 - 3,600 SFPM |
| Plastics and other materials     | Fibre-reinforced plastics (GRP/CRP), thermoplastics, hard rubber | Coarse machining = high stock removal                    | ALU/NF | 1,650 - 3,600 SFPM |
|                                  |  | Fine machining = low stock removal                       | ALU/NF | 1,650 - 3,600 SFPM |

### Example

Carbide bur, ALU/NF cut, bur diameter: 1/2".

Coarse machining of hardened non-ferrous metals, e.g. bronze.

Cutting speed: 2,000 - 3,600 SFPM

**Rotational speed: 16,000 - 30,000 RPM**

| 4 Bur dia. [Inches] | 5 Cutting speed [SFPM] |        |        |         |
|---------------------|------------------------|--------|--------|---------|
|                     | 1,650                  | 2,000  | 3,000  | 3,600   |
|                     | Rotational speed [RPM] |        |        |         |
| 1/8                 | 53,000                 | 64,000 | 95,000 | 117,000 |
| 1/4                 | 27,000                 | 32,000 | 48,000 | 59,000  |
| 3/8                 | 16,000                 | 19,000 | 29,000 | 35,000  |
| 1/2                 | 13,000                 | 16,000 | 24,000 | 30,000  |
| 5/8                 | 10,000                 | 12,000 | 18,000 | 22,000  |

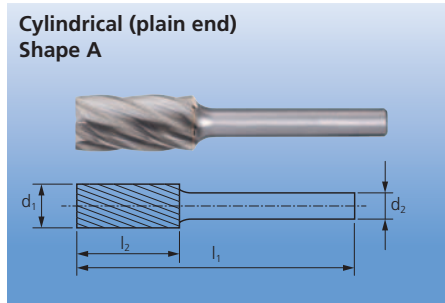


PFERDMEDIA

To see it in action, please visit [pferdusa.com/valuburs](http://pferdusa.com/valuburs)

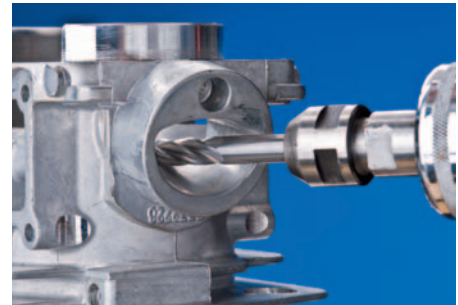
# Carbide burs – High-performance line



for use on aluminum and non-ferrous metals

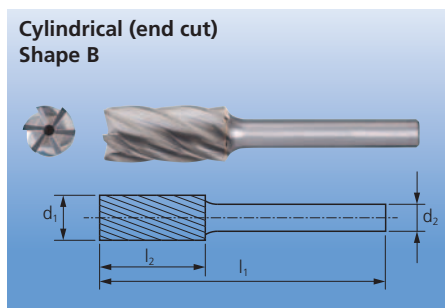


Cylindrical bur with plain end (uncut).

**PFERD specification number**  
ZYA





| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br>ALU/NF<br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/4 x 5/8   | SA-1        | 1/4                             | 1-15/16                             | 24035  | 1   |
| 3/8 x 3/4   | SA-3        | 1/4                             | 2-1/2                               | 24065  | 1   |
| 1/2 x 1   | SA-5        | 1/4                             | 2-3/4                               | 24105  | 1   |
| 5/8 x 1   | SA-6        | 1/4                             | 2-3/4                               | 24115  | 1   |



Cylindrical bur with end cut.

**PFERD specification number**  
ZYAS

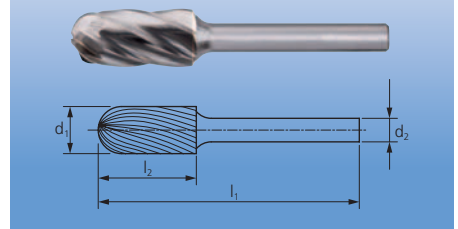
| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br>ALU/NF<br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |  |   |
| 1/8 x 9/16  | SB-43       | 1/8                             | 1-1/2                               | 23165  | 1   |
| 1/4 x 1/2   | SB-51       | 1/8                             | 1-11/16                             | 23175  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/4 x 5/8   | SB-1        | 1/4                             | 1-15/16                             | 24215  | 1   |
| 3/8 x 3/4   | SB-3        | 1/4                             | 2-1/2                               | 24245  | 1   |
| 1/2 x 1   | SB-5        | 1/4                             | 2-3/4                               | 24285  | 1   |
| 5/8 x 1   | SB-6        | 1/4                             | 2-3/4                               | 24295  | 1   |





Cylindrical bur with radius end.

**PFERD specification number**  
WRC

**Cylindrical (radius end)**  
**Shape C**



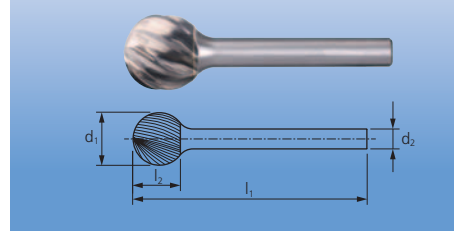
| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>ALU/NF</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|---|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |   |   |
| 1/8 x 1/2   | SC-42       | 1/8                             | 1-1/2                               | 23195   | 1   |
| 1/4 x 1/2   | SC-51       | 1/8                             | 1-11/16                             | 23205   | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |   |   |
| 1/4 x 5/8   | SC-1        | 1/4                             | 1-15/16                             | 24395   | 1   |
| 3/8 x 3/4   | SC-3        | 1/4                             | 2-1/2                               | 24425   | 1   |
| 1/2 x 1   | SC-5        | 1/4                             | 2-3/4                               | 24465   | 1   |
| 5/8 x 1   | SC-6        | 1/4                             | 2-3/4                               | 24475   | 1   |





Ball-shaped bur.

**PFERD specification number**  
KUD

**Ball**  
**Shape D**



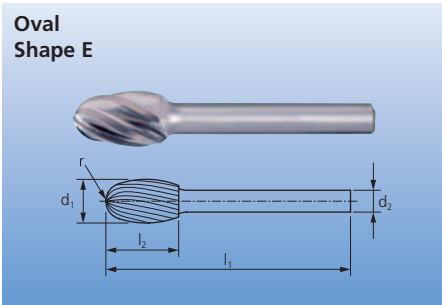
| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>ALU/NF</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|---|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |   |   |
| 1/8 x 3/32  | SD-42       | 1/8                             | 1-1/2                               | 23245   | 1   |
| 1/4 x 3/16  | SD-51       | 1/8                             | 1-3/8                               | 23255   | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |   |   |
| 1/4 x 3/16  | SD-1        | 1/4                             | 1-15/16                             | 24545   | 1   |
| 3/8 x 5/16  | SD-3        | 1/4                             | 2-1/16                              | 24565   | 1   |
| 1/2 x 7/16  | SD-5        | 1/4                             | 2-3/16                              | 24585   | 1   |
| 5/8 x 9/16  | SD-6        | 1/4                             | 2-5/16                              | 24595   | 1   |

# Carbide burs – High-performance line

for use on aluminum and non-ferrous metals



## Oval Shape E

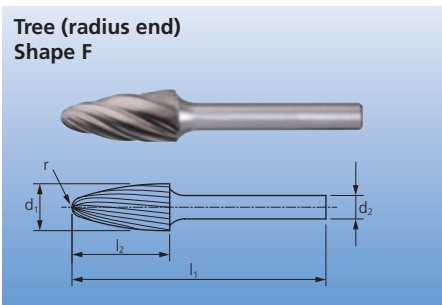


Oval-shaped bur.

**PFERD specification number**  
TRE

| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br>ALU/NF<br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 3/8 x 5/8   | SE-3        | 1/4                             | 2-3/8                               | 24645  | 1   |
| 1/2 x 7/8   | SE-5        | 1/4                             | 2-5/8                               | 24655  | 1   |
| 5/8 x 1   | SE-6        | 1/4                             | 2-3/4                               | 24665  | 1   |



## Tree (radius end) Shape F



Tree-shaped bur with radius end.

**PFERD specification number**  
RBF



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br>ALU/NF<br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |  |   |
| 1/8 x 1/2   | SF-42       | 1/8                             | 1-1/2                               | 23315  | 1   |
| 1/4 x 1/2   | SF-51       | 1/8                             | 1-11/16                             | 23325  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/4 x 5/8   | SF-1        | 1/4                             | 1-15/16                             | 24695  | 1   |
| 3/8 x 3/4   | SF-3        | 1/4                             | 2-1/2                               | 24705  | 1   |
| 1/2 x 1   | SF-5        | 1/4                             | 2-3/4                               | 24725  | 1   |
| 5/8 x 1   | SF-6        | 1/4                             | 2-3/4                               | 24745  | 1   |

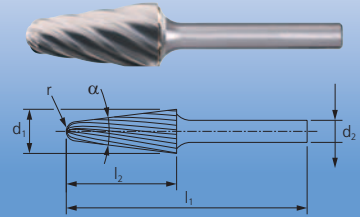






Tapered bur with radius end.

**PFERD specification number**  
KEL

**14° Taper (radius end)**  
**Shape L**





| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Angle<br>$\alpha$ | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>ALU/NF</b><br> |  |
|---|-------------|---------------------------------|-------------------|-------------------------------------|---|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                   |                                     |   |   |
| 3/8 x 1-1/8                                       | SL-3        | 1/4                             | 14°               | 3                                   | 25155   | 1   |
| 1/2 x 1-1/8                                       | SL-4        | 1/4                             | 14°               | 3-1/16                              | 25165   | 1   |
| 5/8 x 1-5/16                                      | SL-6        | 1/4                             | 14°               | 3-1/4                               | 25185   | 1   |

**5 piece carbide bur set 1/4" shank**  
**ALU/NF cut (plastic case)**  
Contains 5 pcs. burs with 1/4" shank dia. and ALU/NF cut.

**5 piece carbide bur set**  
**ALU/NF cut**

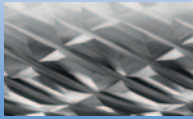


| Set contents<br>shape    | Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Cut type and set EDP number  |                                   |  |
|--------------------------|---|-------------|--|-----------------------------------|---|
|                          |   |             | <b>ALU/NF</b><br> | Individual<br>bur EDP's<br>in set |   |
| Cylindrical (plain end)  | 1/2 x 1   | SA-5        | 26550  | 24105                             | 1   |
| Cylindrical (radius end) | 1/2 x 1   | SC-5        |  | 24465                             | 1   |
| Oval                     | 1/2 x 7/8   | SE-5        |  | 24655                             | 1   |
| Tree                     | 1/2 x 1   | SF-5        |  | 24725                             | 1   |
| 14° Taper                | 1/2 x 1-1/8                                       | SL-4        |  | 25165                             | 1   |

# Carbide burs – High-performance line

**NEW** for use on cast iron

## CAST cut

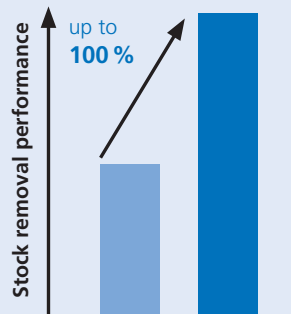


With the CAST cut, PFERD has developed innovative burs especially for work on cast iron. They are characterized by an extremely high stock removal performance on cast iron and impress through smooth milling with significantly reduced vibration and less noise.

## Advantages

- Up to 100% higher stock removal performance when used on cast iron due to the innovative tooth geometry, when compared with conventional double cut burs
- Significantly increased aggressiveness, large chips, very good chip removal

## Performance values for applications on cast iron



■ Conventional burs with double cut  
■ Carbide burs with CAST cut



**PFERDERGONOMICS®** recommends burs with CAST cut as an innovative solution for comfortable working with reduced vibration and lower noise.



**PFERDEFFICIENCY®** recommends burs with CAST cut for long, fatigue-free and resource saving work, with perfect results in the shortest possible time.



## Recommended rotational speed range [RPM]

To determine the recommended rotational speed range, please proceed as follows:

- 1 Refer to the table for the cutting speed range
- 2 Select the required bur diameter
- 3 The cutting speed range and the bur diameter determine the recommended rotational speed range [RPM]

| Workpiece material/colour code |                                 | Characteristics   | Cut  | 1 Cutting speed    |
|--------------------------------|---------------------------------|---|------|--------------------|
| Cast iron                      | Grey cast iron, white cast iron | Cast iron with flake graphite, with nodular graphite/nodular cast iron, white annealed cast iron, black cast iron | CAST | 1,500 - 2,500 SFPM |

## Example

Carbide bur, CAST cut, bur diameter: 1/2".

Coarse stock removal on cast iron.

Cutting speed: 1,500 - 2,500 SFPM

**Rotational speed: 12,000 - 20,000 RPM**

| 2 Bur dia. [Inches]    | 3 Cutting speed [SFPM] |        |
|------------------------|------------------------|--------|
|                        | 1,500                  | 2,500  |
| Rotational speed [RPM] |                        |        |
| 3/8                    | 14,000                 | 24,000 |
| 1/2                    | 12,000                 | 20,000 |



**PFERDMEDIA**

To see it in action, please visit [pferdusa.com/vcastburs](http://pferdusa.com/vcastburs)



Cylindrical bur with plain end (uncut).

**PFERD specification number**

ZYA

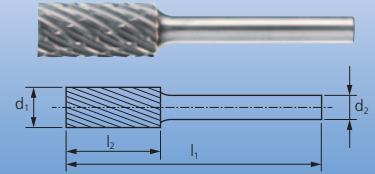
**PFERDERGONOMICS®**




**PFEREFFICIENCY®**



**Cylindrical (plain end)  
Shape A**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>CAST</b> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
|---|-------------|---------------------------------|-------------------------------------|--|---|

Shank dia. 1/4"

|           |      |     |       |       |   |
|-----------|------|-----|-------|-------|---|
| 3/8 x 3/4 | SA-3 | 1/4 | 2-1/2 | 24069 | 1 |
| 1/2 x 1   | SA-5 | 1/4 | 2-3/4 | 24109 | 1 |



Cylindrical bur with radius end.

**PFERD specification number**

WRC

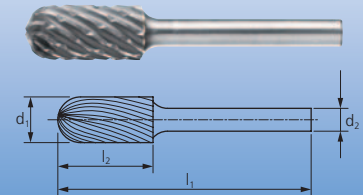
**PFERDERGONOMICS®**




**PFEREFFICIENCY®**



**Cylindrical (radius end)  
Shape C**



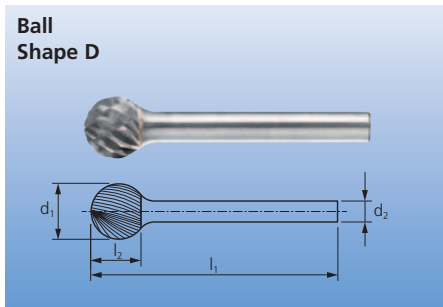
| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>CAST</b> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
|---|-------------|---------------------------------|-------------------------------------|--|---|

Shank dia. 1/4"

|           |      |     |       |       |   |
|-----------|------|-----|-------|-------|---|
| 3/8 x 3/4 | SC-3 | 1/4 | 2-1/2 | 24429 | 1 |
| 1/2 x 1   | SC-5 | 1/4 | 2-3/4 | 24469 | 1 |

# Carbide burs – High-performance line

**NEW** for use on cast iron



Ball-shaped bur.

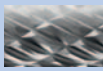

**PFERD specification number**  
KUD

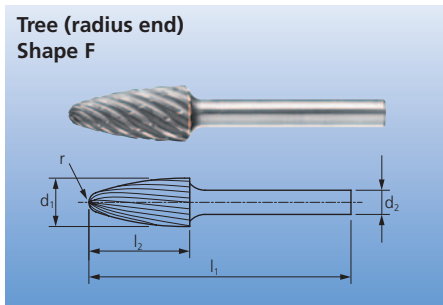
**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br>CAST<br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 3/8 x 5/16  | SD-3        | 1/4                             | 2-1/16                              | 24569  | 1   |
| 1/2 x 7/16  | SD-5        | 1/4                             | 2-3/16                              | 24589  | 1   |



Tree-shaped bur with radius end.

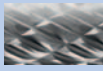

**PFERD specification number**  
RBF

**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br>CAST<br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 3/8 x 3/4   | SF-3        | 1/4                             | 2-1/2                               | 24709  | 1   |
| 1/2 x 1   | SF-5        | 1/4                             | 2-3/4                               | 24729  | 1   |



Tapered bur with radius end.

**PFERD specification number**  
KEL

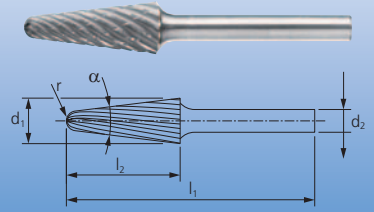
**PFERDERGONOMICS®**

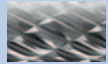



**PFERDEFFICIENCY®**



**14° Taper (radius end)**  
**Shape L**





| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Angle<br>$\alpha$ | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>CAST</b><br> |  |
|---|-------------|---------------------------------|-------------------|-------------------------------------|---|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                   |                                     |   |   |
| 3/8 x 1-1/8                                       | SL-3        | 1/4                             | 14°               | 3                                   | 25159   | 1   |
| 1/2 x 1-1/8                                       | SL-4        | 1/4                             | 14°               | 3-1/16                              | 25169   | 1   |

**5 piece carbide bur set 1/4" shank CAST cut (plastic case)**  
Contains 5 pcs. burs with 1/4" shank dia. and CAST cut.

**5 piece carbide bur set CAST cut**



| Set contents<br>shape    | Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Cut type and set EDP number   |                                   |  |
|--------------------------|---|-------------|---|-----------------------------------|---|
|                          |   |             | <b>CAST</b><br> | Individual<br>bur EDP's<br>in set |   |
| Cylindrical (plain end)  | 1/2 x 1   | SA-5        | 26555   | 24109                             | 1   |
| Cylindrical (radius end) | 1/2 x 1   | SC-5        |   | 24469                             | 1   |
| Ball                     | 1/2 x 7/16  | SD-5        |   | 24589                             | 1   |
| Tree (radius end)        | 1/2 x 1   | SF-5        |   | 24729                             | 1   |
| 14° Taper (radius end)   | 1/2 x 1-1/8                                       | SL-4        |   | 25169                             | 1   |

# Carbide burs – High-performance line

for tough applications

## TOUGH cut

Coarse, aggressive machining, with high stock removal.



TOUGH-Burs represent a PFERD product line developed for users whose required applications result in tooth breakage and bur failure, rather than normal wear. Designed especially for hand-held applications in tough operating conditions common to shipyards, foundries and on steel fabrication.

## Advantages

- Innovative, special cuts providing exceptional impact resistance
- These extremely durable, high-performance cut patterns minimize tooth chipping/breakage, splintering and bur head failures
- The TOUGH cut can be used on materials up to 55 HRC
- These products can also be used at low speeds
- Their extremely high impact resistance means that they are perfectly suited for use as long shank variants. Available in special shaft lengths



## Application examples

- High-impact applications due to long shank design
- Heavy-duty applications, due to angled working
- High angle of surface contact
- Milling of narrow contours

## Recommended rotational speed range [RPM]

To determine the recommended cutting speed [SFPM], please proceed as follows:

- 1 Select the workpiece material to be machined
- 2 Establish the cutting speed range

To determine the recommended rotational speed [RPM], please proceed as follows:

- 3 Select the required bur diameter
- 4 The cutting speed range and the bur diameter determine the recommended rotational speed range [RPM]

| 1 Workpiece material/colour code |   | Characteristics   | Cut   | 2 Cutting speed  |
|----------------------------------|---|---|-------|------------------|
| Steel, cast steel                | Non-hardened, non-heat treated steels up to 38 HRC (< 1,200 N/mm <sup>2</sup> ) | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steels    | TOUGH | 850 - 2,000 SFPM |
|                                  | Hardened, heat-treated steels exceeding 38 HRC (> 1,200 N/mm <sup>2</sup> )     | Tool steels, tempering steels, alloyed steels, cast steels  |       |                  |
| Cast iron                        | Grey cast iron, white cast iron   | Cast iron with flake graphite, with nodular graphite cast iron, white annealed cast iron, black cast iron | TOUGH | 850 - 2,000 SFPM |

### Example

Carbide burr, TOUGH cut, bur diameter: 1/2".  
Coarse machining of non-hardened and non heat-treated steels.  
Cutting speed: 850 - 2,000 SFPM  
**Rotational speed: 7,000 - 16,000 RPM**

| 3 Bur dia. [Inches]    | 4 Cutting speed [SFPM] |        |        |
|------------------------|------------------------|--------|--------|
|                        | 850                    | 1,150  | 2,000  |
| Rotational speed [RPM] |                        |        |        |
| 3/8                    | 8,000                  | 11,000 | 19,000 |
| 1/2                    | 7,000                  | 9,000  | 16,000 |
| 5/8                    | 5,000                  | 7,000  | 12,000 |



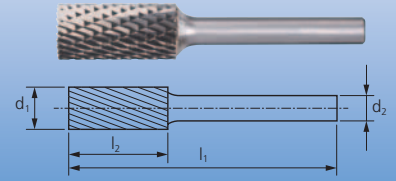
PFERDMEDIA



To see it in action, please visit [pferdusa.com/vtough](http://pferdusa.com/vtough)



Cylindrical bur with plain end (uncut).  
**PFERD specification number**  
 ZYA

**Cylindrical (plain end)**  
**Shape A**

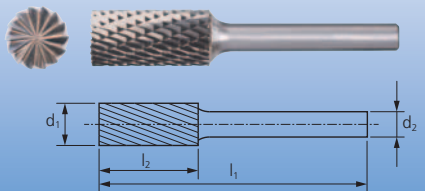




| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>TOUGH</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 3/8 x 3/4   | SA-3        | 1/4                             | 2-1/2                               | 22152  | 1   |
| 1/2 x 1   | SA-5        | 1/4                             | 2-3/4                               | 22156  | 1   |



Cylindrical bur with end cut.  
**PFERD specification number**  
 ZYAS

**Cylindrical (end cut)**  
**Shape B**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>TOUGH</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 3/8 x 3/4   | SB-3        | 1/4                             | 2-1/2                               | 22182  | 1   |
| 1/2 x 1   | SB-5        | 1/4                             | 2-3/4                               | 22186  | 1   |

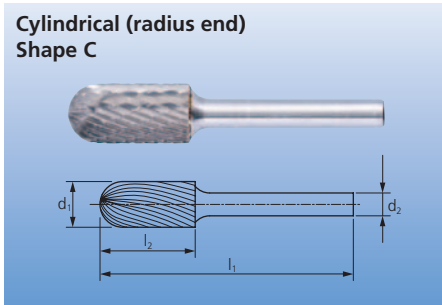


# Carbide burs – High-performance line

for tough applications



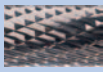

## Cylindrical (radius end) Shape C



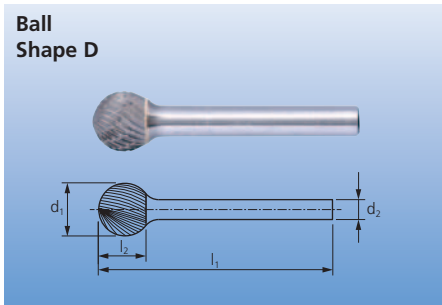
Cylindrical bur with radius end.

**PFERD specification number**  
WRC



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>TOUGH</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |  |   |
| 3/8 x 3/4   | SC-3        | 1/4                             | 2-1/2                               | 22212  | 1   |
| 1/2 x 1   | SC-5        | 1/4                             | 2-3/4                               | 22216  | 1   |
| <b>Extended shank</b>                             |             |                                 |                                     |  |   |
| 3/8 x 3/4   | SC-3L6      | 1/4                             | 6-5/8                               | 22734  | 1   |

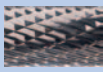

## Ball Shape D



Ball-shaped bur.

**PFERD specification number**  
KUD



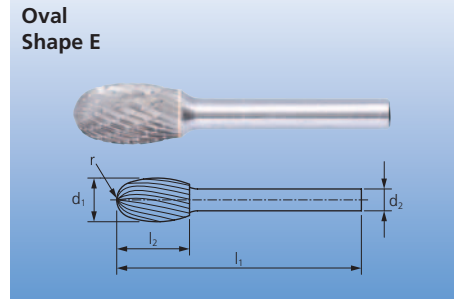
| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>TOUGH</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/2 x 7/16  | SD-5        | 1/4                             | 2-3/16                              | 22244  | 1   |
| 5/8 x 9/16  | SD-6        | 1/4                             | 2-5/16                              | 22246  | 1   |

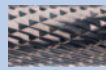





Oval-shaped bur.

**PFERD specification number**  
TRE

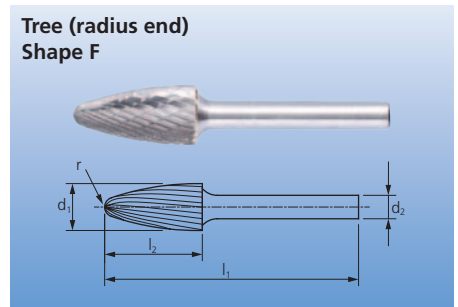




| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>TOUGH</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 3/8 x 5/8   | SE-3        | 1/4                             | 2-3/4                               | 22260  | 1   |



Tree-shaped bur with radius end.

**PFERD specification number**  
RBF

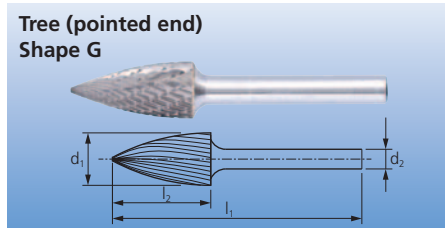


| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>TOUGH</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/2 x 1   | SF-5        | 1/4                             | 2-3/4                               | 22276  | 1   |
| 5/8 x 1   | SF-6        | 1/4                             | 2-3/4                               | 22278  | 1   |
| <b>Extended shank</b>                             |             |                                 |                                     |  |   |
| 1/2 x 1   | SF-5L6      | 1/4                             | 6-7/8                               | 22754  | 1   |



# Carbide burs – High-performance line

for tough applications



Tree-shaped bur with pointed end.

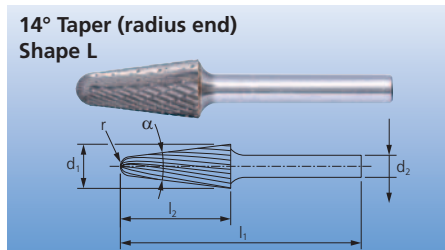
**PFERD specification number**  
SPG



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>TOUGH</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|---|--|
|---|-------------|---------------------------------|-------------------------------------|---|--|

| Shank dia. 1/4" |      |     |       |       |   |
|-----------------|------|-----|-------|-------|---|
| 3/8 x 3/4       | SG-3 | 1/4 | 2-1/2 | 22294 | 1 |
| 1/2 x 1         | SG-5 | 1/4 | 2-3/4 | 22296 | 1 |
| 5/8 x 1         | SG-6 | 1/4 | 2-3/4 | 22298 | 1 |

| Extended shank |        |     |       |       |   |
|----------------|--------|-----|-------|-------|---|
| 1/2 x 1        | SG-5L6 | 1/4 | 6-7/8 | 22760 | 1 |



Tapered bur with radius end.

**PFERD specification number**  
KEL



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Angle<br>$\alpha$ | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>TOUGH</b><br> |  |
|---|-------------|---------------------------------|-------------------|-------------------------------------|---|--|
|---|-------------|---------------------------------|-------------------|-------------------------------------|---|--|

| Shank dia. 1/4" |      |     |     |        |       |   |
|-----------------|------|-----|-----|--------|-------|---|
| 1/2 x 1-1/8     | SL-4 | 1/4 | 14° | 3-1/16 | 22346 | 1 |

| Extended shank |        |     |     |        |       |   |
|----------------|--------|-----|-----|--------|-------|---|
| 1/2 x 1-1/8    | SL-4L6 | 1/4 | 14° | 7-3/16 | 22774 | 1 |



**5 piece tough bur set 1/4" shank**  
(plastic case)

Contains 5 pcs. burs with 1/4" shank dia. and TOUGH cut.

| Set contents<br>shape    | Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Cut type and set EDP number |                                   |   |
|--------------------------|---|-------------|-----------------------------|-----------------------------------|---|
|                          |   |             | <b>TOUGH</b><br>            | Individual<br>bur EDP's<br>in set |   |
| Cylindrical (plain end)  | 1/2 x 1   | SA-5        | 26551                       | 22156                             | 1 |
| Cylindrical (radius end) | 1/2 x 1   | SC-5        |                             | 22216                             | 1 |
| Ball                     | 1/2 x 7/16  | SD-5        |                             | 22244                             | 1 |
| Tree (radius end)        | 1/2 x 1   | SF-5        |                             | 22276                             | 1 |
| Tree (pointed)           | 1/2 x 1   | SG-5        |                             | 22296                             | 1 |

### MICRO cut



PFERD MICRO cut burs are ideal for both hand-held and automated machining tasks. They are a unique solution, combining good stock removal and high-quality finish. Almost all materials up to a hardness of 68 HRC can be machined. If higher stock removal is required, MICRO cut

burs can be used as support in areas where mounted points are usually used.

They run smoothly, with highly controlled removal rates and with very little vibration.

### Application examples

- Finishing
- Very fine plaster work
- Corrections in tooling and moulding construction
- Very fine cleaning work
- Sharpening of cutting tools

**PFERDERGONOMICS®** recommends burs with MICRO cut as an innovative solution for comfortable working with significantly reduced vibration and lower noise.



**PFERDEFFICIENCY®** recommends burs with MICRO cut for long, fatigue-free work, with perfect results in the shortest possible time.



### Recommended rotational speed range [RPM]

To determine the recommended cutting speed [SFPM], please proceed as follows:

- ① Select the workpiece material to be machined
- ② Establish the cutting speed range

To determine the recommended rotational speed [RPM], please proceed as follows:

- ③ Select the required bur diameter

- ④ The cutting speed range and bur diameter determine the recommended rotational speed range [RPM]

| ① Workpiece material/colour code |   |   | Characteristics                    | Cut   | ② Cutting speed    |
|----------------------------------|---|---|------------------------------------|-------|--------------------|
| Steel, cast steel                | Non-hardened, non-heat-treated steels up to 38 HRC (< 1,200 N/mm <sup>2</sup> ) | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steels                | Fine machining = low stock removal | MICRO | 2,000 - 2,500 SFPM |
|                                  | Hardened, heat-treated steels exceeding 38 HRC (> 1,200 N/mm <sup>2</sup> )     | Tool steels, tempering steels, alloyed steels, cast steels  |                                    |       | 1,500 - 2,000 SFPM |
| Stainless steel (INOX)           | Rust and acid-resistant steels  | Austenitic and ferritic stainless steel   | Fine machining = low stock removal | MICRO | 1,500 - 2,000 SFPM |
| Non-ferrous metals               | Hard non-ferrous metals   | Bronze, titanium, titanium alloys, hard aluminum alloys (high Si content)   | Fine machining = low stock removal | MICRO | 1,500 - 2,000 SFPM |
|                                  | High-temperature resistant materials  | Nickel based alloys, cobalt based alloys (aircraft engine and turbine construction)                                   |                                    |       |                    |
| Cast iron                        | Grey cast iron, white cast iron   | Cast iron with flake graphite, with nodular graphite/ductile graphite iron, white annealed cast iron, black cast iron | Fine machining = low stock removal | MICRO | 2,000 - 2,500 SFPM |

### Example

Micro bur, MICRO cut, bur diameter: 3/8".

Fine finish milling of non-hardened, non-tempered steels.

Cutting speed: 2,000 - 2,500 SFPM

**Rotational speed: 19,000 - 24,000 RPM**



| ③ Bur dia. [Inches] | ④ Cutting speed [SFPM] |        |         |
|---------------------|------------------------|--------|---------|
|                     | 1,500                  | 2,000  | 2,500   |
|                     | Rotational speed [RPM] |        |         |
| 3/32                | 56,000                 | 95,000 | 120,000 |
| 1/8                 | 48,000                 | 64,000 | 80,000  |
| 1/4                 | 24,000                 | 32,000 | 40,000  |
| 3/8                 | 14,000                 | 19,000 | 24,000  |

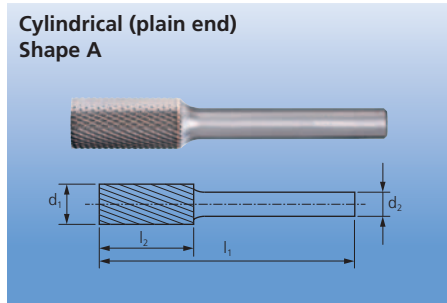


**PFERDMEDIA**

For more information, please visit [pferdusa.com/micro](http://pferdusa.com/micro)

# Carbide burs – High-performance line

for high surface finish



Cylindrical bur with plain end (uncut).



**PFERD specification number**  
ZYA

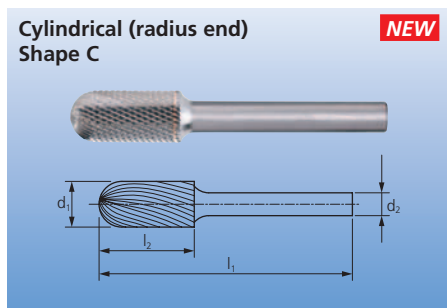
**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>MICRO</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |  |   |
| 1/8 x 1/2   | SA-43       | 1/8                             | 1-1/2                               | 27500  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/4 x 5/8   | SA-1        | 1/4                             | 1-15/16                             | 27512  | 1   |
| 3/8 x 3/4   | SA-3        | 1/4                             | 2-1/2                               | 27516  | 1   |



Cylindrical bur with radius end.



**PFERD specification number**  
WRC

**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>MICRO</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |  |   |
| 1/8 x 1/2   | SC-42       | 1/8                             | 1-1/2                               | 27540  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/4 x 5/8   | SC-1        | 1/4                             | 1-15/16                             | 27541  | 1   |
| 3/8 x 3/4   | SC-3        | 1/4                             | 2-1/2                               | 27542  | 1   |



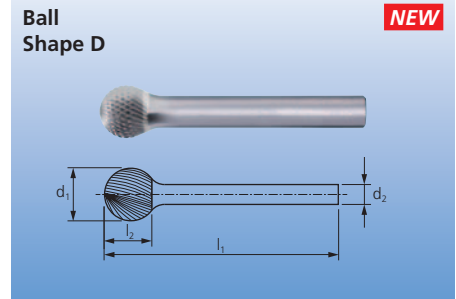
Ball-shaped bur.



**PFERD specification number**  
KUD

**PFERDERGONOMICS®**



**PFEREFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>MICRO</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |  |   |
| 3/32 x 3/32                                       | SD-41       | 1/8                             | 1-1/2                               | 27519  | 1   |
| 1/8 x 3/32  | SD-42       | 1/8                             | 1-1/2                               | 27520  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/4 x 3/16  | SD-1        | 1/4                             | 1-15/16                             | 27521  | 1   |
| 3/8 x 5/16  | SD-3        | 1/4                             | 2-1/16                              | 27522  | 1   |



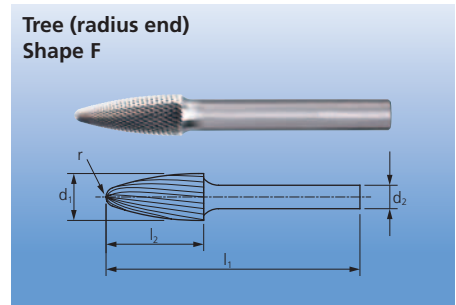
Tree-shaped bur with radius end.



**PFERD specification number**  
RBF

**PFERDERGONOMICS®**



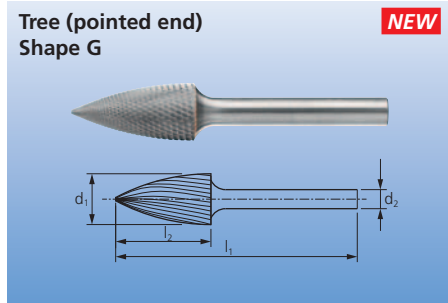
**PFEREFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>MICRO</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |  |   |
| 1/8 x 1/2   | SF-42       | 1/8                             | 1-1/2                               | 27524  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/4 x 5/8   | SF-1        | 1/4                             | 1-15/16                             | 27528  | 1   |
| 3/8 x 3/4   | SF-3        | 1/4                             | 2-1/2                               | 27532  | 1   |

# Carbide burs – High-performance line

for high surface finish



Tree-shaped bur with pointed end.



**PFERD specification number**  
SPG

**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>MICRO</b><br> |  |
|---|-------------|---------------------------------|-------------------------------------|--|---|
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |  |   |
| 1/8 x 1/4   | SG-41       | 1/8                             | 1-1/2                               | 27546  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |  |   |
| 1/4 x 5/8   | SG-1        | 1/4                             | 1-15/16                             | 27547  | 1   |
| 3/8 x 3/4   | SG-3        | 1/4                             | 2-1/2                               | 27548  | 1   |



## HICOAT® coating HC-FEP for iron and steel materials



### Advantages

- Used for work on steel and cast iron
- High hardness and wear resistance
- Effective chip removal through improved anti-adhesion characteristics
- Very high resistance against thermal load
- Increased service life

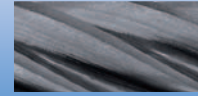
## HICOAT® coating HC-HT for high-temperature-resistant materials



### Advantages

- Used for high-temperature-resistant non-ferrous metals
- Low friction values, low heat generation
- Good oxidation resistance and reduced chemical wear
- Increased service life

## HICOAT® coating HC-NFE for use on aluminum and non-ferrous metals



### Advantages

- Used for long-chipping and greasy non-ferrous metals
- Highest stock removal performance
- Effective chip removal through improved anti-adhesion characteristics
- Lower thermal loads
- Increased service life

## Recommended rotational speed range [RPM]

To determine the recommended cutting speed [SFPM], please proceed as follows:

- 1 Select the workpiece material to be machined
- 2 Determine the characteristics of your application

- 3 Select the cut
- 4 Establish the cutting speed range

To determine the recommended rotational speed [RPM], please proceed as follows:

- 5 Select the required bur diameter
- 6 The cutting speed range and the bur diameter determine the recommended rotational speed range [RPM]

| 1 Workpiece material/colour code |   | 2 Characteristics   | 3 Cut  | Coating | 4 Cutting speed |                    |
|----------------------------------|---|---|--|---------|-----------------|--------------------|
| Steel, cast steel                | Non-hardened, non-heat treated steels up to 38 HRC (< 1,200 N/mm <sup>2</sup> ) | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steels    | Coarse machining = high stock removal                                  | Double  | HC-FEP          | 1,500 - 2,000 SFPM |
|                                  | Hardened, heat-treated steels exceeding 38 HRC (> 1,200 N/mm <sup>2</sup> )     | Tool steels, tempering steels, alloyed steels, cast steels  |  |         |                 | 850 - 1,150 SFPM   |
| Non-ferrous metals               | Soft non-ferrous metals, Hard non-ferrous metals                                | Aluminum alloys, brass, copper, zinc, bronze, titanium, hard aluminum alloys (high Si content)            | Coarse machining = high stock removal<br>Fine machining e.g., deburing | ALU/NF  | HC-NFE          | 2,000 - 3,000 SFPM |
|                                  | High-temperature-resistant materials  | Nickel-based and cobalt-based alloys (engine and turbine construction)                                    | Coarse stock removal   | Diamond | HC-HT           | 850 - 1,150 SFPM   |
| Cast iron                        | Grey cast iron, white cast iron   | Cast iron with flake graphite, with nodular graphite cast iron, white annealed cast iron, black cast iron | Coarse machining = high stock removal                                  | Double  | HC-FEP          | 1,500 - 2,000 SFPM |
| Plastics, other materials        | Fibre-reinforced plastics (GRP/CRP), thermoplastics                             |   | Coarse stock removal   | ALU     | HC-NFE          | 1,500 - 3,600 SFPM |
|                                  |   |   | Fine stock removal   |         |                 |                    |

### Example

Carbide bur, double cut, bur diameter: 1/2"

Coarse machining of non-hardened, non-heat-treated steels.

Cutting speed: 1,500 - 2,000 SFPM

**Rotational speed: 12,000 - 16,000 RPM**

| 5 Bur dia. [Inches] | 6 Cutting speed [SFPM] |        |        |        |        |        |
|---------------------|------------------------|--------|--------|--------|--------|--------|
|                     | 850                    | 1,150  | 1,500  | 2,000  | 3,000  | 3,600  |
|                     | Rotational speed [RPM] |        |        |        |        |        |
| 1/4                 | 13,000                 | 19,000 | 24,000 | 32,000 | 48,000 | 59,000 |
| 3/8                 | 8,000                  | 12,000 | 14,000 | 19,000 | 29,000 | 35,000 |
| 1/2                 | 7,000                  | 9,000  | 12,000 | 16,000 | 24,000 | 30,000 |

PFERDEFFICIENCY® recommends carbide burs with HICOAT® coatings for long, fatigue-free and resource saving work, with perfect results in the shortest possible time.



In general, all PFERD tungsten carbide burs are also available with HICOAT® coatings. Contact us. You will find the addresses of our worldwide sales offices at:

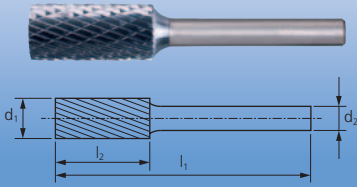
[www.pferd.com](http://www.pferd.com)

# Carbide burs – High-performance line

HICOAT® – coating HC-FEP



**Cylindrical (plain end)  
Shape A**

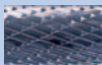



Cylindrical bur with plain end (uncut).

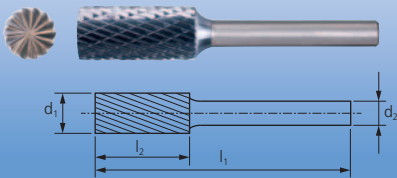
**PFERD specification number**  
ZYA

**PFERDEFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall<br>length<br>$l_1$<br>[Inches] | Coating | Coating<br>colour | Cut type and EDP number<br>Double<br> |  |
|---|-------------|---------------------------------|--|---------|-------------------|--|---|
| 1/4 x 5/8   | SA-1        | 1/4                             | 1-15/16                                | HC-FEP  | violet-grey       | 27040  | 1   |
| 3/8 x 3/4   | SA-3        | 1/4                             | 2-1/2                                  | HC-FEP  | violet-grey       | 27042  | 1   |
| 1/2 x 1   | SA-5        | 1/4                             | 2-3/4                                  | HC-FEP  | violet-grey       | 27052  | 1   |

**Cylindrical (end cut)  
Shape B**

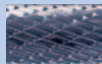



Cylindrical bur with end cut.

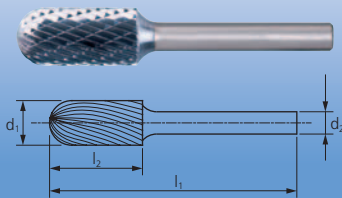
**PFERD specification number**  
ZYAS

**PFERDEFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall<br>length<br>$l_1$<br>[Inches] | Coating | Coating<br>colour | Cut type and EDP number<br>Double<br> |  |
|---|-------------|---------------------------------|--|---------|-------------------|--|---|
| 3/8 x 3/4   | SB-3        | 1/4                             | 2-1/2                                  | HC-FEP  | violet-grey       | 27082  | 1   |

**Cylindrical (radius end)  
Shape C**





Cylindrical bur with radius end.

**PFERD specification number**  
WRC

**PFERDEFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall<br>length<br>$l_1$<br>[Inches] | Coating | Coating<br>colour | Cut type and EDP number<br>Double<br> |  |
|---|-------------|---------------------------------|--|---------|-------------------|--|---|
| 3/8 x 3/4   | SC-3        | 1/4                             | 2-1/2                                  | HC-FEP  | violet-grey       | 27167  | 1   |
| 1/2 x 1   | SC-5        | 1/4                             | 2-3/4                                  | HC-FEP  | violet-grey       | 27177  | 1   |





Ball-shaped bur.

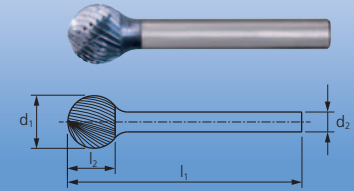
**PFERD specification number**

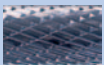

KUD

**PFERDEFFICIENCY®**



**Ball  
Shape D**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall<br>length<br>$l_1$<br>[Inches] | Coating | Coating<br>colour | Cut type and EDP number<br><b>Double</b><br> |  |
|---|-------------|---------------------------------|--|---------|-------------------|---|---|
| 3/8 x 5/16  | SD-3        | 1/4                             | 2-1/16                                 | HC-FEP  | violet-grey       | 27217   | 1   |
| 1/2 x 7/16  | SD-5        | 1/4                             | 2-3/16                                 | HC-FEP  | violet-grey       | 27227   | 1   |



Tree-shaped bur with radius end.

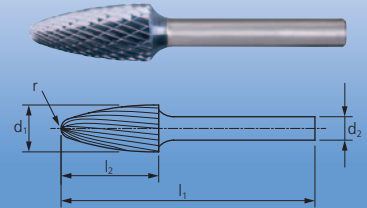
**PFERD specification number**

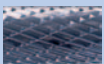

RBF

**PFERDEFFICIENCY®**



**Tree (radius end)  
Shape F**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall<br>length<br>$l_1$<br>[Inches] | Coating | Coating<br>colour | Cut type and EDP number<br><b>Double</b><br> |  |
|---|-------------|---------------------------------|--|---------|-------------------|---|---|
| 3/8 x 3/4   | SF-3        | 1/4                             | 2-1/2                                  | HC-FEP  | violet-grey       | 27282   | 1   |
| 1/2 x 1   | SF-5        | 1/4                             | 2-3/4                                  | HC-FEP  | violet-grey       | 27292   | 1   |

Taper bur with radius end.

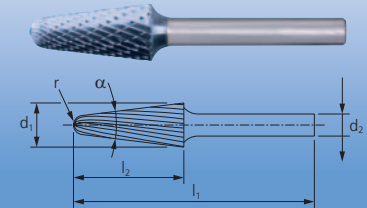
**PFERD specification number**

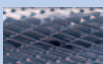

KEL

**PFERDEFFICIENCY®**



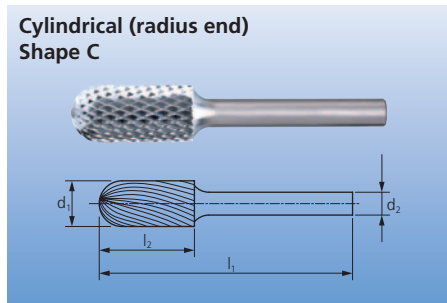
**14° Taper (radius end)  
Shape L**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Angle<br>$\alpha$ | Overall<br>length<br>$l_1$<br>[Inches] | Coating | Coating<br>colour | Cut type and EDP number<br><b>Double</b><br> |  |
|---|-------------|---------------------------------|-------------------|--|---------|-------------------|---|---|
| 3/8 x 1-1/8                                       | SL-3        | 1/4                             | 14°               | 2-13/16                                | HC-FEP  | violet-grey       | 27457   | 1   |
| 1/2 x 1-1/8                                       | SL-4        | 1/4                             | 14°               | 2-7/8                                  | HC-FEP  | violet-grey       | 27462   | 1   |

# Carbide burs – High-performance line

HICOAT® – coating HC-HT





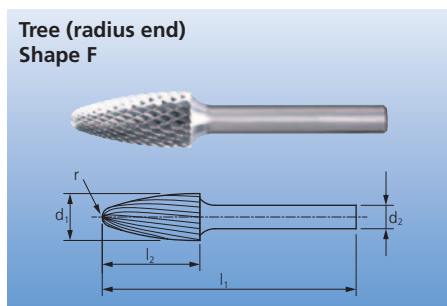
Cylindrical bur with radius end.

**PFERD specification number**  
WRC

**PFERDEFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall<br>length<br>$l_1$<br>[Inches] | Coating | Coating<br>colour | Cut type and EDP number<br>Diamond<br> |  |
|---|-------------|---------------------------------|--|---------|-------------------|---|---|
| 1/2 x 1   | SC-5        | 1/4                             | 2-3/4                                  | HC-HT   | silver-grey       | 27163   | 1   |





Tree-shaped bur with radius end.

**PFERD specification number**  
RBF

**PFERDEFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall<br>length<br>$l_1$<br>[Inches] | Coating | Coating<br>colour | Cut type and EDP number<br>Diamond<br> |  |
|---|-------------|---------------------------------|--|---------|-------------------|---|---|
| 1/2 x 1   | SF-5        | 1/4                             | 2-3/4                                  | HC-HT   | silver-grey       | 27278   | 1   |

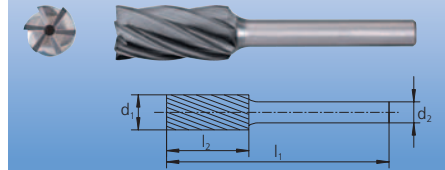
Cylindrical bur with end cut.



**PFERD specification number**  
ZYAS

**PFERDEFFICIENCY®**



**Cylindrical (end cut)**  
Shape B



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Coating | Coating<br>colour | Cut type and EDP number<br>ALU/NF<br> |  |
|---|-------------|---------------------------------|-------------------------------------|---------|-------------------|--|---|
| 1/2 x 1   | SB-5        | 1/4                             | 2-3/4                               | HC-NFE  | black-grey        | 27105  | 1   |



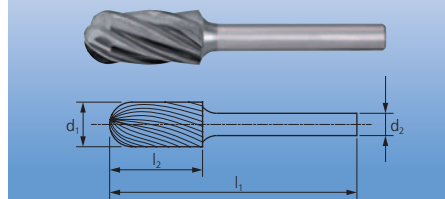
Cylindrical bur with radius end.



**PFERD specification number**  
WRC

**PFERDEFFICIENCY®**



**Cylindrical (radius end)**  
Shape C



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Coating | Coating<br>colour | Cut type and EDP number<br>ALU/NF<br> |  |
|---|-------------|---------------------------------|-------------------------------------|---------|-------------------|--|---|
| 1/2 x 1   | SC-5        | 1/4                             | 2-3/4                               | HC-NFE  | black-grey        | 27165  | 1   |

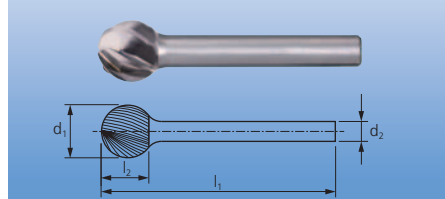
Ball-shaped bur.



**PFERD specification number**  
KUD

**PFERDEFFICIENCY®**



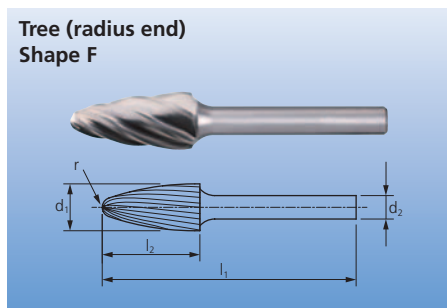
**Ball**  
Shape D



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Coating | Coating<br>colour | Cut type and EDP number<br>ALU/NF<br> |  |
|---|-------------|---------------------------------|-------------------------------------|---------|-------------------|--|---|
| 1/2 x 7/16  | SD-5        | 1/4                             | 2-3/16                              | HC-NFE  | black-grey        | 27235  | 1   |

# Carbide burs – High-performance line

HICOAT® – coating HC-NFE

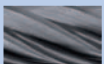



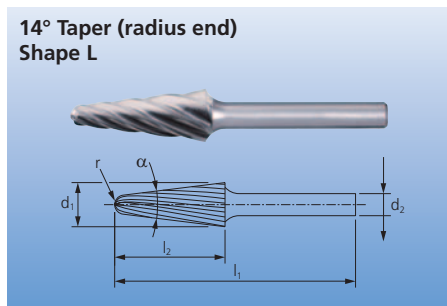
Tree-shaped bur with radius end.

**PFERD specification number**  
RBF

**PFEREFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Coating | Coating<br>colour | Cut type and EDP number<br>ALU/NF<br> |  |
|---|-------------|---------------------------------|-------------------------------------|---------|-------------------|--|---|
| 1/2 x 1   | SF-5        | 1/4                             | 2-3/4                               | HC-NFE  | black-grey        | 27280  | 1   |





Taper bur with radius end.

**PFERD specification number**  
KEL

**PFEREFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank<br>dia.<br>$d_2$<br>[Inches] | Angle<br>$\alpha$ | Overall<br>length<br>$l_1$<br>[Inches] | Coating | Coating<br>colour | Cut type and EDP number<br>ALU/NF<br> |  |
|---|-------------|------------------------------------|-------------------|--|---------|-------------------|--|---|
| 1/2 x 1-1/8                                       | SL-4        | 1/4                                | 14°               | 2-7/8                                  | HC-NFE  | black-grey        | 27450  | 1   |



## Bearing burs for edge profiling

Carbide burs with the EDGE cut have been developed specifically for precise, guided work on edges. They are excellent for chamfering, deburring and edge breaking and rounding, and are mainly used in steel and aluminum construction.

The special bearing design allows the bur to run directly along the edges, without damage to the workpiece. Thus, exact edge shapes can be created in a single-step operation – with either defined chamfers of 30° or 45°, or to a defined radius of 1/8" (3 mm).

Among other things, rounding edges is a precautionary measure for anti-corrosion protection according to:

- ISO 12944-3
- ISO 8501-3
- SOLAS XII/6.3 (Ref. T4/3.01 MSC.1/Circ.1198)

## Advantages

- Special bearing design makes it easy to precisely guide the bur along the edge of the workpiece
- Safe and comfortable to guide
- Create an exact edge shape with either defined chamfers of 30° or 45°, or a defined radius of 1/8" in a single-step operation

## Application examples

- Rounding edges in preparation for the application of anti-corrosion coatings in shipbuilding, on crane systems and other steel constructions which are exposed to corrosion loading
- Chamfering in weld seam preparation for V-shaped seams (60°, ISO 9692-1)
- Chamfering for edge breaking (45°)

## Recommendations for use

- Use the burs counter-rotationally. Pass the bur rapidly over the workpiece in the direction of rotation to achieve fine finishes.
- If possible, use EDGE cut burs with PFERD compressed-air straight grinder PG 3/210 with matching guide sleeve EFH PG 3/210 and guide plate EFP PG 3/210. This will improve the guidability of the burs even further and reduce the thermal load. For more information, see "Power tools" catalogue (section 209).



## Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [SFPM], please proceed as follows:

- 1 Select the workpiece material to be machined
- 2 Establish the cutting speed range

To determine the recommended rotational speed range, please proceed as follows:

- 3 Select the required bur diameter
- 4 The cutting speed range and the bur diameter determine the recommended rotational speed range [RPM]

PFERDEFFICIENCY® recommends burs with EDGE cut for long, fatigue-free and resource saving work, with perfect results in the shortest possible time.



| 1 Workpiece material/colour code |  |   | Characteristics | Cut  | 2 Cutting speed    |
|----------------------------------|--|---|-----------------|------|--------------------|
| Steel, cast steel                | Non-hardened, non-heat-treated steels up to 1,200 N/mm² (< 38 HRC) | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel                 | Work on edges   | EDGE | 2,000 - 3,000 SFPM |
|                                  | Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)          | Tool steels, tempering steels, alloyed steel, cast steel  |                 |      | 2,000 - 2,500 SFPM |
| Stainless steel (INOX)           | Rust- and acid-resistant steels                                    | Austenitic and ferritic stainless steels  | Work on edges   | EDGE | 850 - 1,500 SFPM   |
| Non-ferrous metals               | Soft non-ferrous metals, non-ferrous metals                        | Aluminum alloys, brass, copper, zinc  | Work on edges   | EDGE | 2,000 - 3,000 SFPM |
|                                  | Hard non-ferrous metals  | Bronze, hard aluminum alloys (high Si content), titanium/titanium alloys  |                 |      | 850 - 1,500 SFPM   |
|                                  | High-temperature-resistant materials                               | Nickel-based and cobalt-based alloys (engine and turbine construction)  |                 |      |                    |
| Cast iron                        | Grey cast iron, white cast iron                                    | Cast iron with flake graphite, with nodular graphite/ductile graphite iron, white annealed cast iron, black cast iron | Work on edges   | EDGE | 2,000 - 3,000 SFPM |
| Plastics, other materials        | Fibre-reinforced plastics (GRP/CRP), thermoplastics                |   | Work on edges   | EDGE | 2,500 - 3,600 SFPM |

### Example

Carbide bur, EDGE cut, bur diameter: 5/8". Stock removal on non-hardened, non-heat-treated steels. Cutting speed: 2,000 - 3,000 SFPM

**Rotational speed: 12,000 - 18,000 RPM**

| 3 Bur dia. [Inches]    | 4 Cutting speed [SFPM] |       |        |        |        |        |
|------------------------|------------------------|-------|--------|--------|--------|--------|
|                        | 850                    | 1,500 | 2,000  | 2,500  | 3,000  | 3,600  |
| Rotational speed [RPM] |                        |       |        |        |        |        |
| 5/8                    | 5,000                  | 9,000 | 12,000 | 16,000 | 18,000 | 22,000 |



PFERDMEDIA

To see it in action, please visit [pferdusa.com/vedge](http://pferdusa.com/vedge)

# Carbide burs – High-performance line

## for edge profiling

### Burs for edge profiling

Carbide burs for edge profiling represent a new PFERD product line. They are used in steel and aluminum construction and have been specifically designed for chamfering, deburring and rounding of edges.

PFERD offers burs for edge profiling both with and without a guide bearing. For more information about bearing burs with EDGE cut, see page 41.

Carbide burs for edge profiling achieve almost exact chamfers or radii due to their special shapes. They can also be used in hard-to-reach areas.

### Advantages

- Perfect for general deburring and chamfering applications
- Convenient for use in hard-to-reach areas
- Creates almost exact chamfers and radii

### Recommendations for use

- In exceptional cases, it is possible to work at less than 3,000 RPM. This is preferable for stationary use or when countersinking with 360° use of the bur surface.
- The rotational speed can be substantially increased up to 100% for low stock removal (deburring, chamfering, surface finishing).
- In general, burs are used counter-rotationally or with a side to side motion. Pass the bur rapidly over the workpiece in the direction of rotation to achieve fine finishes or to achieve very smooth chamfers.

### Application examples

- Producing/working on outer radii
- Rounding edges
- Sinking and chamfering
- Work on hard-to-reach, reverse side edges



### Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [SFPM], please proceed as follows:

- ❶ Select the workpiece material to be machined
- ❷ Select the cut

- ❸ Establish the cutting speed range

To determine the recommended rotational speed range, please proceed as follows:

- ❹ Select the required bur diameter
- ❺ The cutting speed range and the bur diameter determine the recommended rotational speed range [RPM]

| ❶ Workpiece material/colour code     |  |   | Characteristics                       |                                       | ❷ Cut                                 | ❸ Cutting speed    |                  |                    |
|--------------------------------------|--|---|---------------------------------------|---------------------------------------|---------------------------------------|--------------------|------------------|--------------------|
| Steel, cast steel                    | Non-hardened, non-heat-treated steels up to 1,200 N/mm <sup>2</sup> (< 38 HRC) | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel                 | Work on edges                         | Coarse machining = high stock removal | Double                                | 1,500 - 2,000 SFPM |                  |                    |
|                                      |  |   |                                       | Fine machining = low stock removal    | Single                                |                    |                  |                    |
|                                      | Hardened, heat-treated steels over 1,200 N/mm <sup>2</sup> (> 38 HRC)          | Tool steels, tempering steels, alloyed steels, cast steel   |                                       | Coarse machining = high stock removal | Double                                |                    | 850 - 1,150 SFPM |                    |
|                                      |  |   |                                       | Fine machining = low stock removal    | Single                                |                    |                  |                    |
| Stainless steel (INOX)               | Rust- and acid-resistant steels  | Austenitic and ferritic stainless steels  | Work on edges                         | Coarse machining = high stock removal | Diamond                               | 850 - 1,150 SFPM   |                  |                    |
|                                      |  |   |                                       | Fine machining = low stock removal    | Single                                |                    |                  |                    |
| Non-ferrous metals                   | Soft non-ferrous metals, non-ferrous metals                                    | Brass, copper, zinc   |                                       | Work on edges                         | Coarse machining = high stock removal |                    | Double           | 2,000 - 3,000 SFPM |
|                                      |  |   |                                       |                                       | Fine machining = low stock removal    |                    | Single           |                    |
|                                      | Hard non-ferrous metals  | Bronze, titanium/titanium alloys  | Coarse machining = high stock removal |                                       | Double                                | 850 - 1,500 SFPM   |                  |                    |
|                                      |  |   | Fine machining = low stock removal    |                                       | Single                                |                    |                  |                    |
| High-temperature-resistant materials | Nickel-based and cobalt-based alloys (engine and turbine construction)         | Coarse machining = high stock removal   | Double                                |                                       |                                       |                    |                  |                    |
|                                      |  | Fine machining = low stock removal  | Single                                |                                       |                                       |                    |                  |                    |
| Cast iron                            | Grey cast iron, white cast iron  | Cast iron with flake graphite, with nodular graphite/ductile graphite iron, white annealed cast iron, black cast iron | Work on edges                         | Coarse machining = high stock removal | Double                                | 1,500 - 2,000 SFPM |                  |                    |
|                                      |  |   |                                       | Fine machining = low stock removal    | Single                                |                    |                  |                    |

### Example

Carbide bur, single cut, bur diameter: 1/2".

Stock removal on non-hardened, non-heat-treated steels.

Cutting speed: 1,500 - 2,000 SFPM

**Rotational speed: 12,000 - 16,000 RPM**

| ❹ Bur dia. [Inches] | ❺ Cutting speed [SFPM] |        |        |        |        |
|---------------------|------------------------|--------|--------|--------|--------|
|                     | 850                    | 1,150  | 1,500  | 2,000  | 3,000  |
|                     | Rotational speed [RPM] |        |        |        |        |
| 1/8                 | 27,000                 | 37,000 | 48,000 | 64,000 | 95,000 |
| 1/4                 | 13,000                 | 19,000 | 24,000 | 32,000 | 48,000 |
| 1/2                 | 7,000                  | 9,000  | 12,000 | 16,000 | 24,000 |
| 5/8                 | 5,000                  | 7,000  | 9,000  | 12,000 | 18,000 |
| 3/4                 | 4,000                  | 6,000  | 7,000  | 10,000 | 14,000 |
| 1                   | 3,000                  | 4,000  | 6,000  | 8,000  | 11,000 |



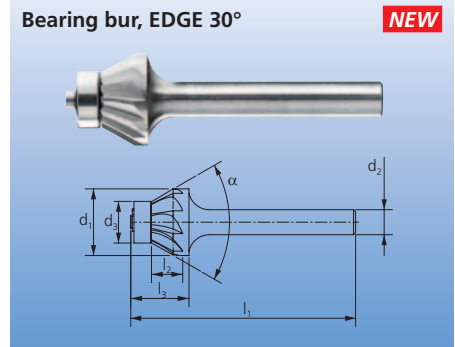
Conical counterbore bur for cutting precisely defined chamfers.



**Applications**

Sinking and chamfering of defined 30° chamfer angles

**PFERD specification number**  
KSJ

**PFEREFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | Shank dia.<br>$d_2$<br>[Inches] | Length<br>$l_3$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Bearing diameter<br>$d_3$<br>[Inches] | Angle<br>$\alpha$ | Cut type and EDP number<br>EDGE<br> |  |
|---|---------------------------------|-----------------------------|-------------------------------------|---------------------------------------|-------------------|--|---|
| <b>Shank dia. 1/4"</b>                            |                                 |                             |                                     |                                       |                   |  |   |
| 5/8 x 3/16  | 1/4                             | 9/16                        | 2-1/4                               | 3/8                                   | 60°               | 25045  | 1   |



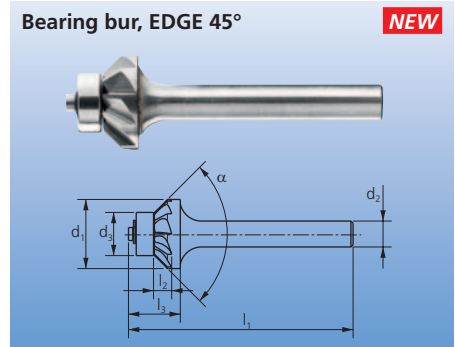
Conical counterbore bur for the production of precisely defined chamfers.



**Applications**

Sinking and chamfering of defined 45° chamfer angles

**PFERD specification number**  
KSK

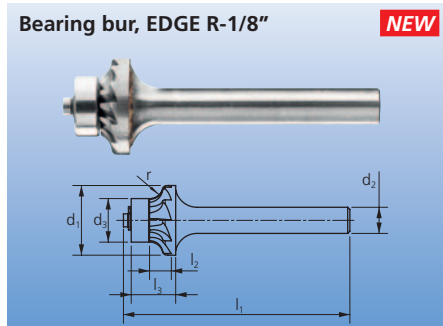
**PFEREFFICIENCY®**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | Shank dia.<br>$d_2$<br>[Inches] | Length<br>$l_3$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Bearing diameter<br>$d_3$<br>[Inches] | Angle<br>$\alpha$ | Cut type and EDP number<br>EDGE<br> |  |
|---|---------------------------------|-----------------------------|-------------------------------------|---------------------------------------|-------------------|--|---|
| <b>Shank dia. 1/4"</b>                            |                                 |                             |                                     |                                       |                   |  |   |
| 5/8 x 1/8   | 1/4                             | 1/2                         | 2                                   | 3/8                                   | 90°               | 25105  | 1   |

# Carbide burs – High-performance line

for edge profiling



Radius bur for the production of precise radii. Concave radius burs cannot be re-sharpened.

### Applications

Production and processing of 1/8" (3 mm) outer radii

### PFERD specification number

V

### PFERDEFFICIENCY®



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | Shank dia.<br>$d_2$<br>[Inches] | Length<br>$l_3$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Bearing diameter<br>$d_3$<br>[Inches] | Radius<br>$r$<br>[Inches] | Radius<br>$r_1$<br>[Inches] | Cut type and EDP number<br><b>EDGE</b><br> |  |
|---|---------------------------------|-----------------------------|-------------------------------------|---------------------------------------|---------------------------|-----------------------------|--|--|
|---|---------------------------------|-----------------------------|-------------------------------------|---------------------------------------|---------------------------|-----------------------------|--|--|

### Shank dia. 1/4"

|           |     |     |   |     |     |     |       |   |
|-----------|-----|-----|---|-----|-----|-----|-------|---|
| 5/8 x 1/8 | 1/4 | 1/2 | 2 | 3/8 | 3/8 | 1/8 | 25150 | 1 |
|-----------|-----|-----|---|-----|-----|-----|-------|---|

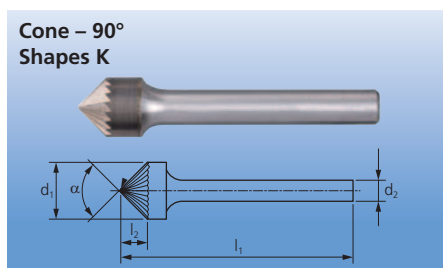


For enhanced results, PFERD recommends the use of EDGE cut burs with PFERD compressed-air straight grinder PG 3/210 (EDP 90036). The exhaust is deliberately discharged towards the front, so that chips are removed and the thermal load on the workpiece and the bur is reduced. This is a particular advantage when working with materials which do not conduct heat well, such as stainless steel (INOX). Use guide sleeve EFH PG 3/210 (EDP 95294), which was specially designed for this power tool. The additional contact surface of the guide sleeve further improves the guidability of the burs.

The use of guide sleeve also avoids the build-up of chip deposits when working on aluminum materials. Alternatively, you can use a grinding oil. The guide plate EFP PG 3/210 (EDP 95295) can be used in combination with guide sleeve EFH PG 3/210 to improve guidability even further. Ordering data for power tool and guide sleeve can be found in "Power tools" catalogue (section 209). Ordering data for PFERD grinding oil 412 can be found in "Fine grinding and finishing products" catalogue (section 204).

# Carbide burs – Universal line

for edge profiling



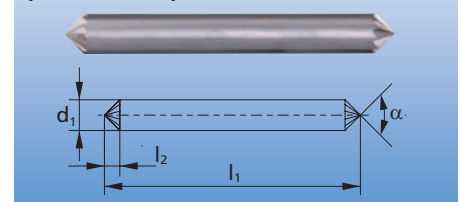
These burs are flatter and less acute-angled, 90° cone shape.

Suitable for counterboring and chamfering with defined chamfer angles.

EDP 23431 shape K SK-42 1/8" shank (double ended) design is cut and usable on both sides: see picture at right.

### PFERD specification number KSK 90°

### Conical counterbore shape K (double ended)



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI no. | Shank dia.<br>$d_2$<br>[Inches] | Angle<br>$\alpha$ | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number |            |  |
|---|----------|---------------------------------|-------------------|-------------------------------------|-------------------------|------------|--|
|   |          |                                 |                   |                                     | Single<br>              | Double<br> |  |

### Shank dia. 1/8" (Double Ended)

|            |       |     |     |       |       |   |   |
|------------|-------|-----|-----|-------|-------|---|---|
| 1/8 x 1/16 | SK-42 | 1/8 | 90° | 1-1/2 | 23431 | - | 1 |
|------------|-------|-----|-----|-------|-------|---|---|

### Shank dia. 1/4"

|            |      |     |     |         |       |       |   |
|------------|------|-----|-----|---------|-------|-------|---|
| 1/2 x 1/4  | SK-5 | 1/4 | 90° | 2-9/64  | 25091 | -     | 1 |
| 5/8 x 5/16 | SK-6 | 1/4 | 90° | 2-1/4   | 25101 | -     | 1 |
| 1 x 1/2    | SK-9 | 1/4 | 90° | 2-13/32 | -     | 25122 | 1 |



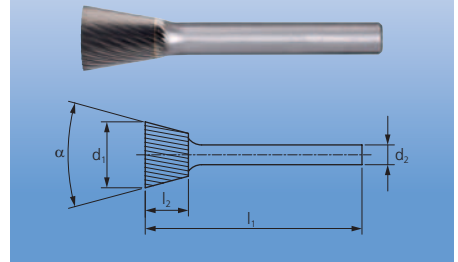


Inverted cone bur, tapering off towards the shank.

Suitable for working on hard-to-reach, rear-side edges.

**PFERD specification number**  
WKN

**Inverted cone (plain end)**  
Shape N



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Angle<br>$\alpha$ | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number |            |             |   |
|---|-------------|---------------------------------|-------------------|-------------------------------------|-------------------------|------------|-------------|---|
|   |             |                                 |                   |                                     | Single<br>              | Double<br> | Diamond<br> |   |
| <b>Shank dia. 1/8"</b>                            |             |                                 |                   |                                     |                         |            |             |   |
| 1/8 x 1/8   | SN-42       | 1/8                             | 14°               | 1-1/2                               | 23531                   | 23532      | -           | 1 |
| 1/4 x 1/4   | SN-51       | 1/8                             | 10°               | 1-7/16                              | 23541                   | 23542      | -           | 1 |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                   |                                     |                         |            |             |   |
| 1/2 x 1/2   | SN-4        | 1/4                             | 28°               | 2-17/64                             | 25281                   | 25282      | -           | 1 |
| 3/4 x 5/8   | SN-7        | 1/4                             | 30°               | 2-13/32                             | -                       | -          | 25303       | 1 |

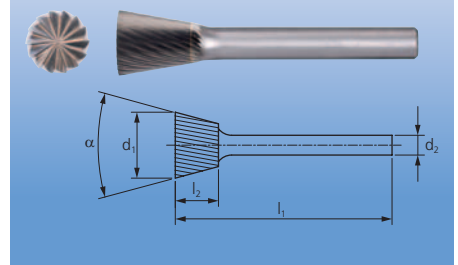


Inverted cone bur, tapering off towards the shank, with end cut.

Suitable for working on hard-to-reach, rear-side edges.

**PFERD specification number**  
WKN-S

**Inverted cone (end cut)**  
Shape N



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Angle<br>$\alpha$ | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number |  |   |
|---|-------------|---------------------------------|-------------------|-------------------------------------|-------------------------|--|---|
|   |             |                                 |                   |                                     | Single<br>              |  |   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                   |                                     |                         |  |   |
| 1/2 x 1/2   | SN-4E       | 1/4                             | 28°               | 2-17/64                             | 25321                   |  | 1 |

# Carbide burs – Universal line

Standard shank lengths, extended shank length L2

## Single cut



## Double cut



## Diamond cut



### Recommended rotational speed range [RPM]

To determine the recommended cutting speed [SFPM], please proceed as follows:

- ❶ Select the workpiece material to be machined
- ❷ Determine the characteristics of your application

- ❸ Select the cut
- ❹ Establish the cutting speed range

To determine the recommended rotational speed [RPM], please proceed as follows:

- ❺ Select the required bur diameter
- ❻ The cutting speed range and the bur diameter determine the recommended rotational speed range [RPM]

| ❶ Workpiece material/colour code |  | ❷ Characteristics   | ❸ Cut                                 | ❹ Cutting speed             |                    |
|----------------------------------|--|---|---------------------------------------|-----------------------------|--------------------|
| Steel and steel castings         | Non-hardened, nonheat treated steels up to 35 HRC (< 1,200 N/mm <sup>2</sup> ) | Constructional steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, steel castings | Coarse machining = high stock removal | Single<br>Double            | 2,000 - 3,000 SFPM |
|                                  |  |   | Fine machining = low stock removal    | Single                      | 1,500 - 2,000 SFPM |
| Stainless steel (INOX)           | Rust and acid-resistant steels   | Austenitic and ferritic high-grade steels   | Coarse machining = high stock removal | Single<br>Double<br>Diamond | 850 - 1,150 SFPM   |
|                                  |  |   | Fine machining = low stock removal    | Single                      | 1,150 - 1,500 SFPM |
|                                  |  |   |                                       |                             |                    |
| Non-ferrous metals               | Hard non-ferrous metals  | Bronze, titanium/titanium alloys, very hard aluminum alloys (high Si content)                               | Coarse machining = high stock removal | Single<br>Diamond           | 850 - 1,150 SFPM   |
|                                  |  |   | Fine machining = low stock removal    | Single                      | 1,150 - 1,500 SFPM |
|                                  | Heat resistant alloys  | Nickel based alloys, NiCo alloys (aircraft engine and turbine construction)                                 | Coarse machining = high stock removal | Double<br>Diamond           | 1,000 - 1,500 SFPM |
| Cast iron                        | Grey cast iron, white cast iron  | Cast iron with flake graphite, with nodular graphite cast iron, white annealed cast iron, black cast iron   | Coarse machining = high stock removal | Single<br>Double            | 1,500 - 2,000 SFPM |
|                                  |  |   | Fine machining = low stock removal    | Single                      |                    |

### Example

Carbide bur, double cut, bur diameter: 1/2".

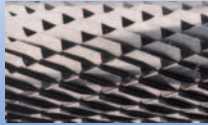
Coarse machining of non-hardened and non-heat-treated steels.

Cutting speed: 2,000 - 3,000 SFPM

**Rotational speed: 16,000 - 24,000 RPM**

| ❺ Bur dia. [Inches] | ❻ Cutting speed [SFPM] |        |        |        |         |
|---------------------|------------------------|--------|--------|--------|---------|
|                     | 850                    | 1,150  | 1,500  | 2,000  | 3,000   |
|                     | Rotational speed [RPM] |        |        |        |         |
| 3/32                | 35,000                 | 56,000 | 72,000 | 95,000 | 120,000 |
| 1/8                 | 27,000                 | 37,000 | 48,000 | 64,000 | 95,000  |
| 3/16                | 16,000                 | 22,000 | 29,000 | 38,000 | 57,000  |
| 1/4                 | 13,000                 | 19,000 | 24,000 | 32,000 | 48,000  |
| 5/16                | 10,000                 | 14,000 | 18,000 | 24,000 | 36,000  |
| 3/8                 | 8,000                  | 11,000 | 14,000 | 19,000 | 29,000  |
| 7/16                | 7,500                  | 10,000 | 13,000 | 17,500 | 26,500  |
| 1/2                 | 7,000                  | 9,000  | 12,000 | 16,000 | 24,000  |
| 5/8                 | 5,000                  | 7,000  | 9,000  | 12,000 | 18,000  |
| 3/4                 | 4,000                  | 6,000  | 7,000  | 10,000 | 14,000  |
| 1                   | 3,000                  | 4,000  | 6,000  | 8,000  | 11,000  |

### Double cut



### Carbide burs with long shank (L3 and L6)

Small carbide burs with long shanks **L3** (3") are perfect for work on small hard-to-reach components.

Carbide burs with long shanks **L6** (6") are ideal for cost-effective work in deep, hard-to-reach places.



### Safety note

Not suitable for robotic and stationary usage.  
**Risk of bending.** Only use power tools with rigid clamping systems.



Read the instructions!  
 = (Please observe the recommended RPM!)

### Safety information recommended RPM

**When working with long shank burs, the bur must be in contact with the workpiece (or inserted in the bore or slot to be machined) before the machine is turned on. As a rule, the bur must remain in contact with the workpiece for as long as the machine is running.** Failure to observe this procedure may result in shank failure and hence, an increased accident risk.

If the continuous contact between the bur and the workpiece is not guaranteed, the **idling speeds** stated in the table should **not be exceeded**.

For safety reasons, drive speeds **with contact to workpiece** require a reduction in the recommended standard length bur speed from the speeds stated in the table below.

Proceed as follows:

- ❶ Select the workpiece material to be machined
- ❷ Select the required bur diameter
- ❸ For the recommended reduced speed [RPM] with workpiece contact, please refer to the right-hand side of the table

| ❶ Workpiece material/colour code |   | Characteristics   | Cut                                   |
|----------------------------------|---|---|---------------------------------------|
| Steel, cast steel                | Non-hardened, non-heat treated steels up to 38 HRC (< 1,200 N/mm <sup>2</sup> ) | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steels    | Coarse machining = high stock removal |
|                                  | Hardened, heat-treated steels exceeding 38 HRC (> 1,200 N/mm <sup>2</sup> )     | Tool steels, tempering steels, alloyed steels, cast steels  |                                       |
| Stainless steel (INOX)           | Rust and acid-resistant steels  | Austenitic and ferritic stainless steel   | Coarse machining = high stock removal |
| Non-ferrous metals               | High-temperature resistant materials  | Nickel based alloys, cobalt based alloys (aircraft engine and turbine construction)                       | Coarse machining = high stock removal |
| Cast iron                        | Grey cast iron, white cast iron   | Cast iron with flake graphite, with nodular graphite cast iron, white annealed cast iron, black cast iron | Coarse machining = high stock removal |

### Example

Carbide bur, L6, double cut, bur diameter: 1/2".

Coarse machining of non-hardened and non-heat-treated steels.

**Recommended reduced speed with workpiece contact: 7,000 RPM**

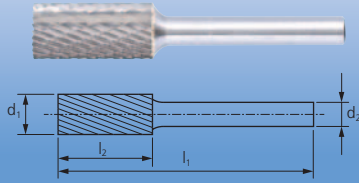
| ❷ Bur dia. [Inches] | ❹ Maximum rotational free speed [RPM] (No contact to the workpiece) |         | ❸ Recommended reduced rotational application speed [RPM] (With contact to the workpiece) |         |
|---------------------|---|---------|--|---------|
|                     | Shank length [Inches]   |         |  |         |
|                     | L3 (3")   | L6 (6") | L3 (3")  | L6 (6") |
| 3/32                | 12,000  | -       | 33,000   | -       |
| 1/8                 | 10,000  | -       | 31,000   | -       |
| 1/4                 | 6,000   | -       | 15,000   | -       |
| 5/16                | -   | 6,000   | -  | 11,000  |
| 3/8                 | -   | 4,500   | -  | 9,000   |
| 1/2                 | -   | 3,000   | -  | 7,000   |

# Carbide burs – Universal line

1/8" - 1/4" shank




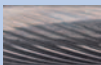

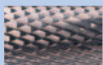
**Cylindrical (plain end)  
Shape A**



Cylindrical bur with plain end (uncut).

**PFERD specification number**  
ZYA

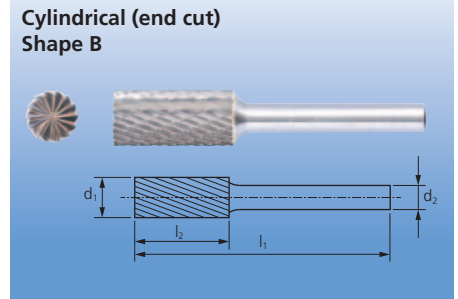



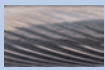
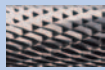
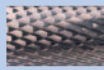
| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number   |   |  |  |
|---|-------------|---------------------------------|-------------------------------------|---|---|--|---|
|   |             |                                 |                                     | Single<br> | Double<br> | Diamond<br> |   |
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |   |   |  |   |
| 3/32 x 1/2  | SA-42       | 1/8                             | 1-1/2                               | -   | 23112   | -  | 1   |
| 1/8 x 1/2   | SA-43       | 1/8                             | 1-1/2                               | 23121   | 23122   | -  | 1   |
| 1/4 x 1/2   | SA-51       | 1/8                             | 1-11/16                             | 23131   | 23132   | -  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |   |   |  |   |
| 1/8 x 1/2   | SA-11       | 1/4                             | 1-15/16                             | 24001   | 24002   | -  | 1   |
| 3/16 x 5/8  | SA-14       | 1/4                             | 1-15/16                             | -   | 24022   | -  | 1   |
| 1/4 x 5/8   | SA-1        | 1/4                             | 1-15/16                             | 24031   | 24032   | 24033  | 1   |
| 5/16 x 3/4  | SA-2        | 1/4                             | 2-1/2                               | 24051   | 24052   | 24053  | 1   |
| 3/8 x 3/4   | SA-3        | 1/4                             | 2-1/2                               | 24061   | 24062   | 24063  | 1   |
| 7/16 x 1  | SA-4        | 1/4                             | 2-3/4                               | 24091   | 24092   | -  | 1   |
| 1/2 x 1   | SA-5        | 1/4                             | 2-3/4                               | 24101   | 24102   | 24103  | 1   |
| 5/8 x 1   | SA-6        | 1/4                             | 2-3/4                               | -   | 24112   | -  | 1   |
| 3/4 x 1/2   | SA-15       | 1/4                             | 2-1/4                               | -   | 24132   | -  | 1   |
| 3/4 x 3/4   | SA-16       | 1/4                             | 2-1/2                               | -   | 24142   | -  | 1   |
| 3/4 x 1   | SA-7        | 1/4                             | 2-3/4                               | -   | 24122   | -  | 1   |
| 1 x 1   | SA-9        | 1/4                             | 2-3/4                               | -   | 24162   | -  | 1   |
| <b>Extended shank L2 (2")</b>                     |             |                                 |                                     |   |   |  |   |
| 3/32 x 1/2  | SA-42L2     | 1/8                             | 2                                   | -   | 23617   | -  | 1   |
| 1/8 x 1/2   | SA-43L2     | 1/8                             | 2                                   | -   | 23621   | -  | 1   |
| <b>Extended shank L3 (3")</b>                     |             |                                 |                                     |   |   |  |   |
| 3/32 x 1/2  | SA-42L3     | 1/8                             | 3                                   | -   | 23792   | -  | 1   |
| 1/8 x 1/2   | SA-43L3     | 1/8                             | 3                                   | -   | 23796   | -  | 1   |
| <b>Extended shank L6 (6")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/4 x 5/8   | SA-1L6      | 1/4                             | 6-9/16                              | -   | 25802   | -  | 1   |
| 3/8 x 3/4   | SA-3L6      | 1/4                             | 6-5/8                               | -   | 25812   | -  | 1   |
| 1/2 x 1   | SA-5L6      | 1/4                             | 6-7/8                               | -   | 25822   | -  | 1   |



Cylindrical bur with end cut.

**PFERD specification number**  
ZYAS



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number   |  |  |  |
|---|-------------|---------------------------------|-------------------------------------|---|--|--|---|
|   |             |                                 |                                     | Single<br> | Double<br> | Diamond<br> |   |
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |   |  |  |   |
| 1/4 x 1/2   | SB-51       | 1/8                             | 1-11/16                             | 23171   | -  | -  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |   |  |  |   |
| 3/16 x 5/8  | SB-14       | 1/4                             | 1-15/16                             | -   | 24202  | -  | 1   |
| 1/4 x 5/8   | SB-1        | 1/4                             | 1-15/16                             | 24211   | 24212  | 24213  | 1   |
| 5/16 x 3/4  | SB-2        | 1/4                             | 2-1/2                               | -   | 24232  | 24233  | 1   |
| 3/8 x 3/4   | SB-3        | 1/4                             | 2-1/2                               | 24241   | 24242  | -  | 1   |
| 7/16 x 1  | SB-4        | 1/4                             | 2-3/4                               | 24271   | 24272  | 24273  | 1   |
| 1/2 x 1   | SB-5        | 1/4                             | 2-3/4                               | 24281   | 24282  | 24283  | 1   |
| 5/8 x 1   | SB-6        | 1/4                             | 2-3/4                               | -   | 24292  | -  | 1   |
| 3/4 x 1/2   | SB-15       | 1/4                             | 2-1/4                               | -   | 24312  | -  | 1   |
| 3/4 x 3/4   | SB-16       | 1/4                             | 2-1/2                               | -   | 24322  | -  | 1   |
| 3/4 x 1   | SB-7        | 1/4                             | 2-3/4                               | -   | 24302  | -  | 1   |
| 1 x 1   | SB-9        | 1/4                             | 2-3/4                               | -   | 24342  | -  | 1   |
| <b>Extended shank L6 (6")</b>                     |             |                                 |                                     |   |  |  |   |
| 3/8 x 3/4   | SB-3L6      | 1/4                             | 6-5/8                               | -   | 25842  | -  | 1   |
| 1/2 x 1   | SB-5L6      | 1/4                             | 6-7/8                               | -   | 25852  | -  | 1   |

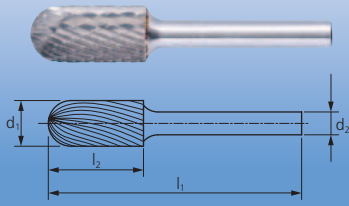


# Carbide burs – Universal line

1/8" - 1/4" shank






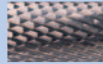
**Cylindrical (radius end)  
Shape C**



Cylindrical bur with radius end.

**PFERD specification number**  
WRC



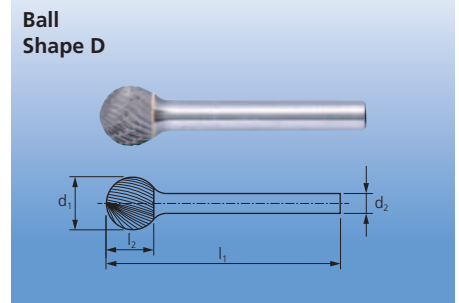
| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number   |   |  |  |
|---|-------------|---------------------------------|-------------------------------------|---|---|--|---|
|   |             |                                 |                                     | Single<br> | Double<br> | Diamond<br> |   |
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |   |   |  |   |
| 3/32 x 1/2  | SC-41       | 1/8                             | 1-1/3                               | -   | 23182   | -  | 1   |
| 1/8 x 1/2   | SC-42       | 1/8                             | 1-1/2                               | 23191   | 23192   | -  | 1   |
| 1/4 x 1/2   | SC-51       | 1/8                             | 1-11/16                             | 23201   | 23202   | -  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |   |   |  |   |
| 1/8 x 1/2   | SC-11       | 1/4                             | 1-15/16                             | -   | 24352   | -  | 1   |
| 1/8 x 5/8   | SC-12       | 1/4                             | 1-15/16                             | -   | 24362   | -  | 1   |
| 3/16 x 5/8  | SC-14       | 1/4                             | 1-15/16                             | -   | 24382   | -  | 1   |
| 1/4 x 5/8   | SC-1        | 1/4                             | 1-15/16                             | 24391   | 24392   | 24393  | 1   |
| 5/16 x 3/4  | SC-2        | 1/4                             | 2-1/2                               | -   | 24412   | -  | 1   |
| 3/8 x 3/4   | SC-3        | 1/4                             | 2-1/2                               | 24421   | 24422   | 24423  | 1   |
| 7/16 x 1  | SC-4        | 1/4                             | 2-3/4                               | -   | 24452   | -  | 1   |
| 1/2 x 1   | SC-5        | 1/4                             | 2-3/4                               | 24461   | 24462   | 24463  | 1   |
| 5/8 x 1   | SC-6        | 1/4                             | 2-3/4                               | -   | 24472   | 24473  | 1   |
| 3/4 x 1   | SC-7        | 1/4                             | 2-3/4                               | -   | 24482   | 24483  | 1   |
| 1 x 1   | SC-9        | 1/4                             | 2-3/4                               | -   | 24512   | 24513  | 1   |
| <b>Extended shank L2 (2")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/8 x 1/2   | SC-42L2     | 1/8                             | 2                                   | -   | 23649   | -  | 1   |
| <b>Extended shank L3 (3")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/8 x 1/2   | SC-42L3     | 1/8                             | 3                                   | -   | 23824   | -  | 1   |
| <b>Extended shank L6 (6")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/4 x 5/8   | SC-1L6      | 1/4                             | 6-9/16                              | -   | 25862   | -  | 1   |
| 3/8 x 3/4   | SC-3L6      | 1/4                             | 6-5/8                               | -   | 25872   | -  | 1   |
| 1/2 x 1   | SC-5L6      | 1/4                             | 6-7/8                               | -   | 25882   | -  | 1   |









Ball-shaped bur.

**PFERD specification number**  
KUD



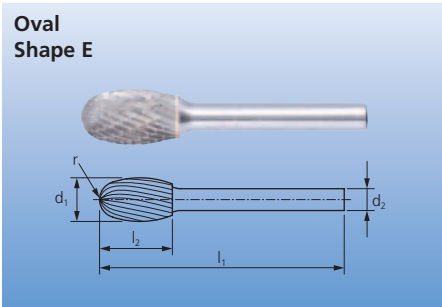
| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number   |   |  |  |
|---|-------------|---------------------------------|-------------------------------------|---|---|--|---|
|   |             |                                 |                                     | Single<br> | Double<br> | Diamond<br> |   |
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |   |   |  |   |
| 3/32 x 3/32                                       | SD-41       | 1/8                             | 1-1/2                               | 23231   | 23232   | -  | 1   |
| 1/8 x 3/32  | SD-42       | 1/8                             | 1-1/2                               | 23241   | 23242   | -  | 1   |
| 3/16 x 1/8  | SD-53       | 1/8                             | 1-3/8                               | 23261   | 23262   | -  | 1   |
| 1/4 x 3/16  | SD-51       | 1/8                             | 1-3/8                               | 23251   | 23252   | -  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |   |   |  |   |
| 1/8 x 3/32  | SD-11       | 1/4                             | 1-15/16                             | -   | 24522   | -  | 1   |
| 3/16 x 1/8  | SD-14       | 1/4                             | 1-15/16                             | 24531   | 24532   | -  | 1   |
| 1/4 x 3/16  | SD-1        | 1/4                             | 1-15/16                             | 24541   | 24542   | 24543  | 1   |
| 5/16 x 1/4  | SD-2        | 1/4                             | 2-1/16                              | 24551   | 24552   | -  | 1   |
| 3/8 x 5/16  | SD-3        | 1/4                             | 2-1/16                              | 24561   | 24562   | 24563  | 1   |
| 7/16 x 3/8  | SD-4        | 1/4                             | 2-1/8                               | -   | 24572   | -  | 1   |
| 1/2 x 7/16  | SD-5        | 1/4                             | 2-3/16                              | 24581   | 24582   | -  | 1   |
| 5/8 x 9/16  | SD-6        | 1/4                             | 2-5/16                              | -   | 24592   | 24593  | 1   |
| 3/4 x 11/16                                       | SD-7        | 1/4                             | 2-13/16                             | -   | 24602   | -  | 1   |
| 1 x 15/16   | SD-9        | 1/4                             | 2-1/16                              | 24611   | 24612   | -  | 1   |
| <b>Extended shank L2 (2")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/8 x 3/32  | SD-42L2     | 1/8                             | 2                                   | -   | 23661   | -  | 1   |
| 1/4 x 3/16  | SD-51L2     | 1/8                             | 2                                   | -   | 23665   | -  | 1   |
| <b>Extended shank L3 (3")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/8 x 3/32  | SD-42L3     | 1/8                             | 3                                   | -   | 23836   | -  | 1   |
| 1/4 x 3/16  | SD-51L3     | 1/8                             | 3-3/16                              | -   | 23840   | -  | 1   |
| <b>Extended shank L6 (6")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/4 x 3/16  | SD-1L6      | 1/4                             | 6-1/8                               | -   | 25922   | -  | 1   |
| 3/8 x 5/16  | SD-3L6      | 1/4                             | 6-1/4                               | -   | 25932   | -  | 1   |
| 1/2 x 7/16  | SD-5L6      | 1/4                             | 6-5/16                              | -   | 25942   | -  | 1   |

# Carbide burs – Universal line

1/8" - 1/4" shank

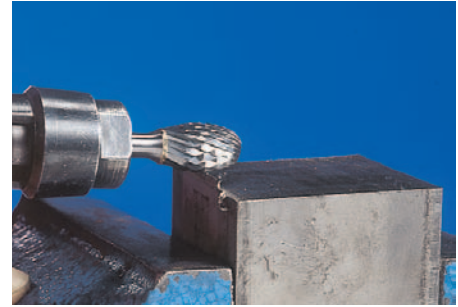



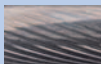

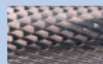
## Oval Shape E



Oval-shaped bur.

PFERD specification number  
TRE



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number   |   |  |  |
|---|-------------|---------------------------------|-------------------------------------|---|---|--|---|
|   |             |                                 |                                     | Single<br> | Double<br> | Diamond<br> |   |
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |   |   |  |   |
| 1/8 x 7/32  | SE-41       | 1/8                             | 1-1/2                               | -   | 23272   | -  | 1   |
| 1/4 x 3/8   | SE-51       | 1/8                             | 1-9/16                              | 23281   | 23282   | -  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |   |   |  |   |
| 1/4 x 3/8   | SE-1        | 1/4                             | 1-15/16                             | 24631   | 24632   | 24633  | 1   |
| 3/8 x 5/8   | SE-3        | 1/4                             | 2-3/8                               | 24641   | 24642   | 24643  | 1   |
| 1/2 x 7/8   | SE-5        | 1/4                             | 2-5/8                               | 24651   | 24652   | 24653  | 1   |
| 5/8 x 1   | SE-6        | 1/4                             | 2-3/4                               | -   | 24662   | -  | 1   |
| <b>Extended shank L2 (2")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/8 x 7/32  | SE-41L2     | 1/8                             | 2                                   | -   | 23673   | -  | 1   |
| 1/4 x 3/8   | SE-51L2     | 1/8                             | 2                                   | -   | 23677   | -  | 1   |
| <b>Extended shank L3 (3")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/8 x 7/32  | SE-41L3     | 1/8                             | 3                                   | -   | 23848   | -  | 1   |
| 1/4 x 3/8   | SE-51L3     | 1/8                             | 3-3/8                               | -   | 23852   | -  | 1   |
| <b>Extended shank L6 (6")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/4 x 3/8   | SE-1L6      | 1/4                             | 6-3/8                               | -   | 25982   | -  | 1   |
| 3/8 x 5/8   | SE-3L6      | 1/4                             | 6-1/2                               | -   | 25992   | -  | 1   |
| 1/2 x 7/8   | SE-5L6      | 1/4                             | 6-3/4                               | -   | 26002   | -  | 1   |

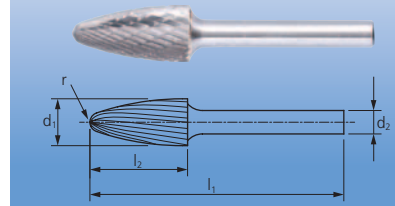




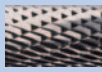
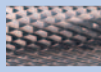


Tree-shaped bur with radius end.

**PFERD specification number**  
RBF

**Tree (radius end)**  
**Shape F**

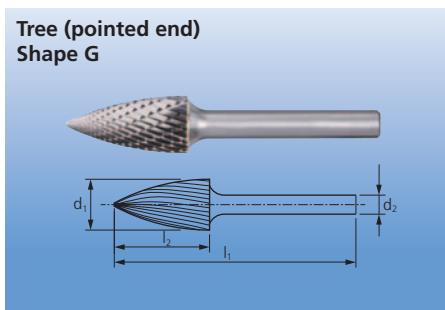


| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number   |   |  |  |
|---|-------------|---------------------------------|-------------------------------------|---|---|--|---|
|   |             |                                 |                                     | Single<br> | Double<br> | Diamond<br> |   |
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |   |   |  |   |
| 1/8 x 1/4   | SF-41       | 1/8                             | 1-1/2                               | 23301   | 23302   | -  | 1   |
| 1/8 x 1/2   | SF-42       | 1/8                             | 1-1/2                               | 23311   | 23312   | -  | 1   |
| 1/4 x 1/2   | SF-51       | 1/8                             | 1-11/16                             | 23321   | 23322   | -  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |   |   |  |   |
| 1/4 x 5/8   | SF-1        | 1/4                             | 1-15/16                             | 24691   | 24692   | 24693  | 1   |
| 3/8 x 3/4   | SF-3        | 1/4                             | 2-1/2                               | 24701   | 24702   | 24703  | 1   |
| 7/16 x 1  | SF-4        | 1/4                             | 2-3/4                               | -   | 24712   | -  | 1   |
| 1/2 x 3/4   | SF-13       | 1/4                             | 2-1/2                               | -   | 24732   | 24733  | 1   |
| 1/2 x 1   | SF-5        | 1/4                             | 2-3/4                               | 24721   | 24722   | 24723  | 1   |
| 5/8 x 1   | SF-6        | 1/4                             | 2-3/4                               | -   | 24742   | -  | 1   |
| 3/4 x 1   | SF-7        | 1/4                             | 2-3/4                               | -   | 24752   | 24753  | 1   |
| 3/4 x 1-1/4                                       | SF-14       | 1/4                             | 3                                   | -   | 24762   | 24763  | 1   |
| 3/4 x 1-1/2                                       | SF-15       | 1/4                             | 3-1/4                               | -   | 24772   | -  | 1   |
| <b>Extended shank L2 (2")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/8 x 1/2   | SF-42L2     | 1/8                             | 2                                   | -   | 23685   | -  | 1   |
| <b>Extended shank L3 (3")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/8 x 1/2   | SF-42L3     | 1/8                             | 3                                   | -   | 23860   | -  | 1   |
| <b>Extended shank L6 (6")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/4 x 5/8   | SF-1L6      | 1/4                             | 6-9/16                              | -   | 26042   | -  | 1   |
| 3/8 x 3/4   | SF-3L6      | 1/4                             | 6-3/4                               | -   | 26052   | -  | 1   |
| 1/2 x 1   | SF-5L6      | 1/4                             | 6-7/8                               | -   | 26062   | -  | 1   |



# Carbide burs – Universal line


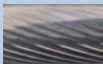

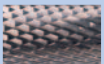
1/8" - 1/4" shank



Tree-shaped bur with pointed end.

**PFERD specification number**  
SPG



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number   |   |  |  |
|---|-------------|---------------------------------|-------------------------------------|---|---|--|---|
|   |             |                                 |                                     | Single<br> | Double<br> | Diamond<br> |   |
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |   |   |  |   |
| 1/8 x 1/4   | SG-41       | 1/8                             | 1-1/2                               | 23341   | 23342   | -  | 1   |
| 1/8 x 3/8   | SG-43       | 1/8                             | 1-1/2                               | 23361   | 23362   | -  | 1   |
| 3/16 x 1/2  | SG-53       | 1/8                             | 1-11/16                             | -   | 23392   | -  | 1   |
| 1/4 x 1/2   | SG-51       | 1/8                             | 1-11/16                             | 23381   | 23382   | -  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |   |   |  |   |
| 1/4 x 5/8   | SG-1        | 1/4                             | 1-15/16                             | 24781   | 24782   | 24783  | 1   |
| 5/16 x 3/4  | SG-2        | 1/4                             | 2-1/2                               | -   | 24792   | 24793  | 1   |
| 3/8 x 3/4   | SG-3        | 1/4                             | 2-1/2                               | 24801   | 24802   | 24803  | 1   |
| 1/2 x 3/4   | SG-13       | 1/4                             | 2-1/2                               | -   | 24822   | 24823  | 1   |
| 1/2 x 1   | SG-5        | 1/4                             | 2-3/4                               | 24811   | 24812   | 24813  | 1   |
| 5/8 x 1   | SG-6        | 1/4                             | 2-3/4                               | -   | 24832   | 24833  | 1   |
| <b>Extended shank L2 (2")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/8 x 1/4   | SG-41L2     | 1/8                             | 2                                   | -   | 23693   | -  | 1   |
| <b>Extended shank L3 (3")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/8 x 1/4   | SG-41L3     | 1/8                             | 3                                   | -   | 23868   | -  | 1   |
| <b>Extended shank L6 (6")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/4 x 5/8   | SG-1L6      | 1/4                             | 6-9/16                              | -   | 26102   | -  | 1   |
| 3/8 x 3/4   | SG-3L6      | 1/4                             | 6-3/4                               | -   | 26112   | -  | 1   |
| 1/2 x 1   | SG-5L6      | 1/4                             | 6-7/8                               | -   | 26122   | -  | 1   |

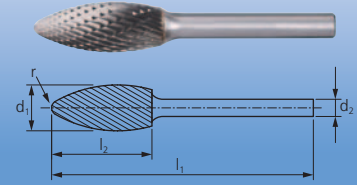



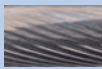

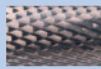


Flame-shaped bur.

**PFERD specification number**  
HM B

**Flame  
Shape H**



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number   |   |  |  |
|---|-------------|---------------------------------|-------------------------------------|---|---|--|---|
|   |             |                                 |                                     | Single<br> | Double<br> | Diamond<br> |   |
| <b>Shank dia. 1/8"</b>                            |             |                                 |                                     |   |   |  |   |
| 1/8 x 1/4   | SH-41       | 1/8                             | 1-1/2                               | 23401   | 23402   | -  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                                     |   |   |  |   |
| 1/4 x 5/8   | SH-1        | 1/4                             | 1-15/16                             | -   | 24862   | 24863  | 1   |
| 5/16 x 3/4  | SH-2        | 1/4                             | 2-1/2                               | 24871   | 24872   | -  | 1   |
| 1/2 x 1-1/4                                       | SH-5        | 1/4                             | 3                                   | 24881   | 24882   | 24883  | 1   |
| 5/8 x 1-7/16                                      | SH-6        | 1/4                             | 3-3/16                              | -   | 24892   | -  | 1   |
| <b>Extended shank L2 (2")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/8 x 1/4   | SH-41L2     | 1/8                             | 2                                   | -   | 23713   | -  | 1   |
| <b>Extended shank L3 (3")</b>                     |             |                                 |                                     |   |   |  |   |
| 1/8 x 1/4   | SH-41L3     | 1/8                             | 3                                   | -   | 23888   | -  | 1   |
| <b>Extended shank L6 (6")</b>                     |             |                                 |                                     |   |   |  |   |
| 5/16 x 3/4  | SH-2L6      | 1/4                             | 6-5/8                               | -   | 26162   | -  | 1   |
| 1/2 x 1-1/4                                       | SH-5L6      | 1/4                             | 7-1/4                               | -   | 26172   | -  | 1   |

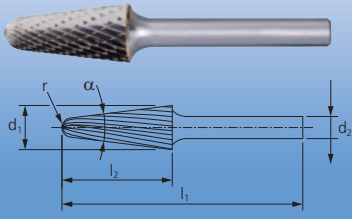


# Carbide burs – Universal line

1/8" - 1/4" shank







14° Taper (radius end)  
Shape L



Taper bur with radius end.

PFERD specification number  
KEL



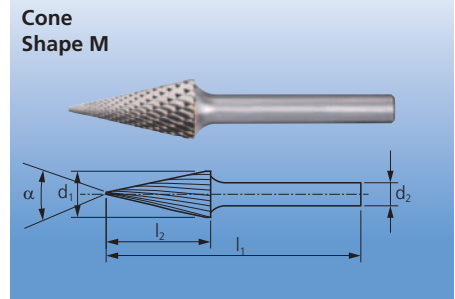
| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Angle<br>$\alpha$ | Overall<br>length<br>$l_1$<br>[Inches] | Cut type and EDP number  |   |  |  |
|---|-------------|---------------------------------|-------------------|--|--|---|--|---|
|   |             |                                 |                   |  | Single<br> | Double<br> | Diamond<br> |   |
| <b>Shank dia. 1/8"</b>                            |             |                                 |                   |  |  |   |  |   |
| 1/8 x 1/2   | SL-42       | 1/8                             | 14°               | 1-1/2                                  | 23451  | 23452   | -  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                   |  |  |   |  |   |
| 1/4 x 5/8   | SL-1        | 1/4                             | 14°               | 1-15/16                                | 25131  | 25132   | 25133  | 1   |
| 5/16 x 1  | SL-2        | 1/4                             | 16°               | 2-13/16                                | -  | 25142   | 25143  | 1   |
| 3/8 x 1-1/16                                      | SL-3        | 1/4                             | 14°               | 3                                      | -  | 25152   | 25153  | 1   |
| 1/2 x 1-1/8                                       | SL-4        | 1/4                             | 14°               | 3-1/16                                 | 25161  | 25162   | 25163  | 1   |
| 5/8 x 1-5/16                                      | SL-6        | 1/4                             | 14°               | 3-1/4                                  | -  | 25182   | 25183  | 1   |
| 3/4 x 1-1/2                                       | SL-7        | 1/4                             | 14°               | 3-7/16                                 | -  | 25192   | -  | 1   |
| <b>Extended shank L2 (2")</b>                     |             |                                 |                   |  |  |   |  |   |
| 1/8 x 1/2   | SL-42L2     | 1/8                             | 14°               | 2                                      | -  | 23725   | -  | 1   |
| <b>Extended shank L3 (3")</b>                     |             |                                 |                   |  |  |   |  |   |
| 1/8 x 1/2   | SL-42L3     | 1/8                             | 14°               | 3                                      | -  | 23900   | -  | 1   |
| <b>Extended shank L6 (6")</b>                     |             |                                 |                   |  |  |   |  |   |
| 1/4 x 5/8   | SL-1L6      | 1/4                             | 14°               | 6-9/16                                 | -  | 26212   | -  | 1   |
| 3/8 x 1-1/16                                      | SL-3L6      | 1/4                             | 14°               | 7-1/8                                  | -  | 26222   | -  | 1   |
| 1/2 x 1-1/8                                       | SL-4L6      | 1/4                             | 14°               | 7-3/16                                 | -  | 26232   | -  | 1   |





Conical burr with pointed end.

**PFERD specification number**  
SKM



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI<br>no. | Shank dia.<br>$d_2$<br>[Inches] | Angle<br>$\alpha$ | Overall<br>length<br>$l_1$<br>[Inches] | Cut type and EDP number  |   |  |  |
|---|-------------|---------------------------------|-------------------|--|--|---|--|---|
|   |             |                                 |                   |  | Single<br> | Double<br> | Diamond<br> |   |
| <b>Shank dia. 1/8"</b>                            |             |                                 |                   |  |  |   |  |   |
| 1/8 x 3/8   | SM-41       | 1/8                             | 14°               | 1-1/2                                  | -  | 23472   | -  | 1   |
| 1/8 x 1/2   | SM-42       | 1/8                             | 12°               | 1-1/2                                  | 23481  | 23482   | -  | 1   |
| 1/8 x 5/8   | SM-43       | 1/8                             | 9°                | 1-1/2                                  | -  | 23492   | -  | 1   |
| 1/4 x 1/2   | SM-51       | 1/8                             | 22°               | 1-13/16                                | 23501  | 23502   | -  | 1   |
| <b>Shank dia. 1/4"</b>                            |             |                                 |                   |  |  |   |  |   |
| 1/4 x 1/2   | SM-1        | 1/4                             | 22°               | 1-15/16                                | 25201  | 25202   | -  | 1   |
| 1/4 x 3/4   | SM-2        | 1/4                             | 14°               | 1-15/16                                | -  | 25212   | 25213  | 1   |
| 1/4 x 1   | SM-3        | 1/4                             | 10°               | 1-15/16                                | -  | 25222   | 25223  | 1   |
| 3/8 x 3/4   | SM-4        | 1/4                             | 28°               | 2-1/2                                  | 25231  | 25232   | -  | 1   |
| 1/2 x 1   | SM-5        | 1/4                             | 28°               | 2-3/4                                  | -  | 25242   | -  | 1   |
| 5/8 x 1-1/8                                       | SM-6        | 1/4                             | 31°               | 2-15/16                                | -  | 25252   | 25253  | 1   |
| <b>Extended shank L2 (2")</b>                     |             |                                 |                   |  |  |   |  |   |
| 1/8 x 1/2   | SM-42L2     | 1/8                             | 12°               | 2                                      | -  | 23733   | -  | 1   |
| 1/8 x 5/8   | SM-43L2     | 1/8                             | 9°                | 2                                      | -  | 23737   | -  | 1   |
| <b>Extended shank L3 (3")</b>                     |             |                                 |                   |  |  |   |  |   |
| 1/8 x 1/2   | SM-42L3     | 1/8                             | 12°               | 3                                      | -  | 23908   | -  | 1   |
| 1/8 x 5/8   | SM-43L3     | 1/8                             | 9°                | 3                                      | -  | 23912   | -  | 1   |



# Carbide burs – Universal line

## Sets



**12 piece carbide bur sets**  
Single cut, double cut


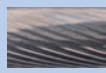
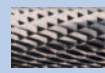


**EDP 26525**  
**12 piece single cut carbide bur set**  
**1/8" shank (plastic case)**

Contains 12 pcs. burs with 1/8" shank dia. and single cut.

**EDP 26526**  
**12 piece double cut carbide bur set**  
**1/8" shank (plastic case)**

Contains 12 pcs. burs with 1/8" shank dia. and double cut.

| Set contents shape       | Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI no. | Cut type and set EDP number   |                             | Cut type and set EDP number   |                             |  |
|--------------------------|---|----------|---|-----------------------------|---|-----------------------------|---|
|                          |   |          | Single<br> | Individual bur EDP's in set | Double<br> | Individual bur EDP's in set |   |
| Cylindrical (plain end)  | 1/8 x 1/2   | SA-43    | 26525   | 23121                       | 26526   | 23122                       | 1   |
| Cylindrical (radius end) | 3/32 x 1/2  | SC-51    |   | 23201                       |   | 23202                       | 1   |
| Cylindrical (radius end) | 1/8 x 1/2   | SC-42    |   | 23191                       |   | 23192                       | 1   |
| Ball                     | 1/8 x 3/32  | SD-42    |   | 23241                       |   | 23242                       | 1   |
| Ball                     | 3/16 x 1/8  | SD-53    |   | 23261                       |   | 23262                       | 1   |
| Tree (radius end)        | 1/8 x 1/4   | SF-41    |   | 23301                       |   | 23302                       | 1   |
| Tree (radius end)        | 1/8 x 1/2   | SF-42    |   | 23311                       |   | 23312                       | 1   |
| Tree (pointed end)       | 1/8 x 3/8   | SG-43    |   | 23361                       |   | 23362                       | 1   |
| Flame shape              | 1/8 x 1/4   | SH-41    |   | 23401                       |   | 23402                       | 1   |
| 14° Taper                | 1/8 x 1/2   | SL-42    |   | 23451                       |   | 23452                       | 1   |
| Cone                     | 1/8 x 1/2   | SM-42    |   | 23481                       |   | 23482                       | 1   |
| Inverted cone            | 1/8 x 1/8   | SN-42    |   | 23531                       |   | 23532                       | 1   |

**8 piece carbide bur sets**  
Single cut, double cut


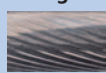



**EDP 26546**  
**8 piece single cut carbide bur set 1/4" shank (plastic case)**

Contains 8 pcs. burs with 1/4" shank dia. and single cut.

**EDP 26547**  
**8 piece double cut carbide bur set 1/4" shank (plastic case)**

Contains 8 pcs. burs with 1/4" shank dia. and double cut.



| Set contents shape       | Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | SCTI no. | Cut type and set EDP number   |                             | Cut type and set EDP number   |                             |  |
|--------------------------|---|----------|---|-----------------------------|---|-----------------------------|---|
|                          |   |          | Single<br> | Individual bur EDP's in set | Double<br> | Individual bur EDP's in set |   |
| Cylindrical (plain end)  | 3/8 x 3/4   | SA-3     | 26546   | 24061                       | 26547   | 24062                       | 1   |
| Cylindrical (plain end)  | 1/2 x 1   | SA-5     |   | 24101                       |   | 24102                       | 1   |
| Cylindrical (radius end) | 3/8 x 3/4   | SC-3     |   | 24421                       |   | 24422                       | 1   |
| Cylindrical (radius end) | 1/2 x 1   | SC-5     |   | 24461                       |   | 24462                       | 1   |
| Ball                     | 3/8 x 5/16  | SD-3     |   | 24561                       |   | 24562                       | 1   |
| Tree (radius end)        | 3/8 x 3/4   | SF-3     |   | 24701                       |   | 24702                       | 1   |
| Tree (radius end)        | 1/2 x 1   | SF-5     |   | 24721                       |   | 24722                       | 1   |
| Tree (pointed end)       | 3/8 x 3/4   | SG-3     |   | 24801                       |   | 24802                       | 1   |

### 5 piece carbide bur set 1/4" shank diamond cut (plastic case)

Contains 5 pcs. burs with 1/4" shank dia. and diamond cut.

### 5 piece carbide bur set, diamond cut



| Set contents shape       | Bur dia. x length<br>d <sub>1</sub> x l <sub>2</sub><br>[Inches] | SCTI no. | Cut type and set EDP number  |                             |  |
|--------------------------|--|----------|--|-----------------------------|---|
|                          |  |          | Diamond<br> | Individual bur EDP's in set |   |
| Cylindrical (plain end)  | 1/2 x 1  | SA-5     | 26552  | 24103                       | 1   |
| Cylindrical (radius end) | 1/2 x 1  | SC-5     |  | 24463                       | 1   |
| Oval                     | 1/2 x 7/8  | SE-5     |  | 24653                       | 1   |
| Tree (radius end)        | 1/2 x 1  | SF-5     |  | 24723                       | 1   |
| 14° Taper                | 1/2 x 1-1/8  | SL-4     |  | 25163                       | 1   |
|                          |  |          |  |                             |   |

### Showcase for carbide burs empty



EDP 26501

### 20 bur showcase


Showcase for carbide burs with lockable plexiglass cover. Features two levels, each with 12 positions for display burs and enough space above to hang up to 5 packaged burs from an integrated hang post. Depending on shank diameter (1/8" or 1/4"), suitable shank holders can be inserted at each bur position.

This showcase is free-standing and may also be used as a component in PFERD TOOL-CENTER merchandising system for distributor showrooms.

### Showcase for carbide burs



EDP 26511

| Set contents shape                       | Bur dia. x length<br>d <sub>1</sub> x l <sub>2</sub><br>[Inches] | SCTI no. | Cut type | EDP number | Individual bur EDP's in showcase |  |
|--|--|----------|----------|------------|----------------------------------|---|
| Cylindrical (plain end)                  | 3/8 x 3/4  | SA-3     | Single   | 26511      | 24061                            | 1   |
| Cylindrical (plain end)                  | 3/8 x 3/4  | SA-3     | Double   |            | 24062                            | 1   |
| Cylindrical (plain end)                  | 1/2 x 1  | SA-5     | Double   |            | 24102                            | 1   |
| Cylindrical (end cut)                    | 1/4 x 5/8  | SB-1     | Double   |            | 24212                            | 1   |
| Cylindrical (end cut)                    | 3/8 x 3/4  | SB-3     | Double   |            | 24242                            | 1   |
| Cylindrical (radius end)                 | 1/4 x 5/8  | SC-1     | Double   |            | 24392                            | 1   |
| Cylindrical (radius end)                 | 3/8 x 3/4  | SC-3     | Double   |            | 24422                            | 1   |
| Cylindrical (radius end)                 | 1/2 x 1  | SC-5     | Double   |            | 24462                            | 1   |
| Ball shape                               | 7/16 x 3/8   | SD-4     | Double   |            | 24572                            | 1   |
| Tree shape                               | 1/4 x 5/8  | SF-1     | Double   |            | 24692                            | 1   |
| Tree shape                               | 3/8 x 3/4  | SF-3     | Double   |            | 24702                            | 1   |
| Tree shape                               | 1/2 x 1  | SF-5     | Double   |            | 24722                            | 1   |
| Tree shape                               | 1/2 x 1  | SF-5     | Diamond  |            | 24723                            | 1   |
| Tree shape                               | 1/2 x 1  | SF-5     | Aluminum |            | 24725                            | 1   |
| Tree shape (pointed)                     | 3/8 x 3/4  | SG-3     | Double   |            | 24802                            | 1   |
| Tree shape (pointed)                     | 1/2 x 1  | SG-5     | Double   |            | 24812                            | 1   |
| 14° Taper                                | 3/8 x 1-1/16   | SL-3     | Double   |            | 25152                            | 1   |
| 14° Taper                                | 1/2 x 1-1/8  | SL-4     | Double   |            | 25162                            | 1   |
| 14° Taper                                | 1/2 x 1-1/8  | SL-4     | Diamond  |            | 25163                            | 1   |
| Cone (pointed)                           | 1/4 x 1  | SM-3     | Double   |            | 25222                            | 1   |
| Showcase for tungsten carbide burs empty |  |          |          | 26501      | -                                | 1   |

# Carbide bur accessories

## Spindle extensions



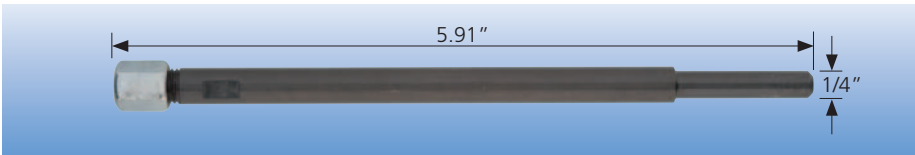
Burs (shank dia. 1/8" and 1/4") can be extended with spindle extensions, allowing access to hard-to-reach areas. The extension is mounted in the collet chuck of the machine (air-powered or electric), or in the handpiece of the flexible shaft. In some applications spindle extensions are efficient alternatives to customized burs with long shanks.

### Safety note

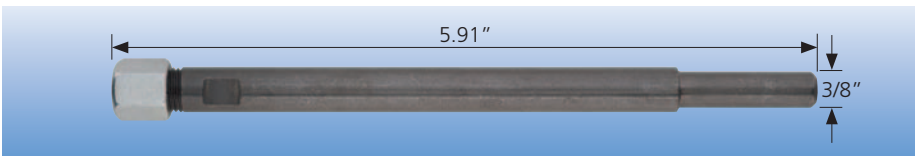
For safety reasons, it is not possible to use spindle extensions in combination with long shank burs. For more safety information, please refer to "Power tools" catalogue (section 209).



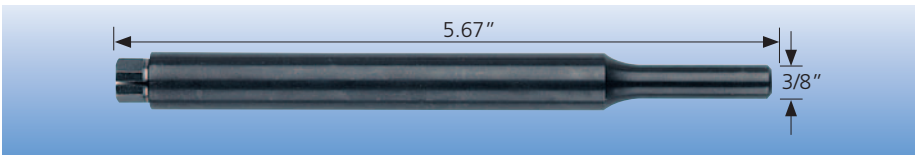
= Read the instructions!



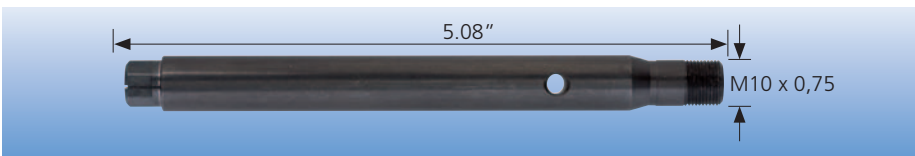
Extension SPV 150-1/8 S1/4  
for 1/8" shanks  
EDP 95825



Extension SPV 150-1/4 S3/8  
for 1/4" shanks  
EDP 95826



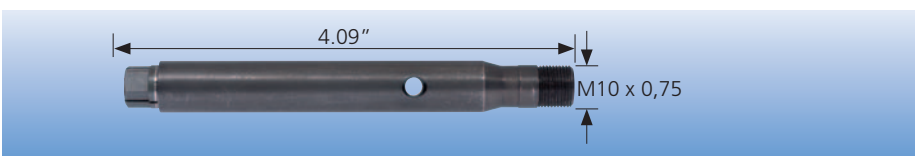
Extension SPV 100-1/4 S3/8  
for 1/4" shanks  
EDP 95824



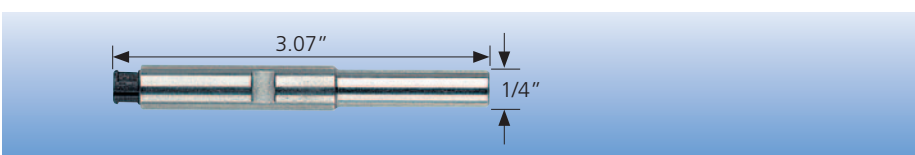
Extension SPV 100-1/4 SPG 6  
for 1/4" shanks  
EDP 95823



Extension SPV 75-1/4 S3/8  
for 1/4" shanks  
EDP 95822



Extension SPV 75-1/4 SPG 6  
for 1/4" shanks  
EDP 95821



Extension SPV 50-1/8 S1/4  
for 1/8" shanks  
EDP 95820

For detailed information and ordering data on spindle extensions please refer to "Power tools" catalogue (section 209).







Carbide router bits with PLAST cut are suitable for trimming and contour milling of a wide range of fibre-reinforced plastics (GRP/CRP).

Router bits with drill tip (BS) or with pilot tip (ZBS) allow combined drilling and cutting tasks.

Router bits with low-burr tip (STS) allow the drilling of holes with little burr formation. The version with flat end tip (FSTS) is used for milling grooves and pockets. Both versions are only for use on machines and on robots.

The special tooth geometry allows high feed rates due to the low resistance. In addition these bits are characterized by smooth milling.

### Application examples

- Trimming
- Contour milling
- Creating cut-outs
- Deburring
- Milling of slots (with FSTS)
- Drilling of blind holes (with FSTS)
- Milling with little burr formation (with STS)

### Recommendations for use

- The design with drill tip (BS) is particularly suitable for machine and robot use, while the version with pilot tip (ZBS) is used for manual applications. It allows secure drilling on almost all surface conditions.
- The versions with low-burr tip (STS) and flat end tip (FSTS) are exclusively for use on machines and on robots.
- Select a burr diameter greater than the thickness of the material to be machined, to avoid impacts and chattering with the risk of damaging or breaking the router bit.
- Increase the rotational speed if the router bit tends to chatter.
- If necessary, reduce the rotational speed and contact pressure if melting occurs.

**PFERDERGONOMICS®** recommends router bits with PLAST cut as an innovative solution for comfortable working with significantly reduced vibration and lower noise.



**PFERDEFFICIENCY®** recommends router bits with PLAST cut for long, fatigue-free and resource saving work, with perfect results in the shortest possible time.



### PLAST cut



Router bits with the PLAST cut are particularly suitable for use on less hard glass- and carbon-fibre-reinforced duroplastics (GRP and CRP ≤ 40% fibre content) and fibre-reinforced thermoplastics.

The cut (similar to PCD milling) minimizes delamination and fraying.

### Advantages

- Particularly suitable for GRP and CRP ≤ 40% fibre content
- Minimizes delamination and fraying due to the special cut that is similar to PCD mills
- Very suitable for machine use and robot use
- Very low cutting force
- High feed rates

### Recommended rotational speed range [RPM]

To determine the recommended rotational speed range, please proceed as follows:

- ① Refer to the table for the cutting speed range
- ② Select the required router bit diameter

- ③ The cutting speed range and the router bit diameter determine the recommended rotational speed range [RPM]

| Workpiece material/colour code |  | Application   | Cut   | ① Cutting speed    |
|--------------------------------|--|---|-------|--------------------|
| Plastics, other materials      | Fibre-reinforced plastics (GRP/CRP), fibre content ≤ 40%, thermoplastics | Trimming, contour milling, creating cut-outs, deburring | PLAST | 1,650 - 3,000 SFPM |

### Example

Carbide router bit, PLAST cut, router bit diameter: 5/16".

Trimming of plastics.

Cutting speed: 1,650 - 3,000 SFPM

**Rotational speed: 18,000 - 36,000 RPM**

| ② Router bit dia. [Inches] | ③ Cutting speed [SFPM] |        |
|----------------------------|------------------------|--------|
|                            | 1,650                  | 3,000  |
| Rotational speed [RPM]     |                        |        |
| 1/4                        | 24,000                 | 48,000 |
| 5/16                       | 18,000                 | 36,000 |



More PFERD products and a large number of application tips on working with plastics can be found in our PRAXIS brochure "PFERD tools for use on plastics". Please contact us.

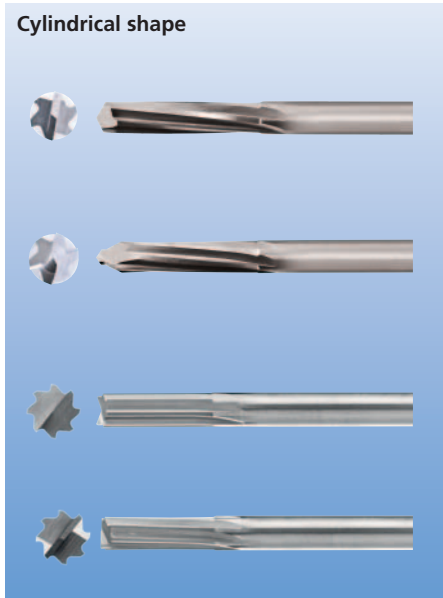


**PFERDMEDIA**

For more information, please visit [pferdusa.com/plast](http://pferdusa.com/plast)

# Carbide router bits

**NEW** for use on plastics/composites



Cylindrical bur.

**PFERD specification number**  
ZYA

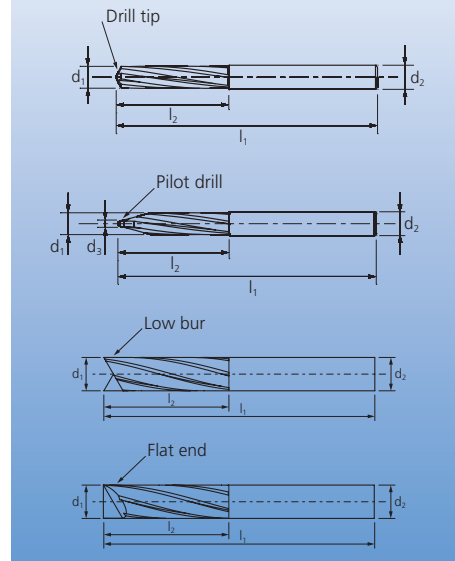
**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



Cylindrical shape



| Bur dia. x length<br>$d_1 \times l_2$<br>[Inches] | Tip type            | Shank dia.<br>$d_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Cut type and EDP number<br><b>PLAST</b><br> |  |
|---|---------------------|---------------------------------|-------------------------------------|---|---|
| <b>Shank dia. 1/4"</b>                            |                     |                                 |                                     |   |   |
| 1/4 x 1   | Drill tip (BS)      | 1/4                             | 2-1/2                               | 26430   | 1   |
| 1/4 x 1   | Pilot tip (ZBS)     | 1/4                             | 2-1/2                               | 26420   | 1   |
| 1/4 x 1   | Low-bur tip (STS)   | 1/4                             | 2-1/2                               | 26440   | 1   |
| 1/4 x 1   | Flat end tip (FSTS) | 1/4                             | 2-1/2                               | 26435   | 1   |
| <b>Shank dia. 5/16"</b>                           |                     |                                 |                                     |   |   |
| 5/16 x 1  | Drill tip (BS)      | 5/16                            | 2-1/2                               | 26431   | 1   |
| 5/16 x 1  | Pilot tip (ZBS)     | 5/16                            | 2-1/2                               | 26421   | 1   |
| 5/16 x 1  | Low-bur tip (STS)   | 5/16                            | 2-1/2                               | 26441   | 1   |
| 5/16 x 1  | Flat end tip (FSTS) | 5/16                            | 2-1/2                               | 26436   | 1   |



Bi-metal hole saws are used on drill presses and hand-held drills. Bi-metal construction ensures a long service life and high impact resistance for tough working conditions.

### Advantages

- Cost-effective cutting of holes
- Can be used on diverse materials such as alloy and non-alloy steels, stainless steel (INOX) (please observe recommended use) cast iron, aluminum, copper, bronze, brass, wood, plastics etc.
- An alternating tooth pitch prevents chattering during cutting process
- PFERD offers a range of the most common bimetal hole saws in sets for trades people, fitters, electricians and mechanics
- Bi-metal hole saws are centred and guided via the HSS pilot drill (supplied with compression spring for improved ejection of the cut material)

PFERD bi-metal hole saws provide long service life, high concentricity and high cutting speed. The bi-metal construction prevents breakage of the hole saw at high loads. Highly-finished weld seams result in clean and precise holes, and easy handling. The knock-out slots allow quick and easy plug removal.

Bi-metal hole saws are used in drill presses, lathes and milling cutters as well as on handheld power drills.

Their high concentricity ensures reliable control. PFERD bi-metal hole saws cut perfectly round holes quickly and easily, whether in unalloyed or alloyed stainless steel (INOX), castings, aluminum, copper, bronze, brass, wood, plastics or similar materials.

Thread:

9/16 to 1-3/16" = 1/2"-20 UNF

1-1/4 to 6" = 5/8"-18 UNF

### Recommendations for use

- The pilot drill is clamped in the hole saw shank and should project at least 1/8" beyond the hole saw teeth.
- When cutting metal, use a high-quality cutting oil. The cutting oil facilitates smooth running and lengthens service life.  
**Exceptions:** Do not use cutting oil when working on cast iron. When working on aluminum add kerosene instead of cutting oil.
- Bi-metal hole saws are suitable for work on stainless steel (INOX).
- To avoid corrosion, particles resulting during work must be removed. We recommend either mechanical or chemical cleaning (etching/polishing etc.).
- All teeth should be applied evenly. Avoid swinging movements during sawing to avoid tooth breakage.
- Avoid overheating the hole saw.

These bi-metal hole saws come with an alternating 4/6" tooth pitch (i.e., alternately 4 and 6 teeth per inch, counted on the circumference) which helps prevent chatter.

Bi-metal hole saws range in overall height from 1-3/8" to 2-1/4", depending on type.

### Industry/target group

- Mechanical engineering
- Tank and pressure vessel construction
- Plumbing, electrical, aircraft construction and maintenance
- Metal cutting industries and automotive trades

### Ordering note

Please order arbors separately.

### PFERD specification number

LS

### Safety recommendations

When using shank extensions, the recommended hole saw speed ranges must not be exceeded. Risk of accidents!



= Wear eye protection!

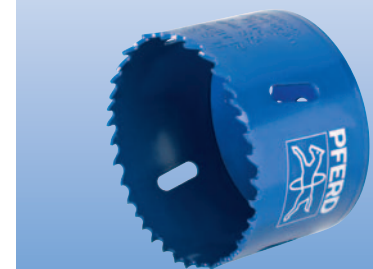



= Read the instructions!  
= (Please observe the recommended RPM!)



PFERD's quick-mount system allows for fast and easy replacement of hole saws with just the push of a button. See page 65 for more information.

### Bi-metal hole saws




| Dia. [Inches] | Maximum cutting depth [Inches] | EDP number | Suitable arbors      | Recommended rotational speed [RPM] |                                       |                    |         |  |
|---------------|--------------------------------|------------|----------------------|------------------------------------|---------------------------------------|--------------------|---------|---|
|               |                                |            |                      | Non-alloyed steels                 | Tool steel and stainless steel (INOX) | Non-ferrous metals | Plastic |   |
| 9/16          | 1-5/16                         | 29100      | EDP 29033, EDP 29034 | 620                                | 310                                   | 800                | 1,000   | 1   |
| 5/8           | 1-5/16                         | 29101      | EDP 29033, EDP 29034 | 550                                | 275                                   | 730                | 880     | 1   |
| 11/16         | 1-7/16                         | 29102      | EDP 29033, EDP 29034 | 520                                | 260                                   | 680                | 820     | 1   |
| 3/4           | 1-7/16                         | 29103      | EDP 29033, EDP 29034 | 460                                | 230                                   | 600                | 740     | 1   |
| 13/16         | 1-7/16                         | 29104      | EDP 29033, EDP 29034 | 410                                | 205                                   | 540                | 670     | 1   |
| 7/8           | 1-7/16                         | 29105      | EDP 29033, EDP 29034 | 390                                | 195                                   | 520                | 640     | 1   |
| 15/16         | 1-7/16                         | 29106      | EDP 29033, EDP 29034 | 360                                | 180                                   | 470                | 580     | 1   |
| 1             | 1-7/16                         | 29107      | EDP 29033, EDP 29034 | 350                                | 175                                   | 470                | 560     | 1   |
| 1-1/16        | 1-7/16                         | 29108      | EDP 29033, EDP 29034 | 325                                | 160                                   | 435                | 520     | 1   |
| 1-1/8         | 1-7/16                         | 29109      | EDP 29033, EDP 29034 | 300                                | 150                                   | 400                | 480     | 1   |
| 1-3/16        | 1-7/16                         | 29110      | EDP 29033, EDP 29034 | 285                                | 145                                   | 380                | 470     | 1   |
| 1-1/4         | 1-7/16                         | 29111      | EDP 29036            | 275                                | 140                                   | 360                | 440     | 1   |

Continued on next page.

# Bi-metal hole saws and accessories

## Bi-metal hole saws



| Dia. [Inches] | Maximum cutting depth [Inches] | EDP number | Suitable arbors | Recommended rotational speed [RPM] |                                       |                    |         |  |
|---------------|--------------------------------|------------|-----------------|------------------------------------|---------------------------------------|--------------------|---------|---|
|               |                                |            |                 | Non-alloyed steels                 | Tool steel and stainless steel (INOX) | Non-ferrous metals | Plastic |   |
| 1-5/16        | 1-7/16                         | 29112      | EDP 29036       | 260                                | 135                                   | 345                | 420     | 1   |
| 1-3/8         | 1-7/16                         | 29113      | EDP 29036       | 250                                | 125                                   | 330                | 400     | 1   |
| 1-7/16        | 1-7/16                         | 29114      | EDP 29036       | 235                                | 115                                   | 310                | 370     | 1   |
| 1-1/2         | 1-7/16                         | 29115      | EDP 29036       | 230                                | 115                                   | 300                | 370     | 1   |
| 1-9/16        | 1-7/16                         | 29116      | EDP 29036       | 215                                | 110                                   | 280                | 350     | 1   |
| 1-5/8         | 1-7/16                         | 29117      | EDP 29036       | 210                                | 105                                   | 280                | 340     | 1   |
| 1-11/16       | 1-1/4                          | 29118      | EDP 29036       | 200                                | 100                                   | 260                | 330     | 1   |
| 1-3/4         | 1-1/4                          | 29119      | EDP 29036       | 195                                | 95                                    | 260                | 320     | 1   |
| 1-13/16       | 1-1/4                          | 29120      | EDP 29036       | 185                                | 90                                    | 250                | 300     | 1   |
| 1-7/8         | 1-1/4                          | 29121      | EDP 29036       | 180                                | 90                                    | 240                | 290     | 1   |
| 2             | 1-1/4                          | 29122      | EDP 29036       | 170                                | 85                                    | 230                | 270     | 1   |
| 2-1/16        | 1-1/4                          | 29123      | EDP 29036       | 165                                | 80                                    | 220                | 270     | 1   |
| 2-1/8         | 1-1/4                          | 29124      | EDP 29036       | 160                                | 80                                    | 210                | 260     | 1   |
| 2-1/4         | 1-1/4                          | 29125      | EDP 29036       | 150                                | 75                                    | 200                | 250     | 1   |
| 2-5/16        | 1-1/4                          | 29126      | EDP 29036       | 145                                | 70                                    | 190                | 240     | 1   |
| 2-3/8         | 1-1/4                          | 29127      | EDP 29036       | 140                                | 70                                    | 190                | 230     | 1   |
| 2-1/2         | 1-1/4                          | 29128      | EDP 29036       | 135                                | 65                                    | 180                | 220     | 1   |
| 2-9/16        | 1-1/4                          | 29129      | EDP 29036       | 135                                | 60                                    | 180                | 220     | 1   |
| 2-5/8         | 1-1/4                          | 29130      | EDP 29036       | 130                                | 65                                    | 170                | 210     | 1   |
| 2-3/4         | 1-1/4                          | 29131      | EDP 29036       | 125                                | 60                                    | 160                | 200     | 1   |
| 2-7/8         | 1-1/4                          | 29132      | EDP 29036       | 120                                | 60                                    | 160                | 190     | 1   |
| 3             | 1-1/4                          | 29133      | EDP 29036       | 115                                | 55                                    | 150                | 180     | 1   |
| 3-1/8         | 1-1/4                          | 29134      | EDP 29036       | 110                                | 55                                    | 140                | 180     | 1   |
| 3-1/4         | 1-1/4                          | 29135      | EDP 29036       | 105                                | 50                                    | 140                | 170     | 1   |
| 3-3/8         | 1-1/4                          | 29136      | EDP 29036       | 100                                | 50                                    | 130                | 160     | 1   |
| 3-1/2         | 1-1/4                          | 29137      | EDP 29036       | 95                                 | 45                                    | 130                | 160     | 1   |
| 3-5/8         | 1-1/4                          | 29138      | EDP 29036       | 95                                 | 45                                    | 120                | 150     | 1   |
| 3-3/4         | 1-1/4                          | 29139      | EDP 29036       | 90                                 | 45                                    | 120                | 150     | 1   |
| 3-7/8         | 1-1/4                          | 29140      | EDP 29036       | 90                                 | 45                                    | 120                | 140     | 1   |
| 4             | 1-1/4                          | 29141      | EDP 29036       | 85                                 | 40                                    | 110                | 140     | 1   |
| 4-1/8         | 1-1/4                          | 29142      | EDP 29036       | 80                                 | 40                                    | 110                | 130     | 1   |
| 4-3/8         | 1-1/4                          | 29144      | EDP 29036       | 75                                 | 35                                    | 100                | 130     | 1   |
| 4-1/2         | 1-1/4                          | 29145      | EDP 29036       | 75                                 | 35                                    | 100                | 120     | 1   |
| 4-3/4         | 1-1/4                          | 29146      | EDP 29036       | 70                                 | 35                                    | 90                 | 120     | 1   |
| 5             | 1-1/4                          | 29147      | EDP 29036       | 65                                 | 30                                    | 80                 | 110     | 1   |
| 5-1/2         | 1-1/4                          | 29148      | EDP 29036       | 60                                 | 30                                    | 75                 | 100     | 1   |
| 6             | 1-1/4                          | 29149      | EDP 29036       | 55                                 | 25                                    | 70                 | 90      | 1   |

PFERD offers a new quick-change mounting system for hole saws. This quick-change system and the two three-part adapter sets matched to the hole saw diameters ensure that hole saws can be used easily and conveniently with all standard power drills.

### Recommendations for use

- Screw the adapters quickly and easily into the desired hole saw and clamp them in the quick-mounting system.
- After use, the hole saw and quick-mounting system can be separated without the use of additional tools by simply pressing a button.



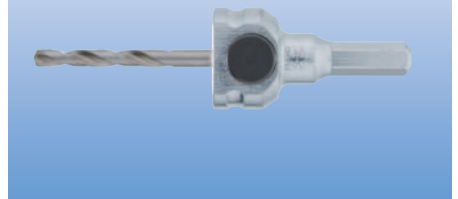
### Adapter sets




### Ordering note

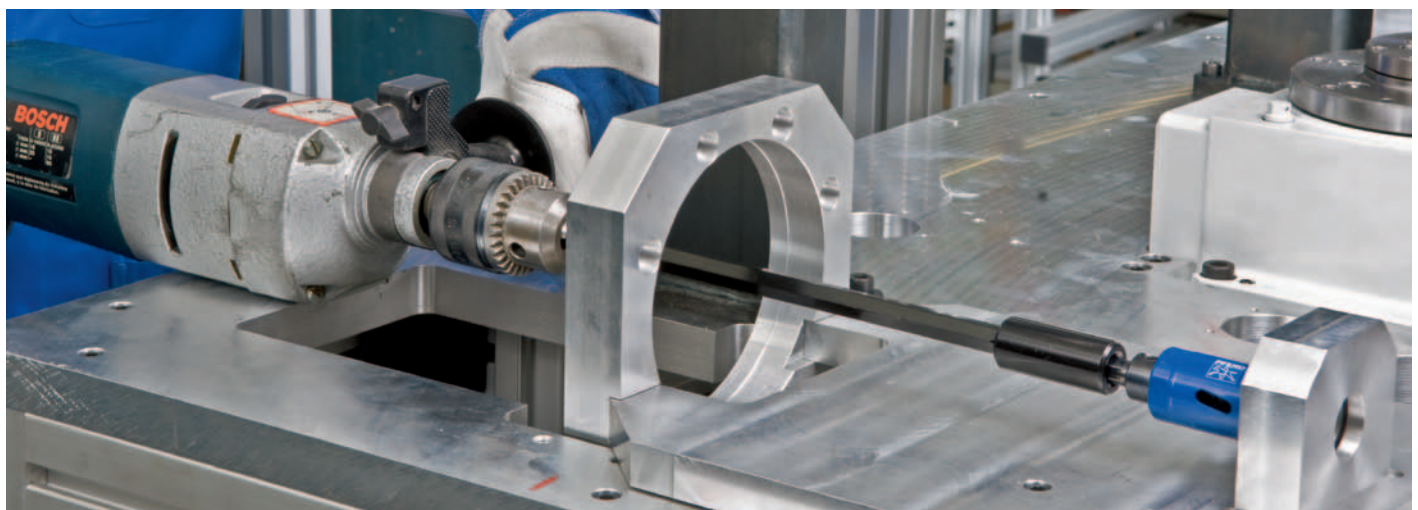
Adapter set EDP 29043 is available for hole saw diameter 9/16" - 1-3/16", and adapter set EDP 29044 for hole saw diameter 1-1/4" - 6". Both adapter sets contain three adapters with the same dimensions.

### Quick-mounting system for hole saws



| Description                         | For hole saw threads | Suitable for hole saw diameters [Inches] | EDP number |  |
|-------------------------------------|----------------------|--|------------|---|
| Quick-mounting system for hole saws | -                    | 9/16 - 6                                 | 29042      | 1   |
| 3-piece quick-mounting adapter set  | 1/2-20               | 9/16 - 1-3/16                            | 29043      | 1   |
| 3-piece quick-mounting adapter set  | 5/8-18               | 1-1/4 - 6                                | 29044      | 1   |

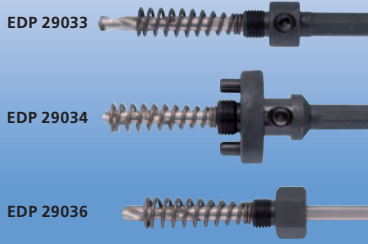
### Combination example



# Bi-metal hole saws and accessories

## Hole saw arbors

### Hole saw arbors LSS



Hole saw arbors are designed for mounting the hole saw and the pilot drill.

The PFERD range includes three different sizes. Select the appropriate arbor, taking into account the hole saw diameter and available tool drive spindle.

#### Purpose of the compression spring

This prevents "jamming" of the cut-out material between the inner walls of the hole saw and the drill. The spring force ejects the material. Should this effect not be required for a particular


application, e.g. ready-installed pipes, the spring can easily be removed without tools.

#### Ordering note

Hole saw arbors EDP 29033 and EDP 29034 are delivered with the HSS pilot drill EDP 29040 and one ejection spring.






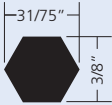

Hole saw arbor EDP 29036 is delivered with the HSS pilot drill EDP 29039 and one ejection spring.

**PFERD specification number**  
LSS

| Shank dia. [Inches] | Shank dia. [mm] | Thread  | Shank type | Suitable for hole saw diameters [Inches] | EDP number |  |
|---------------------|-----------------|---------|------------|--|------------|---|
| 3/8                 | 9.53            | 1/2"-20 | Hexagonal  | 9/16 to 1-3/16                           | 29033      | 1   |
| 3/8                 | 9.53            | 5/8"-18 | Hexagonal  | 1-1/4 to 6                               | 29034      | 1   |
| 1/4                 | 6.35            | 1/2"-20 | Round      | 9/16 to 1-3/16                           | 29036      | 1   |

### Arbor shapes

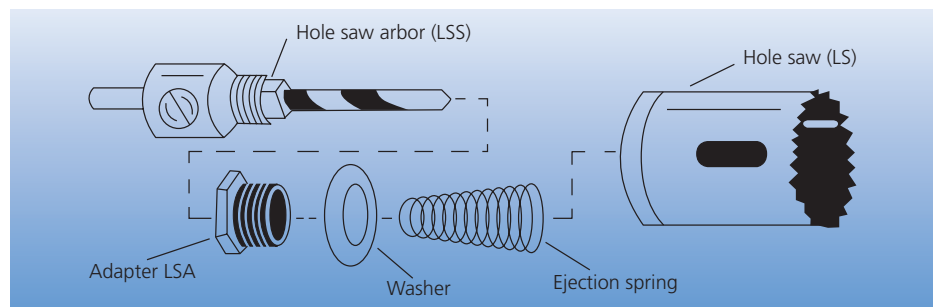
The adjacent table shows information on shank forms, LSS dimensions and LSB pilot drills. The appropriate PFERD hole saws have been shown.

| PFERD-hole saw arbors EDP        | Shank dia. [Inches] | Shank dia. [mm] | Shank shape   | for PFERD hole saw dia. [Inches]  |
|----------------------------------|---------------------|-----------------|---|---|
| <b>29033</b>                     | 3/8                 | 9.53            |    | 9/16 to 1-3/16  |
| <b>29034</b>                     | 3/8                 | 9.53            |   | 1-1/4 to 6  |
| <b>29036</b>                     | 1/4                 | 6.35            |  | 9/16 to 1-3/16  |
| <b>Pilot drill</b>               |                     |                 |   | for hole saw arbors EDP 29033, 29034, 29036   |
| <b>29040</b>                     | 1/4                 | 6.35            |  |   |
| <b>29039</b>                     | 1/4                 | 6.35            |  |   |
| <b>Shank dimensions [Inches]</b> |                     |                 |   |  |

### Compression spring

All hole saw arbors are delivered with a compression spring for better ejection of the waste material.

Before application, this compression spring can be installed/uninstalled if required. Screw on the compression spring from the side with the smaller diameter up to its limit. It is also possible to use the compression spring with the LSA adapter (see diagram).



The bi-metal hole saw arbors EDP 29033 and 29034 can be extended using the 12" arbor extension.

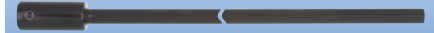
### Advantages


- Suitable for work on hard-to-reach components
- Particularly suitable for work on hollow walls. Deep holes can be cut with ease

- Achieves the required distance between the power source and the work area
- Avoids damage to workpiece and machine
- Dust is not drawn into the power source during cutting process

**PFERD specification number**  
SVL-300

### Hole saw arbor extension 12"



| Hexagonal socket (sw) [Inches] | Hexagonal socket (sw) [mm] | Overall length [Inches] | Overall length [mm] | Shank type | Width across flats [Inches] | Width across flats [mm] | Suitable for arbors | EDP number |  |
|--------------------------------|----------------------------|-------------------------|---------------------|------------|-----------------------------|-------------------------|---------------------|------------|---|
| 3/8                            | 9.53                       | 12                      | 300                 | hexagonal  | 7/16                        | 11                      | EDP 29033, 29034    | 29071      | 1   |

With the repair set for hole saw arbors the most common parts can be replaced in case of loss or damage.


### Contents

- 2 compression springs
- 2 hexagon socket head screws
- 1 hexagon socket wrench

**PFERD specification number**  
RSL-5

### Hole saw arbor repair kit RSL-5



| EDP number |  |
|------------|---|
| 29072      | 1   |

This thread adapter and washer allows the use of 1-1/4" to 1-1/2" hole saws with an 1/4" shank arbor.


**PFERD specification number**  
LSA

### Adapter LSA



### Recommendation for use

The use of this adapter for hole saws exceeding 1-1/8" dia. is not recommended.

| Suitable for hole saw diameters [Inches] | Suitable for arbors  | EDP number |  |
|--|----------------------|------------|---|
| 1-1/4 – 1-1/2                            | EDP 29033, EDP 29036 | 29070      | 1   |


## HSS pilot drill for bi-metal hole saws

Replacement pilot drills are available for use with PFERD drive arbors.

**PFERD specification number**  
LSB

### HSS pilot drill LSB



| Shank dia. [Inches] | Shank dia. [mm] | Shank type | Suitable for hole saw diameters [Inches] | Suitable for arbors  | EDP number |  |
|---------------------|-----------------|------------|--|----------------------|------------|---|
| 1/4                 | 6.35            | Round      | 9/16 to 6                                | EDP 29033, EDP 29034 | 29040      | 1   |
| 1/4                 | 6.35            | Round      | 9/16 to 6                                | EDP 29036            | 29039      | 1   |

# Bi-metal hole saws and accessories

## Hole saw sets



### 7 piece bi-metal hole saw set



The hole saws are supplied neatly arranged in a strong plastic box, with instructions for use included.

#### EDP 29179

#### 7 piece bi-metal hole saw set

The set contains hole saws in the most common diameters used to install air conditioner hoses, door locks, antennas, etc.

#### EDP 29183

#### 9 piece bi-metal hole saw set for plumbers/fitters

The set contains hole saws in the most common diameters for use in the plumber's and pipe fitter's trade.

#### PFERD specification number

LS-SO 7 H, LS-SO 9 I

### 9 piece bi-metal hole saw set for plumbers/fitters



| Number of pieces | Dimension [Inches]    | Contents   | Industry/target group       | EDP number |  |
|------------------|-----------------------|--|-----------------------------|------------|---|
| 7                | 6-1/2 x 4-1/2 x 2-1/4 | 5 bi-metal hole saws:<br>7/8", 1", 1-1/8", 1-1/4", 1-1/2"<br>1 hole saw arbor EDP 29036<br>1 thread adapter EDP 29070<br>1 allen wrench 1/16"                      | Professional trades and DIY | 29179      | 1   |
| 9                | 8-1/2 x 6 x 2-1/4     | 6 bi-metal hole saws:<br>3/4", 7/8", 1-1/8", 1-1/2", 1-3/4", 2-1/4"<br>2 hole saw arbors 1/4" and 3/8" shank<br>1 thread adapter EDP 29070<br>1 allen wrench 1/16" | Plumber and fitter trades   | 29183      | 1   |

### 9 piece bi-metal hole saw set for electricians



The hole saws are supplied neatly arranged in a strong plastic box, with instructions for use included.

#### EDP 29184

#### 9 piece bi-metal hole saw set for electricians

The set contains hole saws in the most common diameters for electricians.

#### EDP 29180

#### 13 piece bi-metal hole saw set for assembly mechanics


The set contains hole saws in the most common diameters for mechanics and equipment fitters.

#### PFERD specification number

LS-SO 9 E-1, LS-SO 13 M

### 13 piece bi-metal hole saw set for assembly mechanics



| Number of pieces | Dimension [Inches] | Contents   | Industry/target group  | EDP number |  |
|------------------|--------------------|--|--|------------|---|
| 9                | 8-1/2 x 6 x 2-1/4  | 6 bi-metal hole saws:<br>7/8", 1-1/8", 1-3/8", 1-3/4", 2", 2-1/2"<br>2 hole saw arbors 1/4" and 3/8" shank<br>1 thread adapter EDP 29070<br>1 allen wrench 1/16"   | Electrician's trade  | 29184      | 1   |
| 13               | 8-1/2 x 7 x 2-1/2  | 9 bi-metal hole saws:<br>3/4", 7/8", 1-1/8", 1-3/8", 1-1/2", 1-3/4", 2", 2-1/4", 2-1/2"<br>2 hole saw arbors 1/4", 3/8" shank<br>1 pilot drill EDP 29039<br>1 thread adapter EDP 29070<br>1 allen wrench 1/16" | Process equipment construction, tank and pressure vessel construction, pipeline construction | 29180      | 1   |



# Mounted points, cones and plugs, bench grinding wheels



203

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6x1x1"  
150x25.4x25.4mm  
GRINDING WHEEL  
for ferrous and non-ferrous metals  
Silicon Carbide  
Grit 120

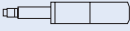
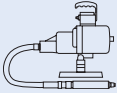

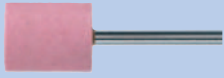
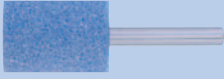

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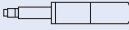
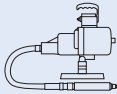

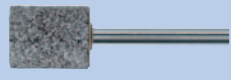
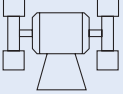



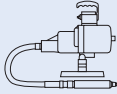

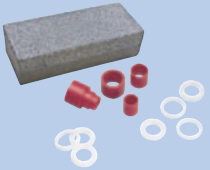


# Mounted points

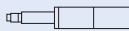

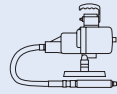
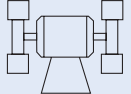
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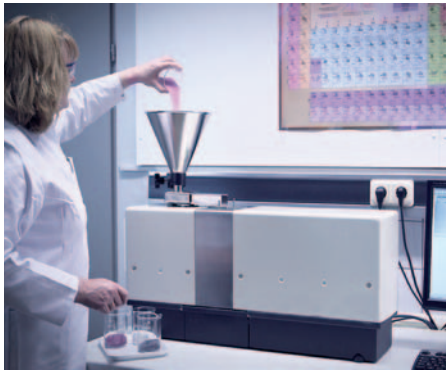
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### PFERD quality

PFERD mounted points, cones and plugs and bench grinding wheels are developed, manufactured and tested according to the highest quality standards.

Research and development, our own machine and plant construction, as well as the continuous testing and further development of the quality and safety standards in our own laboratories guarantee the high PFERD quality.

PFERD quality management is certified according to ISO 9001.



### Technical customer support

If you have any questions about the optimization of your grinding task or about solving specific application problems, our sales representatives and technical advisors will be happy to help you. Please contact us!

**Canada Phone: (905) 501-1555**  
**Toll-Free: (866) 245-1555**  
**USA Phone: (262) 255-3200**  
**Toll-Free: (800) 342-9015**

You can find our worldwide sales offices at:  
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### PFERD TOOL-CENTER

On the PFERD TOOL-CENTER of your local retailer, you will find all the important information required for selecting the most appropriate product. The PFERD information and symbol cards contain important tips about products and applications.

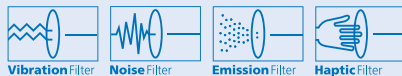
If you have any questions, your local retailer or PFERD sales representative will be happy to assist you.

### PFERDVALUE® – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD products offer measurable added value.

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- Steel
- Stainless steel (INOX)
- Aluminum
- Plastics & composites



# Mounted points

## General information



### Abrasives

- A = Aluminum oxide ( $Al_2O_3$ )
- C = Silicon carbide (SiC)

The following classification is used:

- AD = Aluminum oxide, dark red
- AW = Aluminum oxide, white
- AR = Aluminum oxide, pink
- AN = Aluminum oxide, regular
- AH = Aluminum oxide, bubble grain
- CN = Silicon carbide, green
- CU = Silicon carbide, grey
- CO = Ceramic oxide
- ADW = Aluminum oxide mixture, AD + AW
- AWN = Aluminum oxide mixture, AW + AN
- ADR = Aluminum oxide mixture, AD + AR
- AWCO = Ceramic/aluminum oxide mixture, AW + CO

### PFERD packaging

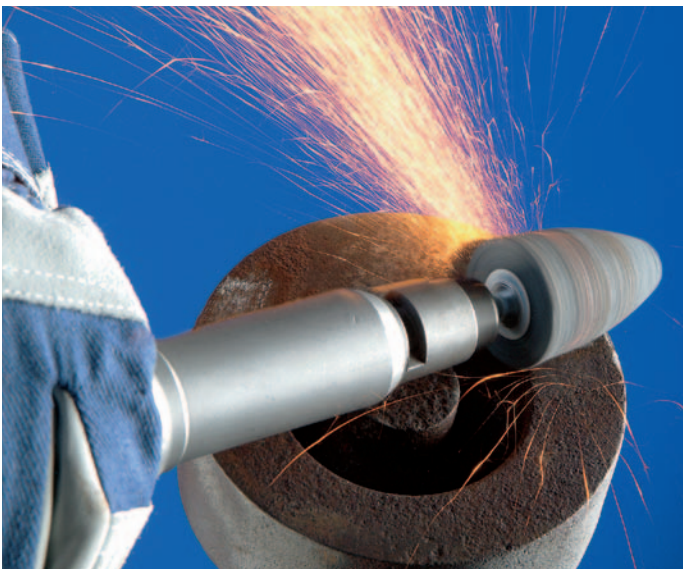
PFERD sells mounted points in modern PE bags. Through the transparent window, customers can see the mounted points in the store already. Moreover, these bags can be hung up at the PFERD TOOL-CENTER thanks to the European standard hole pattern.

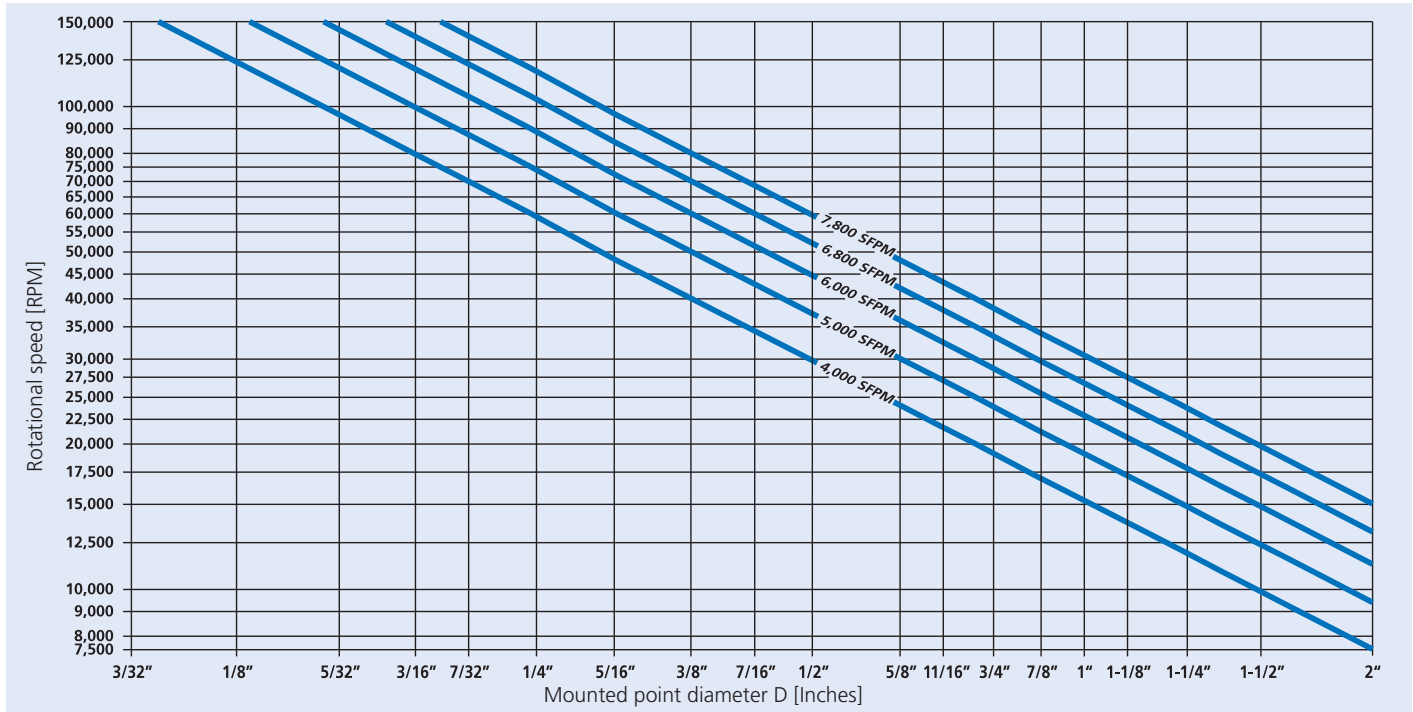
For bag quantities, please refer to the product tables. Important information, such as article number, description, EDP code and technical information can be found on the packaging labels.

### Spindle extensions

Using spindle extensions it is possible to increase the shank length of mounted points, making it easier to work in hard-to-reach areas, e.g. inside pipes and ducts. The extension is simply fitted into the collet of the machine (air or electric grinder) or inserted into a flexible shaft handpiece. With these spindle extensions you can replace expensive mounted points with long shanks.

For detailed information and ordering data on spindle extensions please refer to our "Power tools" catalogue (section 209).





### Peripheral speeds of mounted points

The diagram above allows you to determine the rotational speed [RPM] from a given peripheral speed. Recommended peripheral speeds are stated in the introductory descriptions for the various hardness grades on the following pages.

In the diagram, peripheral speeds are represented by blue diagonal lines. Each vertical line represents a mounted point diameter. From its point of intersection with the diagonal line for a given peripheral speed, proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] of the mounted point and spindle.

### Example

Mounted point diameter: 1" (W220)  
 Hardness grade: O  
 Application: Surface grinding  
 Peripheral speed: 5,000 - 6,000 SFPM  
 Rotational speed: 18,000 - 22,000 RPM

### Dust warning

Use of the mounted points in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE

OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.

**Important!**  
 Observe applicable safety codes and accident prevention regulations when working with spindle extensions.

### Safety recommendations

- = Wear eye protection!
- = Wear hearing protection!
- = Wear gloves!
- = Read the instructions!
- = Wear dust respirators!
- = Read the Safety Data Sheets (SDS) before using any materials!

All PFERD mounted points are approved for a maximum peripheral speed of 9,800 SFPM.

Maximum RPM levels for the various shank lengths and shank diameters are defined in EN 12413 and meet or exceed the ANSI standard B7.1. Strictly observe these limits to prevent hazards due to shank buckling.

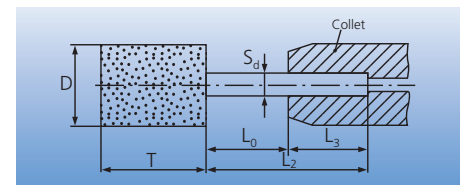
Regardless of the shank length, the clamping depth ( $L_3$ ) in the machine collet must be at least 1/2".

Each package of PFERD mounted points comes with RPM recommendations for a given overhang shank length ( $L_0$ ) of that product. Check for proper concentricity and correct clamping in the power tool.

Charts showing maximum permitted RPM for the entire PFERD range of mounted points are available upon request.

The buckling speed [RPM] calculated in accordance with ANSI B7.1 is a function of the following factors:

- Shape and dimensions of the point
- Steel shank diameter
- Overhang ( $L_0$ )



- $D$  = point diameter
- $T$  = point length
- $S_d$  = shank diameter
- $L_0$  = overhang
- $L_2$  = shank length
- $L_3$  = shank clamping depth

# Mounted points

## Your quick product selection guide

PFERD offers an extensive line of vitrified and resin bonded mounted points.

Designed to meet individual application needs, these products come in a broad range of grain types, grit sizes, hardness levels and shapes. The mounted points are manufactured on advanced production lines to high standards of dimensional accuracy and stability, consistent quality, and close tolerances.

To enable you to select the correct mounted point for your needs, the workpiece material, main fields of application and specific operating requirements have to be taken into consideration. This overview shows which different types (abrasives, bonds and hardness grades) are recommended for the various workpiece materials and the tasks at hand.

### How do I find the best mounted point?

#### 1 Workpiece material

First, determine the material to be machined. The various workpiece material groups are colour-coded and shown on the left-hand side of the chart below.

| 1 Workpiece material         |  |   | Bond ▶   |
|------------------------------|--|---|--|
|                              |  |   | ⊕ Hardness grade ▶   |
|                              |  |   | Abrasive grit type ▶   |
|                              |  |   | Recommended cutting speed ▶  |
|                              |  |   | ⊗ Application ▼  |
| Steel, cast steel            | Non-hardened, non-heat-treated steels up to 38 HRC (<1,200 N/mm <sup>2</sup> ) | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels                 | <b>General use</b> on edge and surface<br><b>Surface grinding</b> with high stock removal<br><b>Edge grinding</b> with high form stability |
|                              | Hardened, heat-treated steels exceeding 38 HRC (>1,200 N/mm <sup>2</sup> )     | Tool steels, tempering steels, alloyed steels   | <b>General use</b> on edge and surface<br><b>Surface grinding</b> with high stock removal<br><b>Edge grinding</b> with high form stability |
|                              | Cast steels  | Non-alloyed cast steels, low-alloyed cast steels  | <b>Surface grinding</b> with high stock removal<br><b>Edge grinding</b> with high form stability   |
| Stainless steel (INOX)       | Rust and acid-resistant steels   | Austenitic and ferritic stainless steels  | <b>Surface grinding</b> with high stock removal<br><b>Edge grinding</b> with high form stability   |
| Non-ferrous metals           | Soft non-ferrous metals  | Aluminum alloys, brass, copper, zinc  | <b>General use</b> on edge and surface   |
|                              | Hard non-ferrous metals  | Bronze, titanium, titanium alloys, hard aluminum alloys   |  |
|                              | High-temperature resistant materials   | Nickel-based alloys, cobalt-based alloys (aircraft engine and turbine construction)                       |  |
| Cast iron                    | Grey cast iron, white cast iron  | Cast iron with flake graphite, with nodular graphite cast iron, white annealed cast iron, black cast iron | <b>Surface grinding</b> with high stock removal<br><b>Edge grinding and grinding of burning-in</b> with high form stability                |
| Plastics and other materials |  | Fibre-reinforced plastics, thermoplastics, rubber, wood   | <b>General use</b> on edge and surface   |
|                              |  |   | 4 Catalogue page ▶   |

### ② Application

The application must then be selected according to the type of work on the material. Choose from the following applications:

- General use,
- surface grinding and
- edge grinding.

The mounted point bond and the grain mix have an impact on the grinding output, service life and aggressiveness of the mounted points:

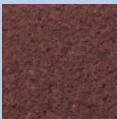

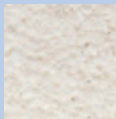
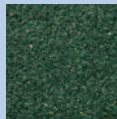



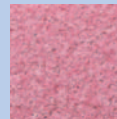

- For **general use**, the emphasis is on the balance between grinding output and service life.
- In **surface grinding**, the mounted points are subject to lower loads. This is why the mounted point bond is comparatively soft and designed to give high stock removal.
- In **edge grinding**, the mounted points must be dimensionally stable. This is why the mounted point bond is comparatively hard and designed for a long service life.

### ④ Mounted point hardness

After determining the application (see column ②), the hardness can be selected in the horizontal row. The recommended bond is shown with a black dot (●). The hardness grades within the bonds are arranged from "soft" to "hard".

### ④ Refer to the catalogue pages

For more information about the hardnesses, mounted point shapes, dimensions and grit sizes, the corresponding catalogue pages are stated at the bottom of the table below.

| Resin bond  |   | Vitrified bond  |   |   |  |   |   |   |
|---|---|---|---|---|--|---|---|---|
| Hardness L  | Hardness N  | Hardness D  | Hardness F-ALU  | Hardness J  | Hardness K   | Hardness M  | Hardness O  | Hardness R  |
| ADW   | AN  | AH  | CN  | AWCO  | ARN  | ADW   | AR  | CU  |
|  |  |  |  |  |  |  |  |  |
| 6,900 - 9,800 SFPM  | 6,900 - 9,800 SFPM  | 1,000 - 4,000 SFPM  | 4,000 - 7,800 SFPM  | 6,000 - 9,800 SFPM  | 6,000 - 9,800 SFPM   | 6,000 - 9,800 SFPM  | 5,000 - 7,800 SFPM  | 6,900 - 9,800 SFPM  |
|   |   |   |   |   |  | ●   |   |   |
| ○   |   |   |   |   |  | ●   | ○   |   |
|   | ○   |   |   |   |  | ○   | ●   |   |
|   |   |   |   |   |  | ●   |   |   |
|   |   |   |   | ●   | ●  | ○   |   |   |
|   |   |   |   | ○   | ○  |   | ○   |   |
| ○   |   |   |   |   |  | ●   | ○   |   |
|   | ○   |   |   |   |  | ○   | ●   |   |
| ●   | ○   |   |   |   |  | ○   |   |   |
| ○   | ●   |   |   |   |  |   | ○   |   |
| ○   |   |   | ●   |   |  |   |   |   |
| ●   |   |   | ○   | ●   | ●  | ○   |   |   |
| ○   |   |   |   | ●   | ●  |   |   |   |
| ○   | ○   |   |   |   |  |   | ○   | ○   |
| ○   | ○   |   |   |   |  |   | ○   | ●   |
|   |   | ●   | ○   |   |  |   |   |   |
| 19  | 20-21   | 9   | 9   | 16-18   | 8  | 10-11   | 12-15   | 22-23   |

● = recommended

○ = suitable

# Mounted points

## Products made to order

If you cannot find the ideal solution in our extensive product range, PFERD can produce mounted points by special request.

Our products will be tailor-made to meet the specific requirements of your job, and can include variations such as special bond, hardness, grit size, shape, dimension, shank, and packaging. Please contact your PFERD sales representative for more information!

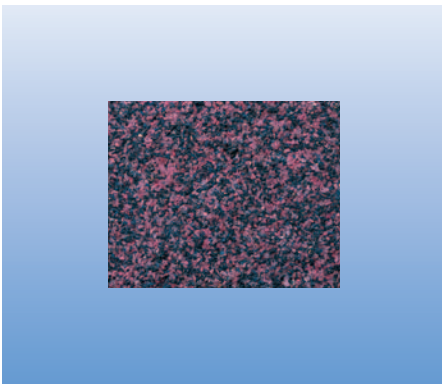
### Important information for your order

| Diameter of mounted point | Minimum order quantity |
|---------------------------|------------------------|
| Smaller than 1 1/4"       | 1,000                  |
| Larger than 1 1/4"        | 600                    |

Special order mounted points may take between 8 and 10 weeks for delivery to North America.



To experience other grain mixtures for special applications, we have three types of mounted points (shape W222) available for testing.



Mounted points in **hardness K** are manufactured from a grain mix of pink aluminum oxide and regular aluminum oxide in a vitrified bond.

In a medium-hard bond, this abrasive grain combination leads to a good stock removal rate and a long service life. The hardness K is particularly suitable for general use on cast iron parts when used with high peripheral speeds.

### Advantages


- Suitable for use on surfaces and edges.
- High abrasiveness and long service life.
- High stock removal rate due to coarse grit sizes.

### Application examples

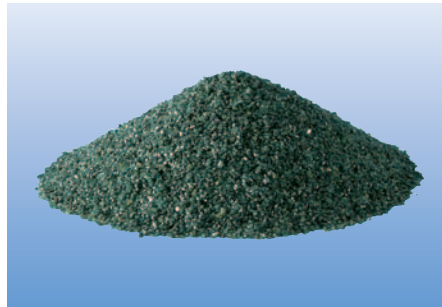
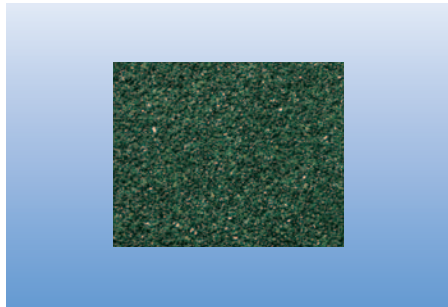
- Cleaning of workpieces made from grey and nodular cast iron.
- Grinding out of shrinkage holes in grey and nodular cast iron components.

### Recommendations for use

- Mounted points of hardness K achieve their best performance at a peripheral speed of 6,000 - 9,800 SFPM.
- Flexible shafts, electric grinders and air-powered straight grinders are suitable tool drives.

| Shape                  | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|------------------------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
| <b>Shank dia. 1/4"</b> |      |            |                                      |                                       |   |                          |                        |                      |   |
| W 222                  | 30   | 34215      | 1 x 2                                | 1/4                                   | 1 1/2                                   | 15,900                   | 15,900                 | 12,370               | 10  |





Mounted points in **hardness F-ALU** are manufactured from green silicon carbide in a vitrified bond. The extremely open microstructure and a special impregnation allow extremely high stock removal rates when working on soft, greasy materials. The hardness F-ALU is produced especially for general use on aluminum and non-ferrous metals and is characterized by its high abrasive qualities and stock removal.

### Advantages


- Due to the special impregnation, there is no loading when working on soft, greasy or tough materials.
- High abrasion and stock removal rate.

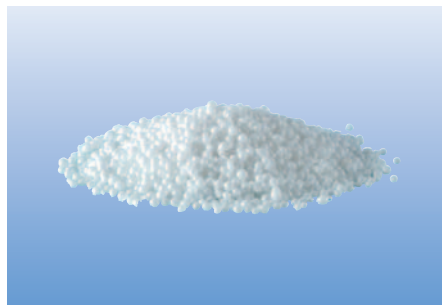
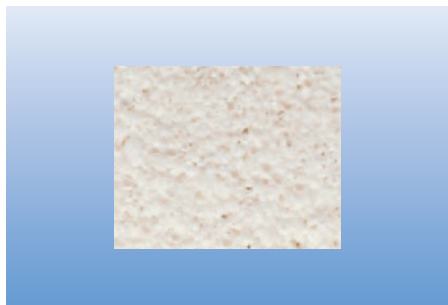
### Application examples

- Removal of burrs on cast aluminum components.
- Grinding of brass, zinc and copper.
- Chamfering and weld preparation on aluminum profiles.

### Recommendations for use

- Mounted points of hardness F-ALU achieve their best performance at a peripheral speed of 4,000 - 7,800 SFPM.
- Flexible shafts, electric grinders and air-powered straight grinders are suitable tool drives.

| Shape                  | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|------------------------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
| <b>Shank dia. 1/4"</b> |      |            |                                      |                                       |   |                          |                        |                      |   |
| W 222                  | 80   | 34214      | 1 x 2                                | 1/4                                   | 1 1/2                                   | 15,900                   | 15,900                 | 12,370               | 10  |



Mounted points in **hardness D** are manufactured from a special vitrified bond and bubble grain aluminum oxide (HKK). The low bond volume in combination with the easy-to-break-down bubble grain produces the softest mounted points in the PFERD product range. Hardness D is particularly suitable for work on soft materials such as plastic, rubber and wood, and is characterized by its high abrasiveness.

### Advantages

- Open structure and large chip spaces through bubble grain aluminum oxide.
- Machining of temperature-sensitive materials without addition of cooling lubricant due to large chip spaces.


### Application examples

- Removal of burrs on plastic injection components.
- Trimming of rubber moulded parts and moulded parts made of polyurethane (PUR).

- Grinding of wooden cores and wooden shapes in model construction workshops.

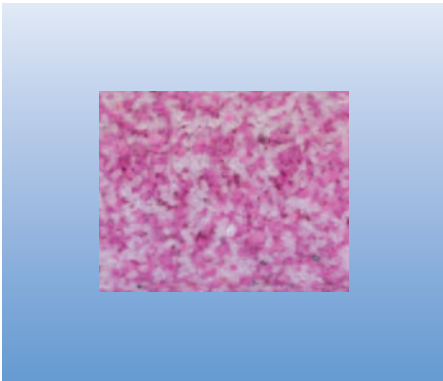
### Recommendations for use

- Mounted points of hardness D achieve their best performance at a peripheral speed of 1,000 - 4,000 SFPM.
- Flexible shafts, electric grinders and air-powered straight grinders are suitable tool drives.

| Shape                  | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|------------------------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
| <b>Shank dia. 1/4"</b> |      |            |                                      |                                       |   |                          |                        |                      |   |
| W 222                  | 1    | 34213      | 1 x 2                                | 1/4                                   | 1 1/2                                   | 8,000                    | 15,900                 | 12,370               | 10  |

# Mounted points

Vitrified bond, aluminum oxide, hardness grade M



**Hardness grade M** mounted points are made of a mix of dark red and white aluminum oxide grit in a vitrified bond. M is one of the most aggressive abrasive grades.

## Advantages

- Hardness grade M mounted points are ideal for **general use** on steel surfaces, providing high abrasive and stock removal rates.
- High stock removal rate increases productivity.

## Application examples


- Grinding of high-speed steel (H.S.S.) components.
- Weld dressing on steel structures.

## Recommendations for use

- Hardness grade M mounted points perform best at a recommended peripheral speed of 6,000 - 9,800 SFPM in surface grinding applications.
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders.

### Hardness M, series A

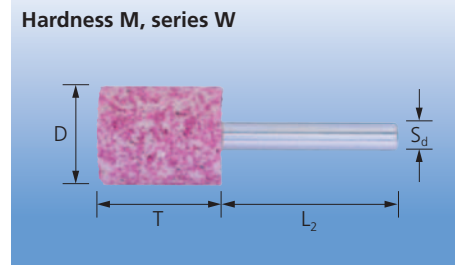



| Shape | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|

#### Shank dia. 1/4"

|     |    |       |               |     |       |        |        |        |    |
|-----|----|-------|---------------|-----|-------|--------|--------|--------|----|
| A1  | 30 | 31000 | 3/4 x 2-1/2   | 1/4 | 1-1/2 | 19,800 | 19,800 | 16,500 | 10 |
| A2  | 30 | 31010 | 1 x 1-1/4     | 1/4 | 1-1/2 | 34,400 | 38,200 | 32,620 | 10 |
| A3  | 30 | 31020 | 1 x 2-3/4     | 1/4 | 1-1/2 | 16,100 | 16,100 | 13,080 | 10 |
| A4  | 30 | 31030 | 1-1/4 x 1-1/4 | 1/4 | 1-1/2 | 26,900 | 30,560 | 24,750 | 5  |
| A5  | 30 | 31040 | 3/4 x 1-1/8   | 1/4 | 1-1/2 | 45,000 | 45,000 | 33,750 | 10 |
| A11 | 30 | 31060 | 7/8 x 2       | 1/4 | 1-1/2 | 19,860 | 19,860 | 15,100 | 10 |
| A12 | 30 | 31070 | 11/16 x 1-1/4 | 1/4 | 1-1/2 | 48,000 | 48,000 | 35,250 | 10 |
| A25 | 30 | 31150 | 1 x 1         | 1/4 | 1-1/2 | 34,400 | 35,620 | 27,370 | 10 |
| A31 | 30 | 31170 | 1-3/8 x 1     | 1/4 | 1-1/2 | 24,600 | 27,780 | 26,250 | 10 |
| A38 | 30 | 31240 | 1 x 1         | 1/4 | 1-1/2 | 34,400 | 34,500 | 26,250 | 10 |

**D** = Point diameter  
**T** = Point length  
**S<sub>d</sub>** = Shank diameter  
**L<sub>2</sub>** = Shank length

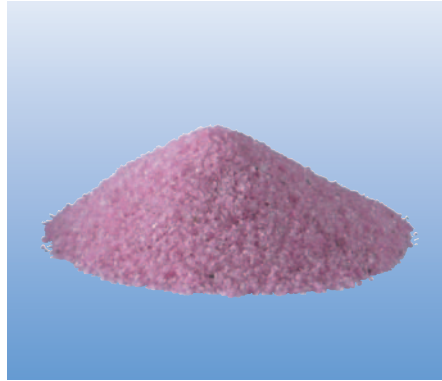
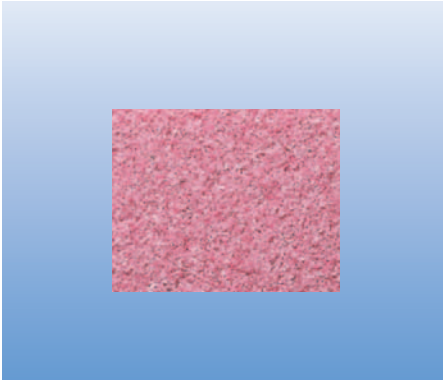


| Shape                  | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|------------------------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
| <b>Shank dia. 1/4"</b> |      |            |                                      |                                       |   |                          |                        |                      |   |
| W187                   | 46   | 33694      | 1/2 x 1                              | 1/4                                   | 1-1/2                                   | 40,500                   | 40,500                 | 30,000               | 10  |
| W189                   | 46   | 33724      | 1/2 x 2                              | 1/4                                   | 1-1/2                                   | 24,000                   | 24,000                 | 18,750               | 10  |
| W208                   | 30   | 34006      | 3/4 x 2                              | 1/4                                   | 1-1/2                                   | 18,750                   | 18,750                 | 15,370               | 10  |
| W220                   | 30   | 34186      | 1 x 1                                | 1/4                                   | 1-1/2                                   | 25,500                   | 25,500                 | 19,120               | 10  |
| W222                   | 30   | 34216      | 1 x 2                                | 1/4                                   | 1-1/2                                   | 15,900                   | 15,900                 | 12,370               | 10  |
| W236                   | 30   | 34426      | 1-1/2 x 1/2                          | 1/4                                   | 1-1/2                                   | 22,600                   | 25,470                 | 25,470               | 5   |
| W239                   | 30   | 34471      | 1-1/2 x 2                            | 1/4                                   | 1-1/2                                   | 12,750                   | 12,750                 | 9,900                | 5   |
| W242                   | 46   | 34512      | 2 x 1                                | 1/4                                   | 1-1/2                                   | 17,200                   | 19,100                 | 15,950               | 5   |



# Mounted points

Vitrified bond, aluminum oxide, hardness grade O



**Hardness grade O** mounted points consist of pink aluminum oxide in a vitrified bond. Good edge holding and long service life characterize hardness grade O, making it predominant in its field of application.

## Advantages

- Hardness grade O mounted points are ideally suited for **heavy-duty** edge grinding on steels. They are noted for their high edge-holding and dimensional stability, long service life and low wear.
- Due to their special edge-holding properties, hardness grade O mounted points can also be used economically with low RPM power tools.

## Application examples


- Deburring of steel castings.
- Chamfering in preparation of welding operations.
- Contour and edge refining on forgings.

## Recommendations for use

- In edge grinding operations, hardness grade O mounted points perform best at a recommended peripheral speed of 5,000 - 7,800 SFPM.
- For surface grinding we recommend a peripheral speed of 3,000 - 5,000 SFPM.
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders.


### Hardness O, series A



| Shape                  | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|------------------------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
| <b>Shank dia. 1/4"</b> |      |            |                                      |                                       |   |                          |                        |                      |   |
| A1                     | 30   | 31001      | 3/4 x 2-1/2                          | 1/4                                   | 1-1/2                                   | 19,800                   | 19,800                 | 16,500               | 10  |
| A2                     | 30   | 31011      | 1 x 1-1/4                            | 1/4                                   | 1-1/2                                   | 26,000                   | 38,200                 | 32,620               | 10  |
| A3                     | 30   | 31021      | 1 x 2-3/4                            | 1/4                                   | 1-1/2                                   | 16,100                   | 16,100                 | 13,080               | 10  |
| A4                     | 30   | 31031      | 1-1/4 x 1-1/4                        | 1/4                                   | 1-1/2                                   | 21,000                   | 30,560                 | 24,750               | 5   |
| A5                     | 30   | 31041      | 3/4 x 1-1/8                          | 1/4                                   | 1-1/2                                   | 35,200                   | 45,000                 | 33,750               | 10  |
| A6                     | 30   | 31051      | 3/4 x 1-1/8                          | 1/4                                   | 1-1/2                                   | 35,200                   | 39,000                 | 29,700               | 10  |
| A11                    | 30   | 31061      | 7/8 x 2                              | 1/4                                   | 1-1/2                                   | 19,860                   | 19,860                 | 15,100               | 10  |
| A12                    | 30   | 31071      | 11/16 x 1-1/4                        | 1/4                                   | 1-1/2                                   | 40,000                   | 48,000                 | 35,250               | 10  |
| A15                    | 60   | 31104      | 1/4 x 1-1/16                         | 1/4                                   | 1-1/2                                   | 72,750                   | 72,750                 | 47,620               | 10  |

## Hardness O, series A




| Shape | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|

### Shank dia. 1/4"

|     |    |       |             |     |       |        |        |        |    |
|-----|----|-------|-------------|-----|-------|--------|--------|--------|----|
| A21 | 30 | 31111 | 1 x 1       | 1/4 | 1-1/2 | 26,000 | 34,500 | 26,250 | 10 |
| A24 | 60 | 31144 | 1/4 x 3/4   | 1/4 | 1-1/2 | 76,500 | 76,500 | 49,500 | 10 |
| A25 | 30 | 31151 | 1 x 1       | 1/4 | 1-1/2 | 26,000 | 35,620 | 27,370 | 10 |
| A26 | 30 | 31161 | 5/8 x 5/8   | 1/4 | 1-1/2 | 41,800 | 61,120 | 46,500 | 10 |
| A36 | 60 | 31224 | 1-5/8 x 3/8 | 1/4 | 1-1/2 | 16,000 | 23,520 | 23,520 | 5  |
| A37 | 60 | 31234 | 1-1/4 x 1/4 | 1/4 | 1-1/2 | 21,000 | 30,560 | 30,560 | 5  |
| A38 | 30 | 31241 | 1 x 1       | 1/4 | 1-1/2 | 26,700 | 34,500 | 26,250 | 10 |
| A38 | 60 | 31244 | 1 x 1       | 1/4 | 1-1/2 | 26,700 | 34,500 | 26,250 | 10 |

## Hardness O, series B



| Shape | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|

### Shank dia. 1/8"

|     |     |       |            |     |       |         |         |        |    |
|-----|-----|-------|------------|-----|-------|---------|---------|--------|----|
| B42 | 46  | 32310 | 1/2 x 3/4  | 1/8 | 1-1/4 | 33,750  | 33,750  | 23,250 | 10 |
| B43 | 100 | 32328 | 1/4 x 5/16 | 1/8 | 1-1/4 | 81,370  | 81,370  | 51,000 | 10 |
| B51 | 80  | 32375 | 7/16 x 3/4 | 1/8 | 1-1/4 | 45,370  | 45,370  | 28,500 | 10 |
| B52 | 46  | 32380 | 3/8 x 3/4  | 1/8 | 1-1/4 | 45,370  | 45,370  | 28,500 | 10 |
| B52 | 80  | 32385 | 3/8 x 3/4  | 1/8 | 1-1/4 | 45,370  | 45,370  | 28,500 | 10 |
| B53 | 60  | 32392 | 5/16 x 5/8 | 1/8 | 1-1/4 | 60,000  | 60,000  | 38,020 | 10 |
| B54 | 100 | 32408 | 1/4 x 1/2  | 1/8 | 1-1/4 | 60,000  | 60,000  | 38,020 | 10 |
| B70 | 100 | 32498 | 3/4 x 1/8  | 1/8 | 1-1/4 | 35,200  | 50,930  | 41,250 | 10 |
| B97 | 100 | 32658 | 1/8 x 3/8  | 1/8 | 1-1/4 | 105,000 | 105,000 | 64,500 | 10 |

# Mounted points

Vitrified bond, aluminum oxide, hardness grade O



## Hardness O, series B



B121



B122



B123



B124



B125




B131



B132



B135

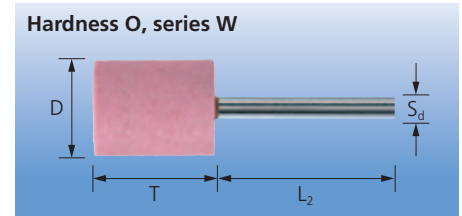
| Shape | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|


### Shank dia. 1/8"

|      |     |       |             |     |       |         |         |        |    |
|------|-----|-------|-------------|-----|-------|---------|---------|--------|----|
| B121 | 80  | 32785 | 1/2 x 1/2   | 1/8 | 1-1/4 | 45,370  | 45,370  | 28,500 | 10 |
| B122 | 80  | 32795 | 3/8 x 3/8   | 1/8 | 1-1/4 | 61,650  | 61,650  | 37,720 | 10 |
| B123 | 100 | 32808 | 3/16 x 3/16 | 1/8 | 1-1/4 | 104,250 | 104,250 | 61,820 | 10 |
| B124 | 100 | 32818 | 1/8 x 1/8   | 1/8 | 1-1/4 | 105,000 | 105,000 | 64,500 | 10 |
| B125 | 100 | 32827 | 1/4 x 1/4   | 1/8 | 1-1/4 | 81,370  | 81,370  | 51,000 | 10 |
| B131 | 80  | 32835 | 1/2 x 1/2   | 1/8 | 1-1/4 | 34,500  | 34,500  | 22,500 | 10 |
| B132 | 46  | 32840 | 3/8 x 1/2   | 1/8 | 1-1/4 | 45,370  | 45,370  | 28,500 | 10 |
| B135 | 100 | 32878 | 1/4 x 1/2   | 1/8 | 1-1/4 | 60,000  | 60,000  | 38,020 | 10 |



D = Point diameter  
 T = Point length  
 S<sub>d</sub> = Shank diameter  
 L<sub>2</sub> = Shank length



| Shape                  | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|------------------------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
| <b>Shank dia. 1/8"</b> |      |            |                                      |                                       |   |                          |                        |                      |   |
| W154                   | 60   | 33203      | 3/16 x 1/2                           | 1/8                                   | 1-1/4                                   | 70,500                   | 70,500                 | 45,600               | 10  |
| W163                   | 60   | 33338      | 1/4 x 1/2                            | 1/8                                   | 1-1/4                                   | 60,000                   | 60,000                 | 38,020               | 10  |
| W163                   | 100  | 33344      | 1/4 x 1/2                            | 1/8                                   | 1-1/4                                   | 60,000                   | 60,000                 | 38,020               | 10  |
| W170                   | 80   | 33446      | 5/16 x 1/2                           | 1/8                                   | 1-1/4                                   | 52,500                   | 52,500                 | 33,000               | 10  |
| <b>Shank dia. 1/4"</b> |      |            |                                      |                                       |   |                          |                        |                      |   |
| W179                   | 46   | 33575      | 3/8 x 1-1/4                          | 1/4                                   | 1-1/2                                   | 45,750                   | 45,750                 | 33,750               | 10  |
| W187                   | 46   | 33695      | 1/2 x 1                              | 1/4                                   | 1-1/2                                   | 40,500                   | 40,500                 | 30,000               | 10  |
| W189                   | 46   | 33725      | 1/2 x 2                              | 1/4                                   | 1-1/2                                   | 24,000                   | 24,000                 | 18,750               | 10  |
| W205                   | 60   | 33968      | 3/4 x 1                              | 1/4                                   | 1-1/2                                   | 34,500                   | 34,500                 | 25,870               | 10  |
| W207                   | 30   | 33992      | 3/4 x 1-1/2                          | 1/4                                   | 1-1/2                                   | 24,000                   | 24,000                 | 18,520               | 10  |
| W215                   | 60   | 34118      | 1 x 1/8                              | 1/4                                   | 1-1/2                                   | 26,700                   | 38,200                 | 38,200               | 10  |
| W220                   | 30   | 34187      | 1 x 1                                | 1/4                                   | 1-1/2                                   | 25,500                   | 25,500                 | 19,120               | 10  |
| W221                   | 30   | 34202      | 1 x 1-1/2                            | 1/4                                   | 1-1/2                                   | 19,120                   | 19,120                 | 14,620               | 10  |
| W222                   | 30   | 34217      | 1 x 2                                | 1/4                                   | 1-1/2                                   | 15,900                   | 15,900                 | 12,370               | 10  |
| W222                   | 60   | 34223      | 1 x 2                                | 1/4                                   | 1-1/2                                   | 15,900                   | 15,900                 | 12,370               | 10  |
| W237                   | 30   | 34442      | 1-1/2 x 1                            | 1/4                                   | 1-1/2                                   | 16,700                   | 22,500                 | 17,620               | 5   |
| W238                   | 30   | 34457      | 1-1/2 x 1-1/2                        | 1/4                                   | 1-1/2                                   | 15,600                   | 15,600                 | 12,000               | 5   |
| W238                   | 60   | 34463      | 1-1/2 x 1-1/2                        | 1/4                                   | 1-1/2                                   | 15,600                   | 15,600                 | 12,000               | 5   |
| W239                   | 30   | 34472      | 1-1/2 x 2                            | 1/4                                   | 1-1/2                                   | 12,750                   | 12,750                 | 9,900                | 5   |
| W242                   | 30   | 34517      | 2 x 1                                | 1/4                                   | 1-1/2                                   | 13,400                   | 19,100                 | 15,950               | 5   |
| W242                   | 60   | 34523      | 2 x 1                                | 1/4                                   | 1-1/2                                   | 13,400                   | 19,100                 | 15,950               | 5   |

### Sets

#### 23 piece mounted point set

These hardness grade O mounted points with 1/4" shank dia. are noted for their outstanding versatility, dimensional stability and edge-holding properties.

The set contains 23 mounted points of various shapes and sizes.

#### Contents

5 each A1, A3, A11, W222  
 3 each W242

#### 50 piece mounted point set

This set comprises small mounted points, hardness grade O, universally suitable for many fine-grinding tasks. It includes the most common shapes and sizes.

Contains 50 mounted points in various shapes and dimensions.


#### Contents

5 each A1, A4, A12, A15, A21, A24, A37, W189, W215, W220.

#### Recommendation for use

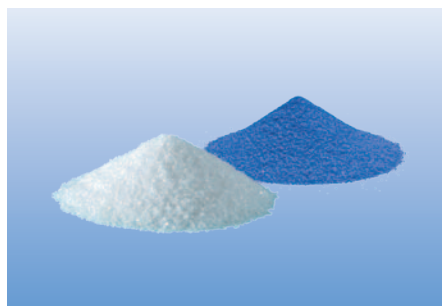
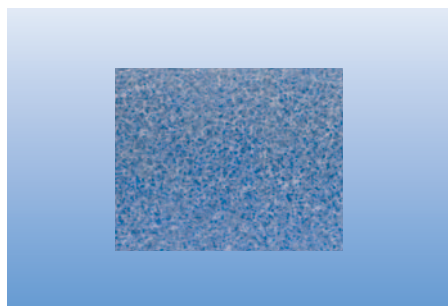
Recommended peripheral speed:  
 3,000 - 8,000 SFPM



| Set      | Shank diameter [Inches] | Grit size | EDP number |  |
|----------|-------------------------|-----------|------------|---|
| 23 piece | 1/4                     | 30        | 39000      | 1   |
| 50 piece | 1/4                     | 30-60     | 39005      | 1   |

# Mounted points

Vitrified bond, ceramic oxide, hardness grade J



Ceramic mounted points in **hardness grade J** are manufactured from a mix of white aluminum oxide and blue ceramic sintered aluminum oxide in a vitrified bond. The soft bond in combination with the easy to break down, sharp-edged white aluminum oxide and the self-sharpening effect of the microcrystalline sintered aluminum oxide allows extremely high stock removal rates with excellent service life.

The hardness grade J is perfectly suited for surface work on titanium materials, nickel and cobalt-based alloys, steel components and build-up weld deposits.

## Advantages

- Cool grinding due to the easy to break down grit mix.
- High stock removal and excellent service life.
- The self-sharpening qualities of the sintered aluminum oxide guarantee consistent stock removal.

## Application examples

- Re-finishing of airplane turbine blades.
- Follow-up repair welding in tool and mould construction.
- Grinding of repair welds and turbine blades.

## Recommendations for use

- Mounted points in hardness grade J perform best at a cutting speed of 6,000 - 9,800 SFPM.

- Suitable drive systems include flexible shafts and electric or air-powered straight grinders.

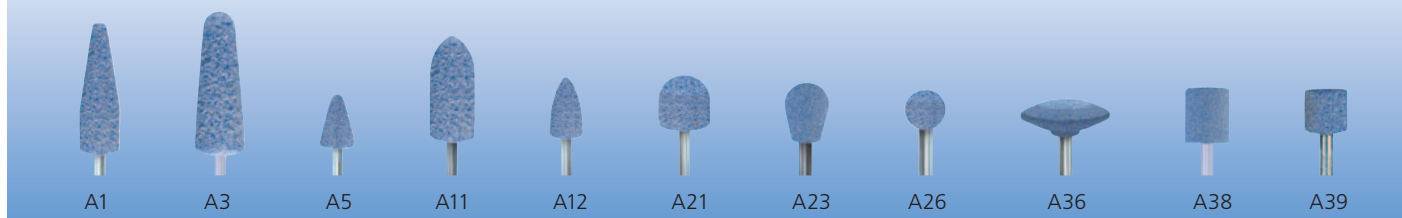
**PFERDEFFICIENCY®** recommends mounted points in hardness grade J for long, fatigue-free and resource saving work, with perfect results in the shortest possible time.




## PFERDVIDEO

To see it in action, please visit [pferdusa.com/jpoints](http://pferdusa.com/jpoints)

## Hardness J, series A




| Shape                  | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|------------------------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
| <b>Shank dia. 1/4"</b> |      |            |                                      |                                       |   |                          |                        |                      |   |
| A1                     | 46   | 30000      | 3/4 x 2-1/2                          | 1/4                                   | 1-1/2                                   | 19,800                   | 19,800                 | 16,500               | 10  |
| A3                     | 46   | 30003      | 1 x 2-3/4                            | 1/4                                   | 1-1/2                                   | 16,100                   | 16,100                 | 13,080               | 10  |
| A5                     | 46   | 30006      | 3/4 x 1-1/8                          | 1/4                                   | 1-1/2                                   | 45,000                   | 45,000                 | 33,750               | 10  |
| A11                    | 46   | 30010      | 7/8 x 2                              | 1/4                                   | 1-1/2                                   | 19,860                   | 19,860                 | 15,100               | 10  |
| A12                    | 46   | 30012      | 11/16 x 1-1/4                        | 1/4                                   | 1-1/2                                   | 48,000                   | 48,000                 | 35,250               | 10  |
| A21                    | 46   | 30017      | 1 x 1                                | 1/4                                   | 1-1/2                                   | 34,400                   | 34,500                 | 26,250               | 10  |
| A23                    | 46   | 30020      | 3/4 x 1                              | 1/4                                   | 1-1/2                                   | 39,370                   | 39,370                 | 30,370               | 10  |
| A25                    | 80   | 30023      | 1 x 1                                | 1/4                                   | 1-1/2                                   | 34,000                   | 35,620                 | 27,370               | 10  |
| A26                    | 46   | 30024      | 5/8 x 5/8                            | 1/4                                   | 1-1/2                                   | 53,700                   | 61,120                 | 46,500               | 10  |
| A36                    | 46   | 30031      | 1-5/8 x 3/8                          | 1/4                                   | 1-1/2                                   | 21,000                   | 23,520                 | 23,520               | 10  |
| A36                    | 80   | 30032      | 1-5/8 x 3/8                          | 1/4                                   | 1-1/2                                   | 21,000                   | 23,520                 | 23,520               | 10  |
| A38                    | 80   | 30034      | 1 x 1                                | 1/4                                   | 1-1/2                                   | 34,500                   | 34,500                 | 26,250               | 10  |
| A39                    | 46   | 30035      | 3/4 x 3/4                            | 1/4                                   | 1-1/2                                   | 45,200                   | 47,250                 | 35,250               | 10  |



### Hardness J, series B



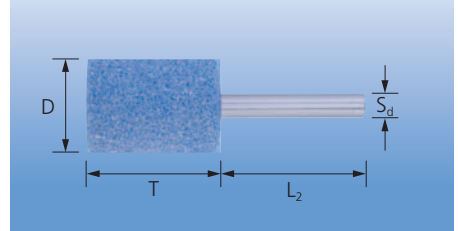
| Shape | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|


#### Shank dia. 1/8"

|      |    |       |           |     |       |         |         |        |    |
|------|----|-------|-----------|-----|-------|---------|---------|--------|----|
| B42  | 80 | 30054 | 1/2 x 3/4 | 1/8 | 1-1/4 | 33,750  | 33,750  | 23,250 | 10 |
| B52  | 80 | 30065 | 3/8 x 3/4 | 1/8 | 1-1/4 | 45,370  | 45,370  | 28,500 | 10 |
| B97  | 80 | 30083 | 1/8 x 3/8 | 1/8 | 1-1/4 | 105,000 | 105,000 | 64,500 | 10 |
| B122 | 80 | 30091 | 3/8 x 3/8 | 1/8 | 1-1/4 | 61,650  | 61,650  | 37,720 | 10 |
| B125 | 80 | 30095 | 1/4 x 1/4 | 1/8 | 1-1/4 | 81,370  | 81,370  | 51,000 | 10 |
| B131 | 80 | 30097 | 1/2 x 1/2 | 1/8 | 1-1/4 | 34,500  | 34,500  | 22,500 | 10 |

- D = Point diameter
- T = Point length
- S<sub>d</sub> = Shank diameter
- L<sub>2</sub> = Shank length

### Hardness J, series W



| Shape | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|

#### Shank dia. 1/8"

|      |    |       |            |     |       |        |        |        |    |
|------|----|-------|------------|-----|-------|--------|--------|--------|----|
| W154 | 80 | 30128 | 3/16 x 1/2 | 1/8 | 1-1/4 | 70,500 | 70,500 | 45,600 | 10 |
| W163 | 80 | 30132 | 1/4 x 1/2  | 1/8 | 1-1/4 | 60,000 | 60,000 | 38,020 | 10 |
| W164 | 80 | 30134 | 1/4 x 3/4  | 1/8 | 1-1/4 | 45,900 | 45,900 | 30,000 | 10 |
| W170 | 80 | 30136 | 5/16 x 1/2 | 1/8 | 1-1/4 | 52,500 | 52,500 | 33,000 | 10 |
| W185 | 80 | 30146 | 1/2 x 1/2  | 1/8 | 1-1/4 | 34,500 | 34,500 | 22,500 | 10 |
| W215 | 80 | 30168 | 1 x 1/8    | 1/8 | 1-1/4 | 34,400 | 38,200 | 24,900 | 10 |

#### Shank dia. 1/4"

|      |    |       |             |     |       |        |        |        |    |
|------|----|-------|-------------|-----|-------|--------|--------|--------|----|
| W179 | 46 | 30141 | 3/8 x 1-1/4 | 1/4 | 1-1/2 | 45,750 | 45,750 | 33,750 | 10 |
| W189 | 46 | 30151 | 1/2 x 2     | 1/4 | 1-1/2 | 24,000 | 24,000 | 18,750 | 10 |
| W189 | 80 | 30153 | 1/2 x 2     | 1/4 | 1-1/2 | 24,000 | 24,000 | 18,750 | 10 |
| W218 | 46 | 30167 | 1 x 1/2     | 1/4 | 1-1/2 | 35,000 | 38,200 | 32,770 | 10 |
| W220 | 46 | 30169 | 1 x 1       | 1/4 | 1-1/2 | 25,500 | 25,500 | 19,120 | 10 |
| W222 | 46 | 30175 | 1 x 2       | 1/4 | 1-1/2 | 15,900 | 15,900 | 12,370 | 10 |
| W236 | 80 | 30183 | 1-1/2 x 1/2 | 1/4 | 1-1/2 | 22,000 | 25,470 | 25,470 | 10 |
| W239 | 46 | 30188 | 1-1/2 x 2   | 1/4 | 1-1/2 | 12,750 | 12,750 | 9,900  | 10 |
| W242 | 46 | 30191 | 2 x 1       | 1/4 | 1-1/2 | 17,200 | 19,100 | 15,950 | 10 |

# Mounted points

Vitrified bond, ceramic oxide, hardness grade J



### 10 piece mounted point set

These hardness grade J mounted points with 1/8" shank dia. contain the most common shapes and dimensions for fine grinding.

#### Contents

1 piece each B52, B97, B122, B125, B131, W154, W163, W134, W170, W215

### Recommendation for use

Recommended peripheral speed:  
6,000 - 9,800 SFPM

| Set      | Shank diameter [Inches] | Hardness grade | Grit size | EDP number |  |
|----------|-------------------------|----------------|-----------|------------|---|
| 10 piece | 1/8                     | J              | 80        | 39002      | 1   |



### 10 piece mounted point set

These hardness grade J mounted points with 1/4" shank dia. contain the most common shapes and dimensions for rough grinding.

#### Contents

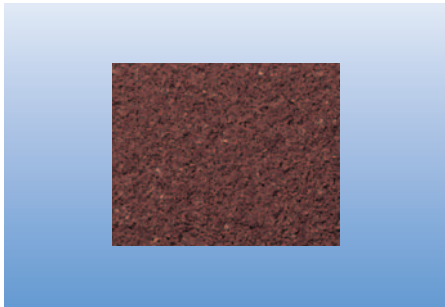
1 piece each A1, A3, A5, A11, A36, A38, A39, W189, W222, W242

### Recommendation for use

Recommended peripheral speed:  
6,000 - 9,800 SFPM

| Set      | Shank diameter [Inches] | Hardness grade | Grit size | EDP number |  |
|----------|-------------------------|----------------|-----------|------------|---|
| 10 piece | 1/4                     | J              | 46        | 39003      | 1   |





Grade L mounted points consist of a mix of white and dark red aluminum oxide in a high-quality resin bond. **Hardness grade L** is considered a fairly soft bond achieving very good removal rates.

### Advantages

- Hardness grade L mounted points are ideal for **general use** on stainless steel surfaces. This hardness grade ensures high abrasive rates and a high stock removal capability.
- Naturally a high stock removal rate reduces grinding time and labour costs.
- Cost reductions are achieved despite increased product consumption, since the reduction in labour costs more than compensates product costs.
- Cool grinding properties reduce the thermal load on the workpiece.

### Application examples

- Grinding on high-temperature alloy components.
- Weld removal on stainless steel structures.
- Coarse grinding of stainless steel.
- Grinding of high-grade steel castings.
- Dressing of titanium and titanium alloy products.

### Recommendations for use

- Hardness grade L mounted points perform best at a recommended peripheral speed of 6,900 - 9,800 SFPM in surface grinding applications.
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders.

#### Hardness L, series A



A1



A3



A11

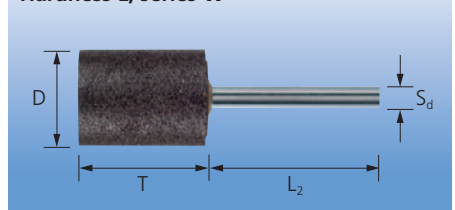
| Shape | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|


#### Shank dia. 1/4"

|     |    |       |             |     |       |        |        |        |    |
|-----|----|-------|-------------|-----|-------|--------|--------|--------|----|
| A1  | 30 | 35100 | 3/4 x 2-1/2 | 1/4 | 1-1/2 | 19,800 | 19,800 | 16,500 | 10 |
| A3  | 30 | 35104 | 1 x 2-3/4   | 1/4 | 1-1/2 | 16,100 | 16,100 | 13,080 | 10 |
| A11 | 30 | 35112 | 7/8 x 2     | 1/4 | 1-1/2 | 19,860 | 19,860 | 15,100 | 10 |

- D = Point diameter
- T = Point length
- S<sub>d</sub> = Shank diameter
- L<sub>2</sub> = Shank length

#### Hardness L, series W



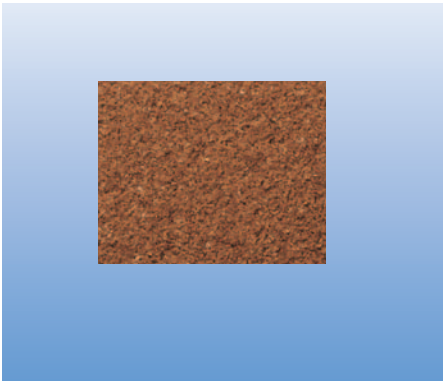
| Shape | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|

#### Shank dia. 1/4"

|      |    |       |             |     |       |        |        |        |    |
|------|----|-------|-------------|-----|-------|--------|--------|--------|----|
| W222 | 30 | 35382 | 1 x 2       | 1/4 | 1-1/2 | 15,900 | 15,900 | 12,370 | 10 |
| W236 | 30 | 35409 | 1-1/2 x 1/2 | 1/4 | 1-1/2 | 22,900 | 25,470 | 25,470 | 5  |

# Mounted points

Resin bond, aluminum oxide, hardness grade N



**Hardness grade N** mounted points are made of regular aluminum oxide in a high-quality resin bond. Mounted points of hardness grade N are noted for their elevated hardness and durability.

## Advantages

- Hardness grade N mounted points are perfect for **heavy-duty** edge grinding on stainless steel. These products are distinguished by their high edge-holding capability, long service life and low wear.
- Due to their special edge-holding properties, hardness grade N mounted points can also be used economically with low RPM power tools.
- Cool grinding properties reduce the thermal load on the workpiece.


## Application examples

- Deburring of high-grade steel castings.
- Chamfering of stainless steel shapes in preparation of welding.
- Dressing of fillet welds on high-grade steel components.
- Deburring of high-temperature alloy parts.

## Recommendations for use

- Hardness grade N mounted points perform best at a recommended peripheral speed of 6,900 - 9,800 SFPM when used for edge grinding.
- For surface grinding we recommend a peripheral speed of 4,000 - 6,000 SFPM.
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders.



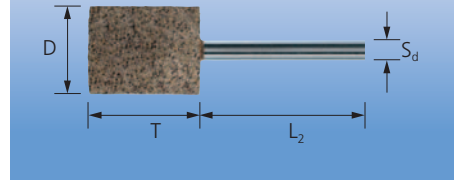
| Shape | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|


**Shank dia. 1/4"**

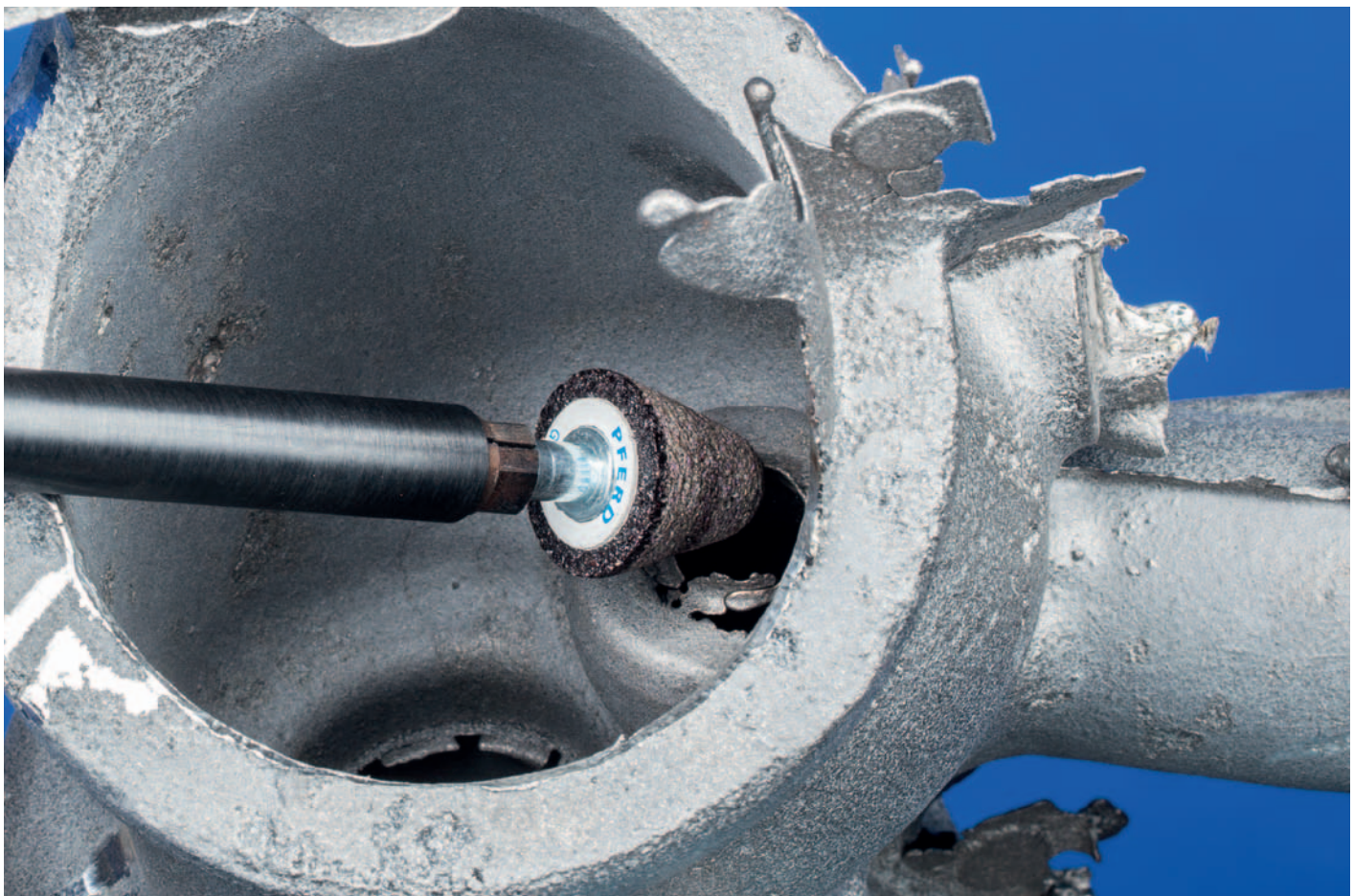
|     |    |       |               |     |       |        |        |        |    |
|-----|----|-------|---------------|-----|-------|--------|--------|--------|----|
| A1  | 30 | 35101 | 3/4 x 2-1/2   | 1/4 | 1-1/2 | 19,800 | 19,800 | 16,500 | 10 |
| A3  | 46 | 35105 | 1 x 2-3/4     | 1/4 | 1-1/2 | 16,100 | 16,100 | 13,080 | 10 |
| A4  | 30 | 35107 | 1-1/4 x 1-1/4 | 1/4 | 1-1/2 | 28,600 | 30,560 | 24,750 | 5  |
| A5  | 30 | 35109 | 3/4 x 1-1/8   | 1/4 | 1-1/2 | 45,000 | 45,000 | 33,750 | 10 |
| A11 | 30 | 35113 | 7/8 x 2       | 1/4 | 1-1/2 | 19,860 | 19,860 | 15,100 | 10 |
| A12 | 30 | 35115 | 11/16 x 1-1/4 | 1/4 | 1-1/2 | 48,000 | 48,000 | 35,250 | 10 |
| A21 | 30 | 35123 | 1 x 1         | 1/4 | 1-1/2 | 34,500 | 34,500 | 26,250 | 10 |
| A38 | 46 | 35149 | 1 x 1         | 1/4 | 1-1/2 | 34,500 | 34,500 | 26,250 | 10 |

D = Point diameter  
 T = Point length  
 S<sub>d</sub> = Shank diameter  
 L<sub>2</sub> = Shank length

Hardness N, series W

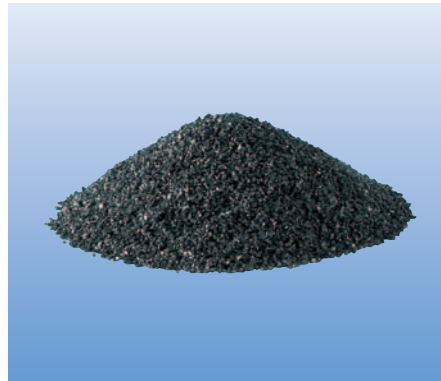
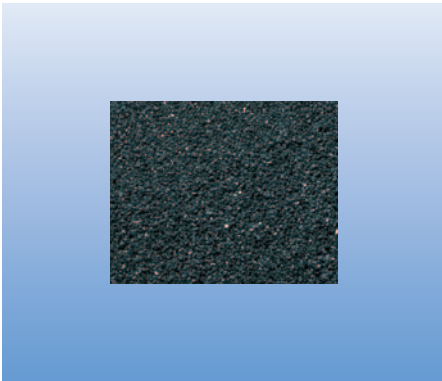


| Shape                  | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|------------------------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
| <b>Shank dia. 1/4"</b> |      |            |                                      |                                       |   |                          |                        |                      |   |
| W189                   | 46   | 35337      | 1/2 x 2                              | 1/4                                   | 1-1/2                                   | 24,000                   | 24,000                 | 18,750               | 10  |
| W220                   | 30   | 35379      | 1 x 1                                | 1/4                                   | 1-1/2                                   | 25,500                   | 25,500                 | 19,120               | 5   |
| W222                   | 30   | 35383      | 1 x 2                                | 1/4                                   | 1-1/2                                   | 15,900                   | 15,900                 | 12,370               | 10  |
| W236                   | 30   | 35410      | 1-1/2 x 1/2                          | 1/4                                   | 1-1/2                                   | 22,900                   | 25,470                 | 25,470               | 5   |



# Mounted points

Vitrified bond, silicon carbide, hardness grade R



**Hardness grade R** mounted points are made of grey silicon carbide in a vitrified bond. These products are noted for their hardness and durability.

## Advantages

- Hardness grade R mounted points are ideally suited for **heavy-duty** edge grinding on castings. They are distinguished by their high edge-holding capability, long service life and low wear.
- Due to their special edge-holding properties, hardness grade R mounted points can also be used economically with low RPM power tools.

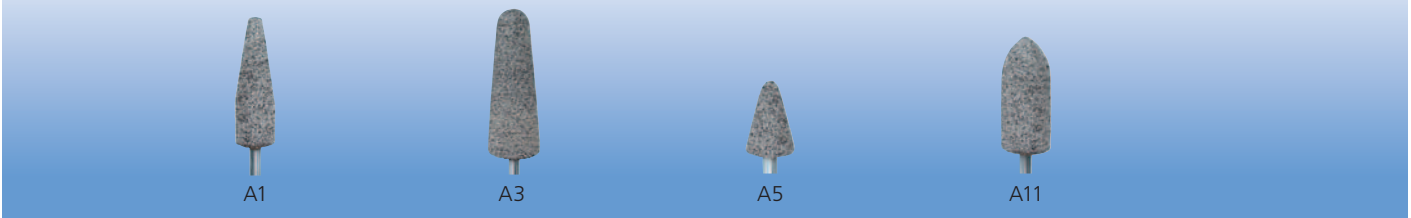
## Application examples


- Removal of sharp burrs on castings (grey and nodular cast iron).
- Removal of sand inclusions and scale from castings.

## Recommendations for use

- In edge grinding operations, hardness grade R mounted points perform best at a recommended peripheral speed of 6,000 - 9,800 SFPM.
- For surface grinding we recommend a peripheral speed of 4,000 - 6,000 SFPM.
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders.

### Hardness R, series A

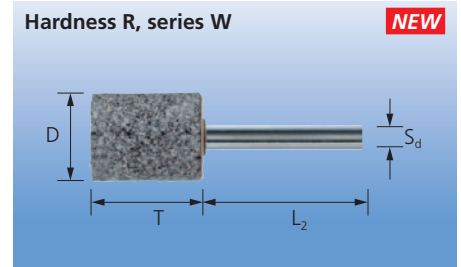



| Shape | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
|-------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|

#### Shank dia. 1/4"

|     |    |       |             |     |       |        |        |        |    |
|-----|----|-------|-------------|-----|-------|--------|--------|--------|----|
| A1  | 30 | 31002 | 3/4 x 2-1/2 | 1/4 | 1-1/2 | 19,800 | 19,800 | 16,500 | 10 |
| A3  | 30 | 31022 | 1 x 2-3/4   | 1/4 | 1-1/2 | 16,100 | 16,100 | 13,080 | 10 |
| A5  | 30 | 31042 | 3/4 x 1-1/8 | 1/4 | 1-1/2 | 38,000 | 45,000 | 33,750 | 10 |
| A11 | 30 | 31062 | 7/8 x 2     | 1/4 | 1-1/2 | 19,860 | 19,860 | 15,100 | 10 |

D = Point diameter  
 T = Point length  
 S<sub>d</sub> = Shank diameter  
 L<sub>2</sub> = Shank length



| Shape                  | Grit | EDP number | Point dia. x length (D x T) [Inches] | Shank dia. (S <sub>d</sub> ) [Inches] | Shank length (L <sub>2</sub> ) [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|------------------------|------|------------|--------------------------------------|---------------------------------------|---|--------------------------|------------------------|----------------------|---|
| <b>Shank dia. 1/4"</b> |      |            |                                      |                                       |   |                          |                        |                      |   |
| W189                   | 30   | 33726      | 1/2 x 2                              | 1/4                                   | 1-1/2                                   | 24,000                   | 24,000                 | 18,750               | 10  |
| W208                   | 30   | 34008      | 3/4 x 2                              | 1/4                                   | 1-1/2                                   | 18,750                   | 18,750                 | 15,370               | 10  |
| W222                   | 30   | 34218      | 1 x 2                                | 1/4                                   | 1-1/2                                   | 15,900                   | 15,900                 | 12,370               | 10  |

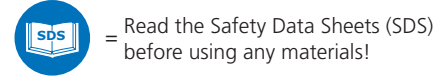
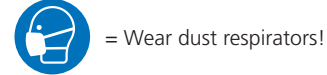
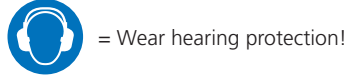
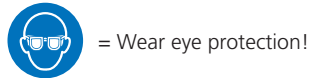


# Bench grinding wheels

## Vitrified bond, aluminum oxide

### Safety recommendations

- The maximum speed is calculated in accordance with ANSI B7.1.
- Never exceed the maximum RPM listed on wheel labels.
- **CAUTION:** Smaller spindles frequently run at higher RPMs.
- Prior to mounting, all wheels shall be visually inspected for damage and cracks.
- Perform the ring test before mounting. An undamaged wheel will give a clear tone.



### Steel/ferrous metals Aluminum oxide



PFERD bench grinding wheels are made of regular aluminum oxide in a vitrified bond. These products are particularly suited for high-speed steel (HSS), steel, cast steel and cast iron.

#### Advantage


High performance on a multitude of materials.

#### Application examples

- Deburring at semi-finished steel and cast products.
- Regrinding and sharpening of HSS tools like drills and turning tools.
- Various maintenance applications.

#### Recommendations for use

- All bench wheels are packed with telescoping bushings to accommodate popular machine spindle sizes.
- If a bench grinding wheel starts to show signs of loading, use dressing stones on page 28.
- Suitable tool drives are bench and pedestal grinders.

| Diameter (D) [Inches] | Thickness nominal (T) [Inches] | Bore (H) [Inches] | Included bushings | Grit size and EDP number |       |       |       |       | Max. RPM |  |
|-----------------------|--------------------------------|-------------------|-------------------|--------------------------|-------|-------|-------|-------|----------|---|
|                       |                                |                   |                   | 24                       | 36    | 46    | 60    | 80    |          |   |
| <b>Flat (type 1)</b>  |                                |                   |                   |                          |       |       |       |       |          |   |
| 6                     | 1/2                            | 1                 | 3/4, 5/8, 1/2     | -                        | -     | -     | 61736 | -     | 4,140    | 1   |
| 6                     | 3/4                            | 1                 | 3/4, 5/8, 1/2     | 61738                    | 61739 | 61740 | 61741 | 61742 | 4,140    | 1   |
| 6                     | 1                              | 1                 | 3/4, 5/8, 1/2     | 61743                    | 61744 | 61745 | 61746 | 61747 | 4,140    | 1   |
| 7                     | 1                              | 1                 | 3/4, 5/8, 1/2     | 61753                    | 61754 | 61755 | 61756 | 61757 | 3,600    | 1   |
| 8                     | 1                              | 1-1/4             | 1                 | 61763                    | 61764 | 61765 | 61766 | 61767 | 3,600    | 1   |
| 10                    | 1                              | 1-1/4             | 1                 | 61768                    | 61769 | 61770 | 61771 | 61772 | 2,400    | 1   |
| 10                    | 1-1/2                          | 1-1/4             | 1                 | 61773                    | 61774 | -     | 61776 | -     | 2,400    | 1   |
| 12                    | 2                              | 1-1/2             | 1-1/4             | 61778                    | 61779 | 61780 | 61781 | -     | 2,070    | 1   |
| 14                    | 2                              | 1-1/2             | 1-1/4             | 61782                    | 61783 | -     | 61784 | -     | 1,800    | 1   |





PFERD bench grinding wheels are made of green silicon carbide in a vitrified bond. These products are particularly suited for carbide and non-ferrous metals like titanium.

### Advantages

- Very good self-sharpening performance.
- Long service life because of hard silicon carbide.
- High stock removal rate.

### Application example

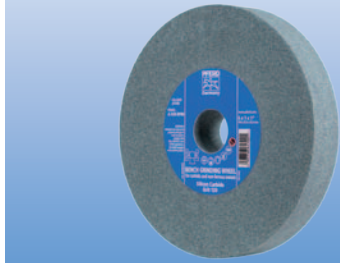
Removing of burrs


- Sharpening of carbide tools like drills, mills or disposable tips.
- Various maintenance applications.
- Dressing diamond tools for tool-grinding machines.

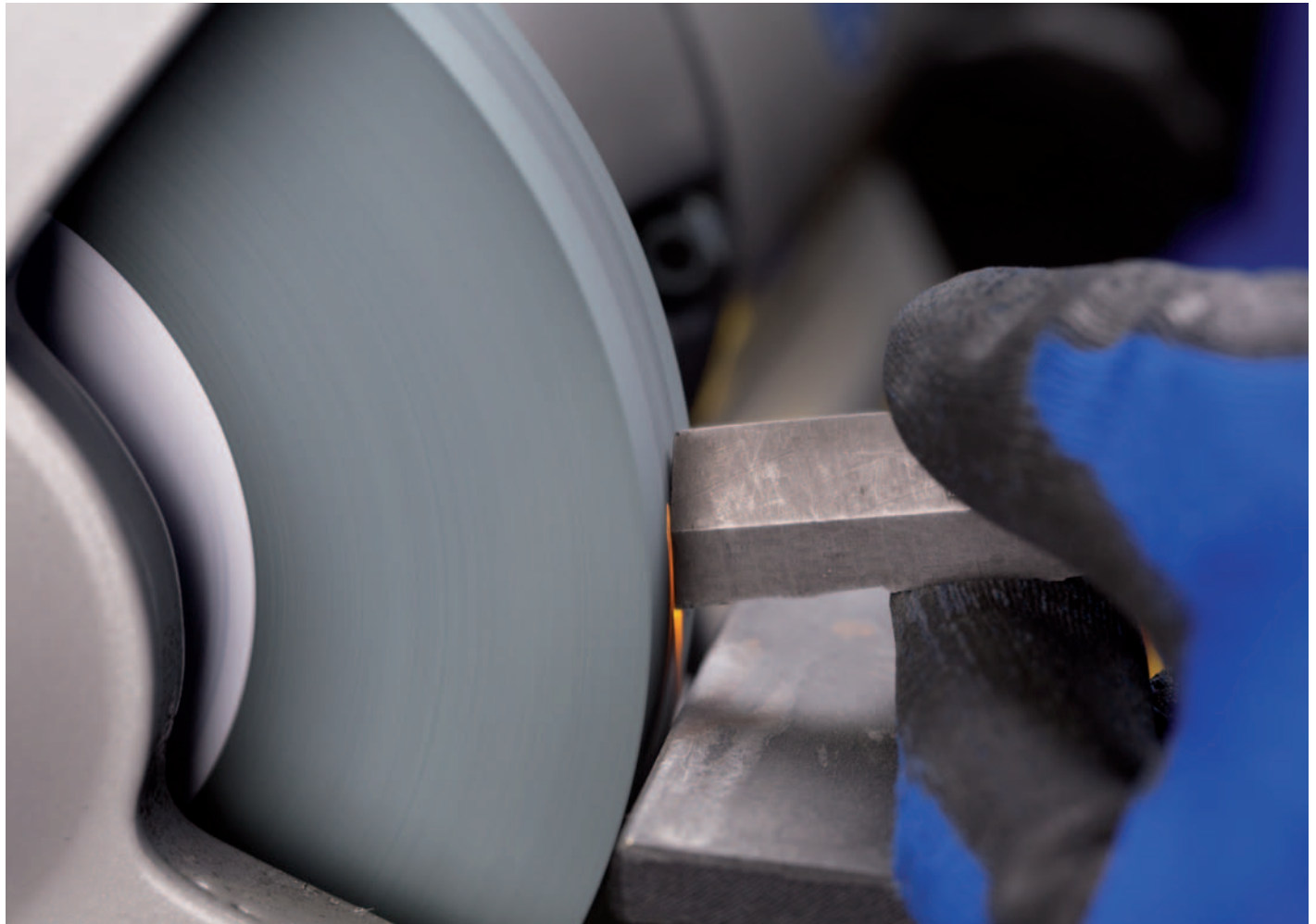
### Recommendations for use

- All bench wheels are packed with telescoping bushings to accommodate popular machine spindle sizes.
- If a bench grinding wheel starts to show signs of loading, use dressing stones on page 28.
- Suitable tool drives are bench and pedestal grinders.

### Carbide/non-ferrous metals/masonry Silicon carbide



| Diameter (D)<br>[Inches] | Thickness<br>nominal (T)<br>[Inches] | Bore (H)<br>[Inches] | Included<br>bushings | Grit size and EDP number |       |       | Max.<br>RPM |  |
|--------------------------|--------------------------------------|----------------------|----------------------|--------------------------|-------|-------|-------------|---|
|                          |                                      |                      |                      | 60                       | 80    | 120   |             |   |
| <b>Flat (type 1)</b>     |                                      |                      |                      |                          |       |       |             |   |
| 6                        | 3/4                                  | 1                    | 3/4, 5/8, 1/2        | 61785                    | 61786 | 61787 | 4,140       | 1   |
| 6                        | 1                                    | 1                    | 3/4, 5/8, 1/2        | 61788                    | 61789 | 61790 | 4,140       | 1   |
| 7                        | 1                                    | 1                    | 3/4, 5/8, 1/2        | 61791                    | 61792 | 61793 | 3,600       | 1   |
| 8                        | 1                                    | 1-1/4                | 1                    | 61794                    | 61795 | 61796 | 3,600       | 1   |
| 10                       | 1                                    | 1-1/4                | 1                    | 61797                    | 61798 | 61799 | 2,400       | 1   |



# Cones and plugs

## Resin bond, aluminum oxide

PFERD cones and plugs are made of regular aluminum oxide in a high-quality resinoid bond. Because of their hardness, these products are noted for their good stock removal rates and high durability.

Cones and plugs are used for steel, cast steel and cast iron.

### Advantages

- High stock removal rate.
- High edge-holding and dimensional stability.
- Cool grinding properties reduce the thermal load on the workpiece.

### Application examples

- Weld dressing on steel removing excess weld metals.
- Chamfering in preparation of welding operations.
- Grinding in hard-to-reach workpiece areas.

- Removing parting lines and imperfections at casting parts.
- Smoothing rough castings.

### Recommendations for use

- Cones and plugs perform best at the recommended peripheral speed of 6,900 - 9,800 SFPM.
- Suitable drive systems include flexible shafts, electric or air-powered straight grinders and angle grinders.

### Safety recommendations:

- The maximum speed is calculated in accordance with ANSI B7.1.
- Never exceed the maximum RPM listed on the label.



= Wear eye protection!



= Wear hearing protection!



= Wear gloves!



= Read the instructions!




= Wear dust respirators!



= Read the Safety Data Sheets (SDS) before using any materials!



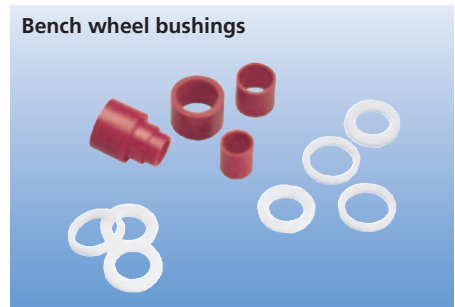
| Diameter (D) x length [Inches] | Thread | Grit size | EDP number | Recom. RPM | Max. RPM |  |
|--------------------------------|--------|-----------|------------|------------|----------|---|
| <b>Curved (type 16)</b>        |        |           |            |            |          |   |
| 1-1/2 x 2-1/2                  | 3/8-24 | 16        | 61816      | 24,000     | 24,100   | 10  |
| 1-1/2 x 3                      | 5/8-11 | 16        | 61820      | 24,000     | 24,100   | 10  |
| 1-3/4 x 3                      | 5/8-11 | 16        | 61826      | 20,600     | 20,700   | 10  |
| 2 x 3                          | 5/8-11 | 16        | 61829      | 18,100     | 18,100   | 10  |
| 2-3/4 x 3-1/2                  | 5/8-11 | 16        | 61837      | 13,100     | 13,200   | 10  |
| <b>Tapered (type 17)</b>       |        |           |            |            |          |   |
| 1-1/2 x 3/8 x 2-1/2            | 3/8-24 | 16        | 61850      | 24,000     | 24,100   | 10  |
| 1-1/2 x 3/8 x 2-1/2            | 5/8-11 | 16        | 61851      | 24,000     | 24,100   | 10  |
| 1-1/2 x 1/2 x 3                | 3/8-24 | 16        | 61854      | 24,000     | 24,100   | 10  |
| 1-1/2 x 1/2 x 3                | 5/8-11 | 16        | 61855      | 24,000     | 24,100   | 10  |
| 2 x 1/2 x 3                    | 5/8-11 | 16        | 61859      | 14,500     | 18,100   | 10  |
| <b>Straight (type 18)</b>      |        |           |            |            |          |   |
| 1 x 2                          | 3/8-24 | 16        | 61883      | 36,100     | 36,200   | 10  |
| 1-1/2 x 2-1/2                  | 3/8-24 | 16        | 61884      | 24,000     | 24,100   | 10  |
| 1-1/2 x 2-1/2                  | 5/8-11 | 16        | 61885      | 24,000     | 24,100   | 10  |
| 1-1/2 x 3                      | 3/8-24 | 16        | 61888      | 24,000     | 24,100   | 10  |
| 1-1/2 x 3                      | 5/8-11 | 16        | 61889      | 24,000     | 24,100   | 10  |
| 2 x 3                          | 5/8-11 | 16        | 61893      | 18,100     | 18,100   | 10  |
| <b>Straight (type 18R)</b>     |        |           |            |            |          |   |
| 1-1/2 x 2-1/2                  | 3/8-24 | 16        | 61927      | 24,000     | 24,100   | 10  |
| 1-1/2 x 2-1/2                  | 5/8-11 | 16        | 61928      | 24,000     | 24,100   | 10  |
| 1-1/2 x 3                      | 3/8-24 | 16        | 61931      | 24,000     | 24,100   | 10  |
| 1-1/2 x 3                      | 5/8-11 | 16        | 61932      | 24,000     | 24,100   | 10  |
| 2 x 3                          | 5/8-11 | 16        | 61936      | 18,100     | 18,100   | 10  |


PFERD bench grinder bushings provide a safe method of reducing the wheel arbor to accommodate various spindle sizes. The bushing should be flush on both sides of the wheel, and should not interfere with the flanges.

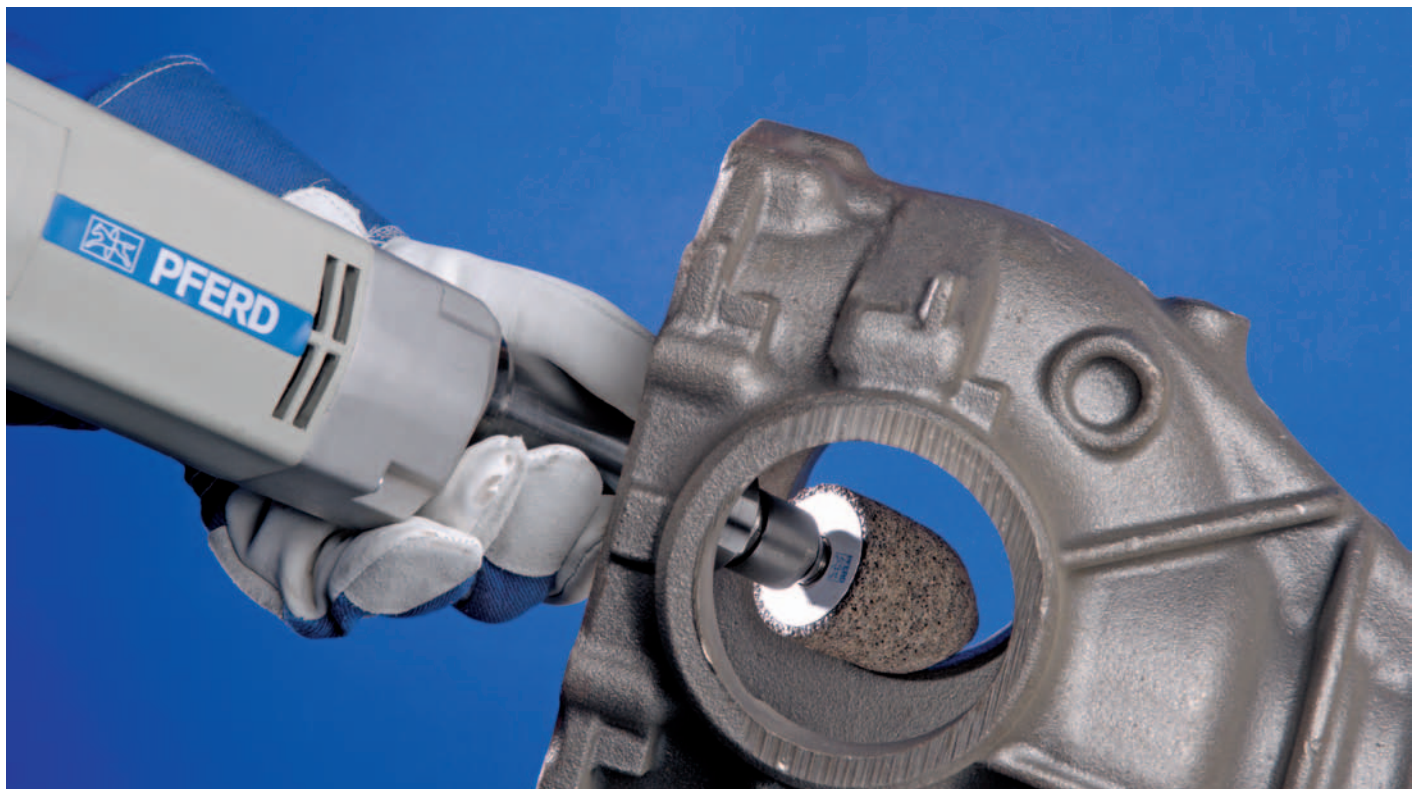
**Recommendation for use**

**CAUTION:** Smaller spindles frequently run at higher RPMs.

**PFERD specification number**  
RBB



| Fits arbor hole (H)<br>[Inches] | Fits thickness (T)<br>[Inches] | Bushing I.D.<br>[Inches] | EDP<br>number |  |
|---------------------------------|--------------------------------|--------------------------|---------------|---|
| <b>Telescoping</b>              |                                |                          |               |   |
| 1                               | 1/2                            | 3/4, 5/8, 1/2            | 69018         | 1   |
| 1                               | 3/4                            | 3/4, 5/8, 1/2            | 69019         | 1   |
| 1                               | 1                              | 3/4, 5/8, 1/2            | 69011         | 1   |
| 1 1/2                           | 1                              | 1 1/4                    | 69024         | 1   |
| 1 1/4                           | 1                              | 1                        | 69025         | 1   |
| <b>Standard</b>                 |                                |                          |               |   |
| 1 1/4                           | 1/4                            | 1                        | 69012         | 1   |
| 1 1/4                           | 1/4                            | 7/8                      | 69014         | 1   |
| 1 1/4                           | 1/4                            | 3/4                      | 69015         | 1   |
| 1 1/4                           | 1/4                            | 5/8                      | 69016         | 1   |
| 1 1/4                           | 1/4                            | 1/2                      | 69017         | 1   |





### Small dressing stone – fine

This small dressing stone in finer grit (grit 46) is suited for profiling and dressing smaller mounted points.

### Medium dressing stones – coarse

This medium large dressing stone in coarser grit (grit 30) is ideal for coarse dressing work. Their anti-slip rubber backing provides a firm grip and protects the support surfaces.


### Medium dressing stones – 2-sided

Dressing stone with two different grit sizes.

- Upper side (coarse): Profiling and sharpening of large mounted points with coarse bonds and grit sizes.
- Underside (fine): Profiling and dressing of mounted points with fine bonds and grit sizes.

### Large dressing stones – coarse

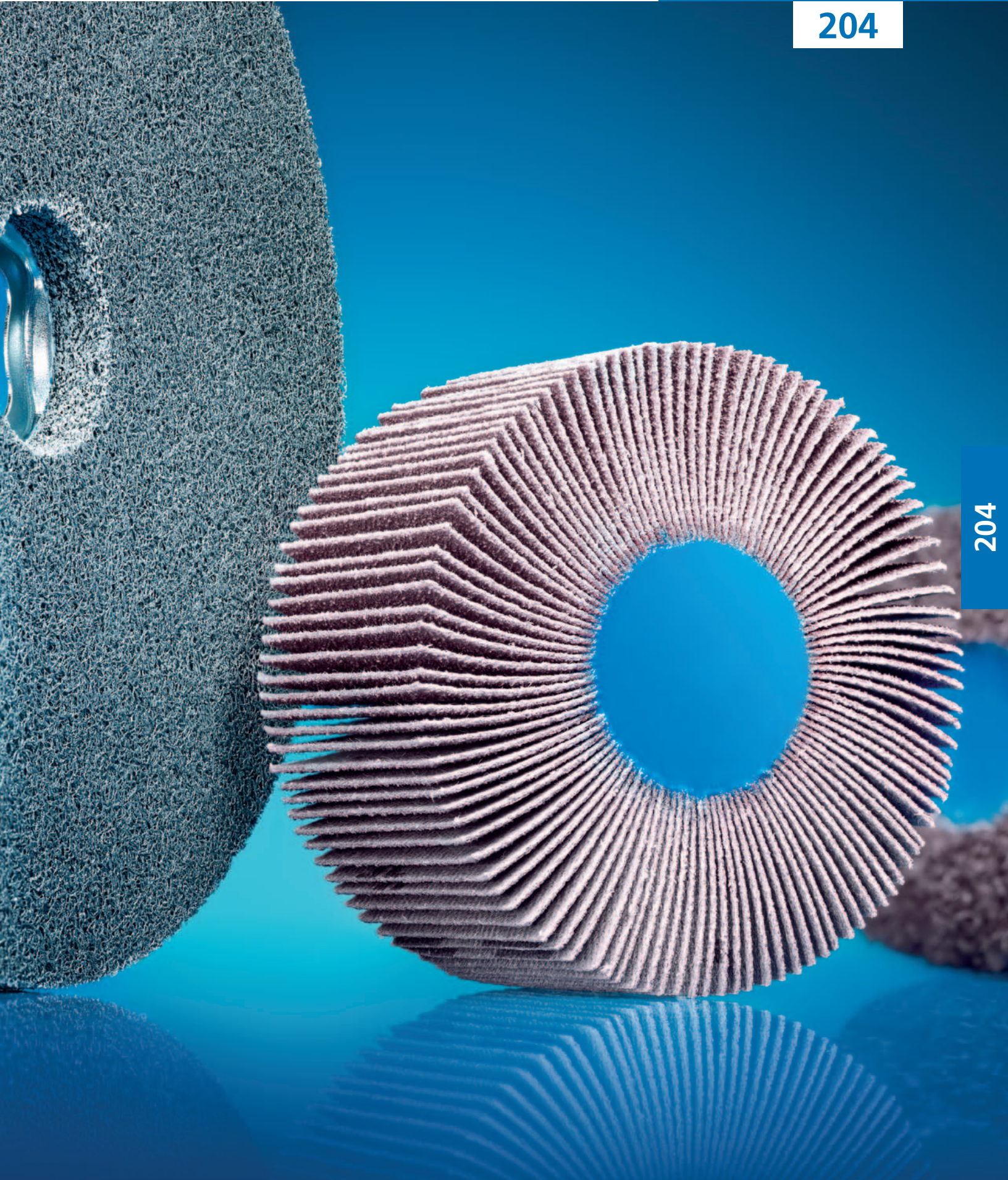
This large dressing stone in coarser grit (grit 30) is suited for profiling and dressing larger and coarser mounted points.

| Description                      | Dressing stones dimension [Inches] | Grit   | EDP number |  |
|----------------------------------|------------------------------------|--|------------|---|
| Small dressing stones – fine     | 2-3/4 x 7/8 x 1/2                  | 46   | 39012      | 5   |
| Medium dressing stones – coarse  | 4-3/4 x 2 x 1-1/4                  | 30   | 39010      | 5   |
| Medium dressing stones – 2-sided | 4-3/4 x 2 x 1-1/4                  | Upper side: coarse, 30 grit<br>Lower side: fine, 60 grit | 39011      | 5   |
| Large dressing stones – coarse   | 6 x 1 x 1                          | 30   | 39015      | 5   |

# Fine grinding and finishing products



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# Fine grinding and finishing products

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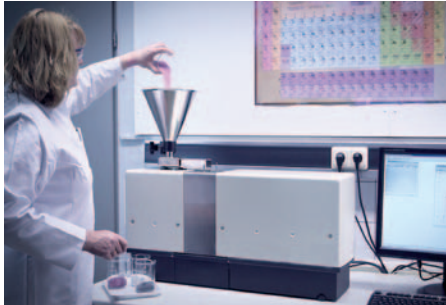
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PFERDMEDIA

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### PFERD quality

PFERD fine grinding and finishing products are developed, manufactured and tested according to the highest quality standards.

Research and development, our own machine and plant construction, as well as the continuous testing and further development of the quality and safety standards in our own laboratories guarantee the high PFERD quality.

PFERD quality management is certified according to ISO 9001.

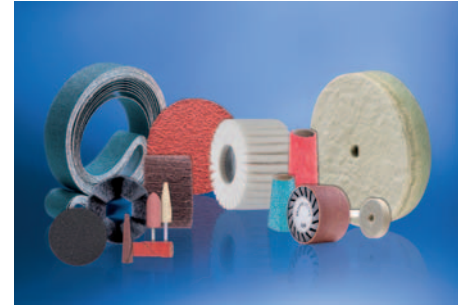


### Technical customer support

If you have any questions about the optimization of your grinding task or about solving specific application problems, our sales representatives and technical advisors will be happy to help you. Please contact us!

**Canada Phone:** (905) 501-1555  
**Toll-Free:** (866) 245-1555  
**USA Phone:** (262) 255-3200  
**Toll-Free:** (800) 342-9015

You can find our worldwide sales offices at: [www.pferd.com](http://www.pferd.com)



### Products made to order

If you cannot find the solution for your particular application in our comprehensive product range, we produce fine grinding and finishing products of premium PFERD quality on request, tailor-made to meet the requirements of your job.

We take account of your requirements and wishes, drawings, information on dimensions and shapes, grit sizes and grain types, grain mixes and shank diameters and lengths. Please contact our sales representatives! We will be happy to advise you.



### PFERD packaging

PFERD supplies fine grinding and finishing products in sturdy industrial packaging that protects the products from damage. For packaging units (PU), please refer to the product tables. Important information, such as article number, description, EDP number and technical information can be found on the packaging labels.



### PFERD TOOL-CENTER

On the PFERD TOOL-CENTER of your local retailer, you will find all the important information required for selecting the most appropriate products. The PFERD information and symbol cards contain important tips about products and applications.



### PFERD PRAXIS

PFERD PRAXIS brochures contain much valuable information on material properties, as well as tips on the use of PFERD products.



#### PFERDMEDIA

For more information, please visit [pferdusa.com/catalog204](http://pferdusa.com/catalog204)

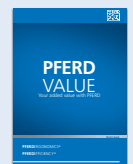
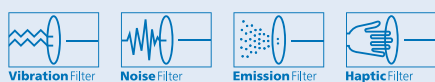
### PFERDVALUE® – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD products offer measurable added value.

Discover **PFERDERGONOMICS®** and **PFERDEFFICIENCY®**

As part of **PFERDERGONOMICS®**, PFERD offers ergonomically optimized products and power tools that contribute to greater safety and working comfort, and thus to health protection.

As part of **PFERDEFFICIENCY®**, PFERD offers innovative, high-performance product solutions and power tools with outstanding added value.





























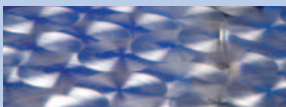








#### PFERDMEDIA

For more information, a complete brochure is available. Please visit [pferdusa.com/pferdvalue](http://pferdusa.com/pferdvalue) to request a free copy or to download a pdf version.



# Fine grinding and finishing products

## Your quick product selection guide



| Type of operation  | Disc applications<br>abrasive discs/non-woven discs  |             | Belt grinding<br>products for belt grinders   |       |
|--|--|-------------|---|-------|
|  | Disc applications  | Page        | Disc applications   | Page  |
| <b>Modification of workpiece geometry</b><br>           |  COMBIDISC®<br>■ Abrasive discs<br>■ Diamond abrasive discs | 26-29<br>30 |  COMBICLICK®<br>fibre discs          | 9-12  |
|  |  COMBIDISC®<br>mini fibre discs                             | 29          |  Fibre discs                         | 17-21 |
|  |  COMBIDISC®<br>Mini-POLIFAN®                                | 25          |  PSA discs                           | 22    |
| <b>Multi-step fine grinding, reducing roughness</b><br> |  COMBIDISC®<br>■ Abrasive discs<br>■ Diamond abrasive discs | 26-29<br>30 |  COMBICLICK®<br>fibre discs          | 9-12  |
|  |  COMBIDISC® PNER<br>unitized discs                          | 32          |  Fibre discs                         | 17-21 |
|  |  PSA discs   | 22          |   |       |
| <b>Fine grinding<br/>Ultra fine grinding</b><br>      |  COMBIDISC®<br>abrasive discs                             | 26-29       |  COMBICLICK®<br>fibre discs        | 9-12  |
|  |  COMBIDISC® PNER<br>unitized discs                        | 32          |  POLIVLIES®<br>flap discs          | 88    |
|  |  Fibre discs  | 17-21       |   |       |
| <b>Cleaning</b><br>                                   |  COMBIDISC®<br>non-woven discs                            | 31          |  COMBIDISC® PNER<br>unitized discs | 32    |
|  |  COMBIDISC®-<br>POLICLEAN® discs                          | 30          |  POLIVLIES®<br>hook and loop discs | 89    |
|  |  COMBIDISC®<br>brushes                                    | 33          |  POLICLEAN®<br>discs               | 92    |
| <b>Creation of visual surface effects</b><br>         |  COMBIDISC®<br>non-woven discs                            | 31          |  POLIVLIES®<br>hook and loop discs | 89    |
|  |  COMBIDISC® PNER<br>unitized discs                        | 32          |  POLIVLIES®<br>flap discs          | 88    |
| <b>Polishing</b><br>                                  |  COMBIDISC®<br>felt discs                                 | 33          |  POLINOX® PNER<br>unitized discs   | 76    |
|  |  COMBIDISC® PNER<br>unitized discs                        | 32          |   |       |



| Peripheral grinding<br>mounted/unmounted products                                   |  |                | Manual grinding   |                               |       |
|---|--|----------------|---|-------------------------------|-------|
|   |  | Page           |   |                               | Page  |
|    | Abrasive spiral bands                    | 51-53          |   |                               |       |
|    | POLIROLL cartridge rolls                 | 54-55          |   |                               |       |
|    | POLICAP® abrasive caps                   | 56-61          |   |                               |       |
|    | Abrasive spiral bands                    | 51-53          |      | Flap drums                    | 68    |
|    | POLIROLL POLICAP®                        | 54-55<br>56-61 |      | POLISTAR                      | 70-71 |
|   | Flap wheels for angle grinders           | 62-68<br>68    |   |                               |       |
|  | Poliflex® fine grinding points           | 93-97          |   |                               |       |
|  | POLINOX® PNER unitized wheels            | 73-75          |      | Abrasive sheets               | 47    |
|  | POLINOX® PNK convolute wheels            | 77-78          |    | Screen rolls                  | 50    |
|  | POLINOX® non-woven mounted flap wheels   | 80-81          |    | POLINOX® grinding drums       | 86-87 |
|  | POLINOX® non-woven unmounted flap wheels | 83-85          |    | POLICLEAN® wheels             | 91    |
|  | POLINOX® cross buffs                     | 82             |    | POLICLEAN® mounted products   | 92    |
|  | POLINOX® non-woven mounted flap wheels   | 80-81          |    | POLIFLAP® wheel               | 69    |
|  | POLINOX® non-woven unmounted flap wheels | 83-85          |    | POLINOX® PNER unitized wheels | 73-75 |
|  | POLINOX® grinding drums                  | 86-87          |    | POLINOX® PNK convolute wheels | 77-78 |
|  | Felt points                              | 99-100         |    | Flap drums                    | 68    |
|  | Felt wheels                              | 101            |    | Cloth rings                   | 102   |
|   |  |                |    | POLINOX® PNER unitized wheels | 73-75 |
|   |  |                |    | POLINOX® PNK convolute wheels | 77-78 |
|   |  |                |    | Diamond polishing pastes      | 103   |
|   |  |                |  | Grinding compounds            | 104   |
|   |  |                |    | Polishing paste bars          | 104   |

# Fine grinding and finishing products

## Surface roughness – influencing factors and reference values

### Factors influencing the surface roughness

#### Abrasives

- The coarser the grit, the rougher the surface achieved.
- Aluminum oxide, ceramic oxide grain and zirconia alumina achieve similar degrees of surface roughness.
- Workpieces that are machined with silicon carbide display a slightly finer surface finish.

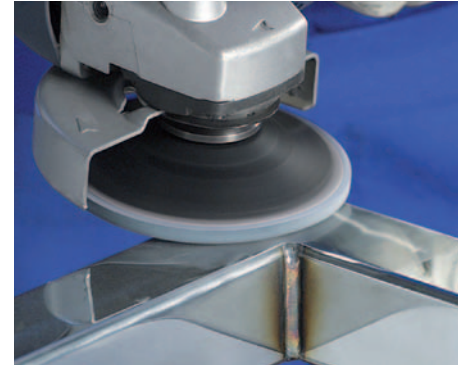
#### Material to be machined

- The softer the material to be machined, the coarser the surface produced when using the same grit size.

- By adding grease or lubricant, a slightly finer surface finish is achieved.

#### Machining parameters

- The relationship between cutting speed and feed rate has the following effects:
  - By increasing the cutting speed, the surface quality is slightly improved.
  - By reducing the feed rate, the surface quality becomes slightly finer.
- The contact pressure has only a very slight effect on the surface roughness.



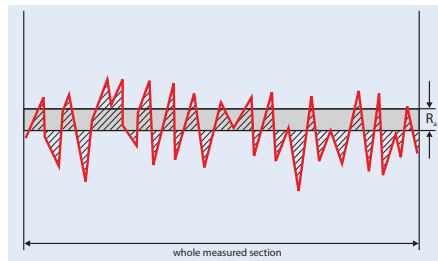
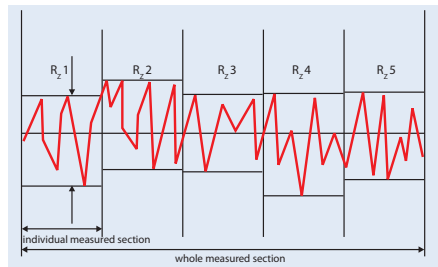
### A distinction is made between the following degrees of surface roughness

The **individual surface roughness**  $R_{z1}$  is the sum of the height of the largest profile peak and the depth of the largest profile trough within an individual measured section.

The **surface roughness**  $R_z$  is the average of the individual surface roughness figures ( $R_{z1}$ ) for consecutive individual measured sections.

The **surface roughness**  $R_{max}$  is the highest individual surface roughness within the whole measured section.

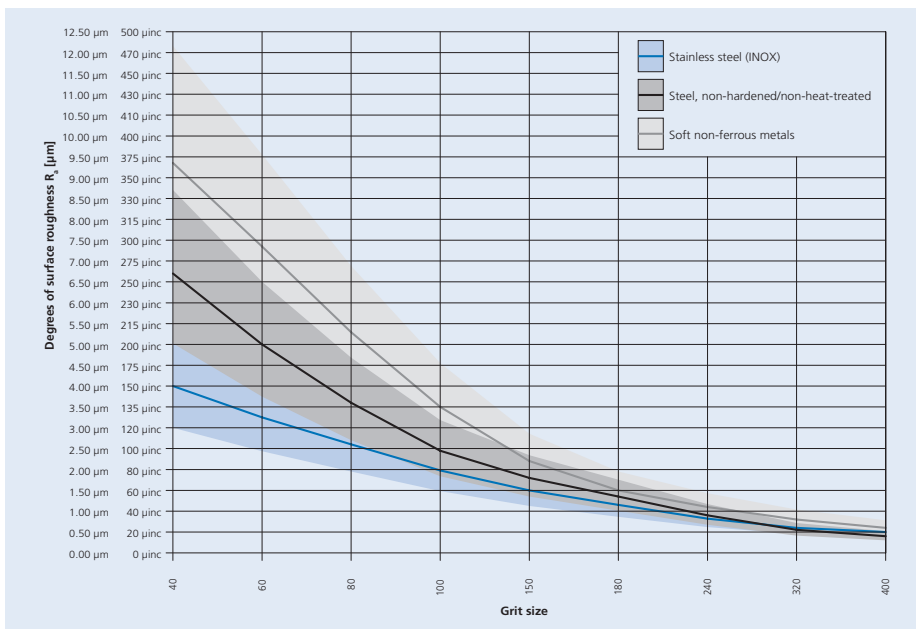
The **mean surface roughness**  $R_a$  is the arithmetic mean of the figures for all the profile values of the roughness profile.



### Guide values for degrees of surface roughness with different machining applications

| Application   | Surface roughness  |
|---|--|
| Coarse grinding:<br>Grit sizes<br>24 to 150                       | $R_a = 0.70$ to $12 \mu\text{m}$<br>$25$ to $470 \mu\text{in}$ |
| Fine grinding:<br>Grit sizes<br>180 to 400                        | $R_a = 0.20$ to $0.70 \mu\text{m}$<br>$8$ to $25 \mu\text{in}$ |
| Polishing:<br>Step 1:   | $R_a = 0.10$ to $0.20 \mu\text{m}$<br>$4$ to $8 \mu\text{in}$  |
| Step 2:   | $R_a = 0.04$ to $0.10 \mu\text{m}$<br>$2$ to $4 \mu\text{in}$  |
| Step 3:   | $R_a < 0.01 \mu\text{m}$<br>$< 1 \mu\text{in}$                 |
| Texturing:<br>Surfaces<br>2G 80 to 2G 320                         | $R_a = 0.20$ to $0.70 \mu\text{m}$<br>$8$ to $25 \mu\text{in}$ |
| Satin finishing/<br>matt finishing:<br>With non-woven<br>material | $R_a = 0.10$ to $0.70 \mu\text{m}$<br>$4$ to $25 \mu\text{in}$ |

### Surface roughness of various materials following machining using coated abrasives



PFERD provides a wide range of products using coated abrasives for machining different workpiece geometries and materials:

- COMBICLICK® fibre discs
- Fibre discs
- COMBIDISC® quick-change abrasive discs
- Abrasive spiral bands and abrasive belts
- Mounted and unmounted flap wheels
- Abrasive sheets and shop rolls
- POLIROLL cartridge rolls
- Hook & loop abrasive discs/self-adhesive discs

Other PFERD products made of coated abrasives can be found in our "Grinding wheels, flap discs and cut-off wheels" catalogue (section 206).

Coated abrasives can be used for wet or dry grinding.

### 1 Backing material

The bond and the abrasive grain are fixed to the backing material. The selection of backing materials available differs in terms of properties such as tensile strength, flexibility and wear. By selecting the appropriate backing, the grinding product is adapted to the demands of the intended application. The PFERD range is divided into three groups:

#### Paper

The main applications for coated abrasives with paper backing are in the wood-processing industry and small trade (carpenters, painters, lacquerers etc.). Coated abrasives with paper backing are not widely used in industrial metal processing.

Papers with a mass per unit area of 70 - 100 g/m<sup>2</sup> are generally used to make abrasives for manual grinding. The heavier papers are used to manufacture abrasives for narrow and wide belts used in machine applications.

#### Cloth

Coated abrasives with cloth backing are mainly used in the metal-processing industry.

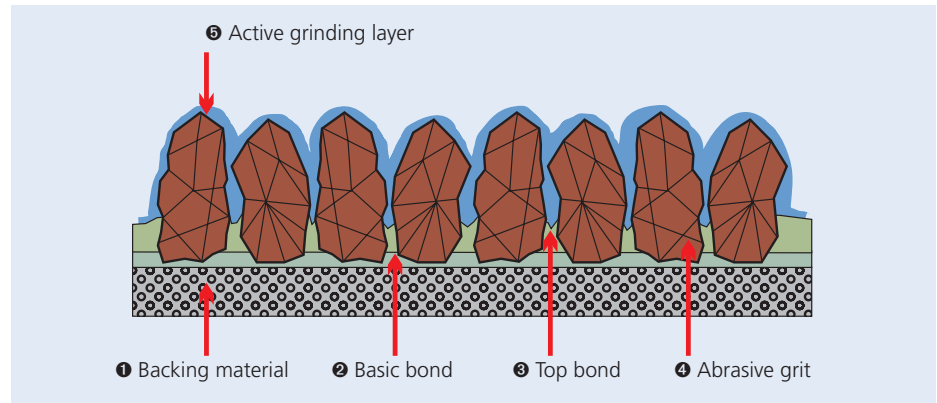
#### Vulcanized fibre

Vulcanized fibre in different strengths, adapted for each machining application, is mainly used in the production of fibre discs. Vulcanized fibre provides an extremely strong, robust backing and is extremely wear-resistant.

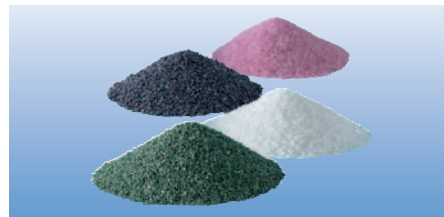
### Bond

Different resin bonds are used in the manufacture of coated abrasives for anchoring the abrasive grain to the backing. First of all, the backing material is coated with the basic bond (2). Then the abrasive grain is strewn evenly across the surface and aligned in special procedures to achieve higher aggressiveness. The abrasive grain is then anchored firmly with the top bond (3), which also protects the abrasive grain against the forces and loads resulting from the grinding process.

### Structure of coated abrasives



### 4 Abrasive grain



Choosing the correct abrasive grain strongly influences the surface quality and cost-effectiveness.

The standard materials used to make abrasive grain are:

#### Aluminum oxide A

Many types of aluminum oxide are used as abrasives. They can be used in their fused or sintered forms. Their hardness and toughness (grades) can be influenced using special manufacturing methods or additives. Normal aluminum oxides with a "sharp-edged" grit shape are mainly used in the production of coated abrasives.

#### Ceramic oxide grain CO

Sintered aluminum oxides are divided into sintered bauxite aluminum oxides and sol-gel aluminum oxides. Sol-gel aluminum oxides are mainly used as ceramic grit for coated abrasives. This highly modern abrasive is used in many applications due to its high level of toughness and good self-sharpening property.

#### Zirconia alumina Z

Zirconia alumina is a fused mixture of aluminum oxide and zirconium oxide. While zirconia alumina is not as hard as aluminum oxides, it is tougher. The high proportion of zirconium oxide gives the zirconia alumina grain an exceptionally effective self-sharpening effect, contributing to excellent stock removal with cool grinding and a long service life.

#### Silicon carbide SiC

Silicon carbide is a synthetically produced abrasive grain, which is very sharp-edged, not particularly tough, but very hard. It is recommended for work on titanium, aluminum, bronze, stone and plastic.

### Diamond grain

Diamond abrasive grain is the hardest abrasive. It consists of pure carbon in crystalline arrangement. For grinding products, the diamonds used are generally produced synthetically at very high temperatures and under high pressure. The properties of the diamond abrasive grain can be adapted to use in the grinding product through various synthesis conditions.

### Grit sizes

The different grit sizes for coated abrasives are defined in ISO 6344 and have been adopted in the FEPA standards:

- Coarse: P 80 – 60 – 50 – 40 – 36 – 24 – 20 – 16 – 12
- Medium: P 280 – 240 – 220 – 180 – 150 – 120 – 100
- Fine: P 600 – 500 – 400 – 360 – 320
- Superfine: P 1500 – 1200 – 1000 – 800

### 5 Active grinding layer

The use of an active grinding layer significantly increases stock removal and reduces the workpiece temperature. This is a particular advantage in the case of materials which do not conduct heat well, such as stainless steel (INOX). PFERD products with an active grinding layer are identified with the addition of "COOL" in the description.



The patented cooling and quick-mounting system from PFERD is designed for use with fibre, non-woven and felt discs.

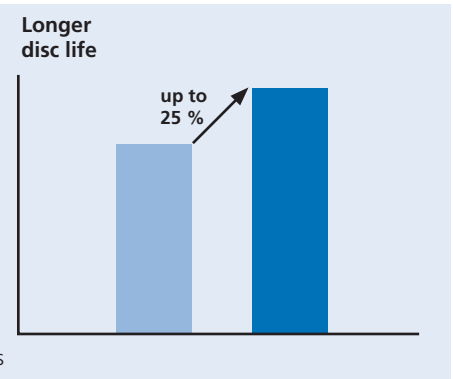
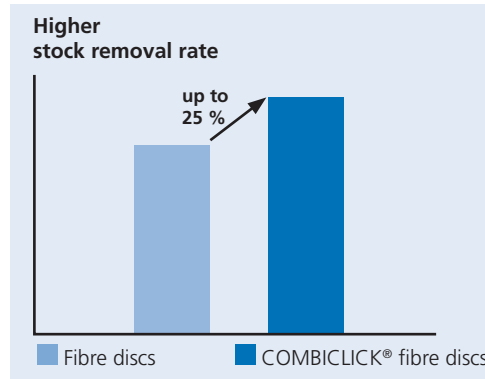
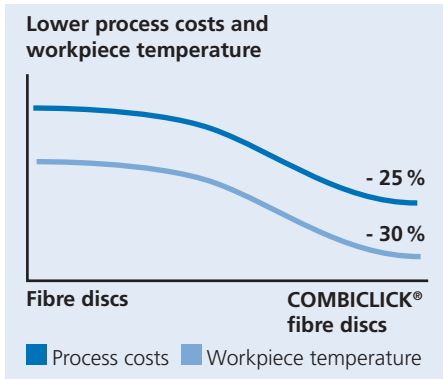
The COMBICLICK® system consists of a specially developed backing pad and a rugged mounting system at the back of the disc. The backing pad allows COMBICLICK® discs to be used on most available angle grinders.

The special geometry of the cooling slots ensures a high throughput of air, thus

significantly reducing the thermal load on the abrasive material and workpiece.

The quick-mounting system, rugged fixture, secure attachment of the disc and optimized cooling system help to provide

- up to 30 % lower workpiece temperature,
- up to 25 % increased stock removal,
- up to 30 % longer disc life and improved utilization of the abrasive.



## Advantages

### System



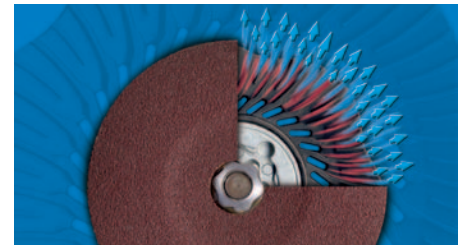
Very easy and comfortable to use.

### Mounting principle



Extremely fast and easy disc change reduces process costs.

### Cooling effect



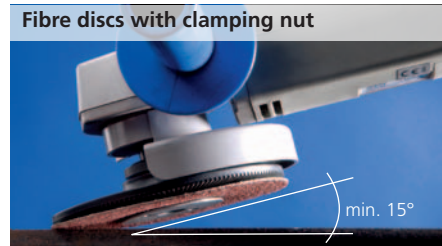
Very good cooling of disc and workpiece.

### Flexible grinding

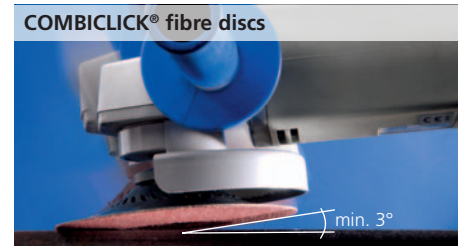


Soft and particularly flexible grinding performance in face-down grinding.

### COMBICLICK® allows very flat use!



With COMBICLICK®, scratches caused by prominent clamping parts are prevented and very high utilization of the available abrasive is attained.



**PFERDERGONOMICS®** recommends COMBICLICK® as an innovative solution to sustainably reduce vibration, noise and dust levels produced in the workplace, and to improve working comfort.



**PFEREFFICIENCY®** recommends COMBICLICK® for long, fatigue-free and resource saving work, with perfect results in the shortest possible time. The patented quick-mounting system reduces disc change and setup times.



### PFERDMEDIA

To see it in action, please visit [pferdusa.com/vcombiclick](http://pferdusa.com/vcombiclick)

The extensive range of COMBICLICK® fibre discs provides the optimum product for any machining application from coarse to fine grinding. PFERD provides COMBICLICK® fibre discs with various

- grit sizes,
- abrasives and
- dimensions.

### Advantages

- Long disc life.
- Uniform grinding pattern.
- Very high stock removal.
- High flexibility.
- Very good grain adhesion.

### Application examples

- Working on weld seams.
- Deburring of steel components.
- Rough grinding work.
- Fine grinding of stainless steel (INOX) components.
- Removal of mill and casting skins.
- Working on narrow, hard-to-reach areas (e.g. cooling ribs).

### Recommendation for use

Use COMBICLICK® fibre discs in combination with the COMBICLICK® backing pad on most available angle grinders.

### Safety notes

- The maximum permitted peripheral speed is 15,800 SFPM.
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



= Wear eye protection!



= Wear a dust mask!



= Wear hearing protection!



= Only use with backing pad!



= Please read the safety instructions!



= Read the Safety Data Sheets (SDS) before using any materials!



= Not permitted for wet grinding!

### Ordering note

Please order COMBICLICK® backing pad separately. More detailed information and ordering data for backing pads can be found on page 16.



### Dust warning

Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.

### The fast way to the best disc

| Workpiece material ▼      |   | Abrasives ▶   | Alum. oxide A | Alum. oxide A-COOL | Zirconia alum. Z | Zirconia alum. Z-COOL | Ceramic oxide CO | Ceramic oxide CO-COOL | Silicon carbide SiC |
|---------------------------|---|---|---------------|--------------------|------------------|-----------------------|------------------|-----------------------|---------------------|
| Steel, cast steel         | Non-hardened, non-heat-treated steels       | Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel                           | ●             |                    | ○                |                       | ●                |                       |                     |
|                           | Hardened, heat-treated steels               | Tool steels, tempering steels, alloyed steels, cast steel   | ○             |                    | ●                |                       | ●                |                       |                     |
| Stainless steel (INOX)    | Rust- and acid-resistant steels             | Austenitic and ferritic stainless steels  |               | ●                  | ○                | ●                     |                  | ●                     |                     |
| Non-ferrous metals        | Soft non-ferrous metals, non-ferrous metals | Soft aluminum alloys  | ○             | ●                  |                  | ○                     |                  | ○                     |                     |
|                           |   | Brass, copper, zinc   | ●             |                    | ○                |                       | ○                |                       |                     |
|                           | Hard non-ferrous metals                     | Hard aluminum alloys  | ●             |                    | ○                |                       | ○                |                       | ○                   |
|                           |   | Bronze, titanium  |               |                    | ○                | ●                     | ○                | ●                     | ●                   |
|                           | High-temperature-resistant materials        | Nickel- and cobalt-based alloys   |               |                    | ○                | ●                     | ○                | ●                     |                     |
| Cast iron                 | Grey cast iron, white cast iron             | Cast iron with flake graphite, with nodular graphite cast iron, white annealed cast iron, black cast iron | ●             |                    | ○                |                       | ●                |                       |                     |
| Plastics, other materials |   | Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint   | ●             |                    |                  |                       |                  |                       | ●                   |

● = highly recommended

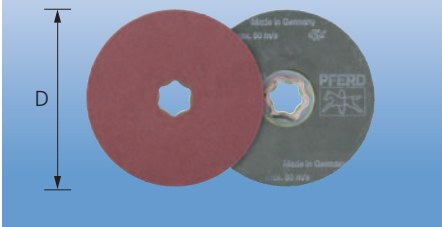
○ = recommended

# COMBICLICK® fibre discs

Aluminum oxide A, zirconia alumina, ceramic oxide CO



## COMBICLICK® fibre discs Aluminum oxide A type



For general-purpose grinding, from coarse to fine, in diverse applications (industry, trades, DIY).

**Abrasive: Aluminum oxide A**

**Workpiece materials**

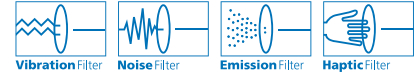
Steel, non-ferrous metals, cast iron and plastics

**Ordering note**

Please order COMBICLICK® backing pad separately on page 16.

**PFERD specification number**  
CC-FS A

**PFERDERGONOMICS®**

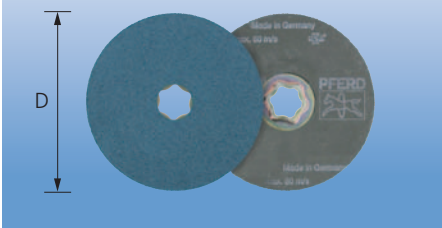


**PFERDEFFICIENCY®**



| Diameter (D)<br>[Inches] | Grit and EDP number |       |       |       |       |       | Max. RPM |    |
|--------------------------|---------------------|-------|-------|-------|-------|-------|----------|----|
|                          | 24                  | 36    | 50    | 60    | 80    | 120   |          |    |
| 4                        | -                   | 40085 | 40086 | 40087 | 40088 | 40089 | 15,300   | 25 |
| 4-1/2                    | 40091               | 40092 | 40093 | 40094 | 40095 | 40097 | 13,300   | 25 |
| 5                        | 40099               | 40100 | 40101 | 40102 | 40103 | 40105 | 12,200   | 25 |
| 7                        | 40115               | 40116 | 40117 | 40118 | 40119 | 40121 | 8,500    | 25 |

## COMBICLICK® fibre discs Zirconia alumina Z type



Designed for coarse grinding and high stock removal, with an extended service life.

Zirconia alumina is a high-performance abrasive which delivers best results on high-powered angle grinders at increased contact pressure.

**Abrasive: Zirconia alumina Z**

**Workpiece material**

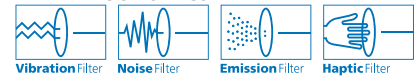
Hardened, heat-treated steels

**Ordering note**

Please order COMBICLICK® backing pad separately on page 16.

**PFERD specification number**  
CC-FS Z

**PFERDERGONOMICS®**

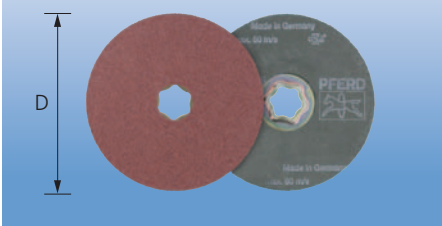


**PFERDEFFICIENCY®**



| Diameter (D)<br>[Inches] | Grit and EDP number |       |       |       |       |       | Max. RPM |    |
|--------------------------|---------------------|-------|-------|-------|-------|-------|----------|----|
|                          | 24                  | 36    | 50    | 60    | 80    | 120   |          |    |
| 4-1/2                    | -                   | 40131 | 40132 | 40133 | 40134 | 40136 | 13,300   | 25 |
| 5                        | 40137               | 40138 | 40139 | 40140 | 40141 | 40143 | 12,200   | 25 |
| 7                        | 40151               | 40152 | 40153 | 40154 | 40155 | 40157 | 8,500    | 25 |

## COMBICLICK® fibre discs Ceramic oxide CO



For aggressive grinding achieving maximum stock removal rates. Nevertheless, these fibre discs attain a very long service life.

Their ceramic grain is particularly well suited for working on hard materials and coatings. To be used preferably with high-powered angle grinders.

**Abrasive: Ceramic oxide CO**

**Workpiece materials**

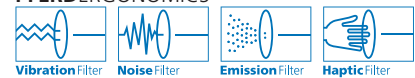
Steel and cast iron

**Ordering note**

Please order COMBICLICK® backing pad separately on page 16.

**PFERD specification number**  
CC-FS CO

**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



| Diameter (D)<br>[Inches] | Grit and EDP number |       |       |       |       |       | Max. RPM |    |
|--------------------------|---------------------|-------|-------|-------|-------|-------|----------|----|
|                          | 24                  | 36    | 50    | 60    | 80    | 120   |          |    |
| 4-1/2                    | 40697               | 40698 | 40699 | 40700 | 40701 | 40703 | 13,300   | 25 |
| 5                        | 40704               | 40705 | 40706 | 40707 | 40708 | 40710 | 12,200   | 25 |
| 7                        | 40718               | 40719 | 40720 | 40721 | 40722 | 40724 | 8,500    | 25 |

For general-purpose grinding, from coarse to ultra-fine, on poor heat-conducting materials.

Active additives in the coating ensure substantially increased stock removal while preventing loading and heat build-up in the workpiece.

**Abrasive: Aluminum oxide A-COOL (top-sized)**

**Workpiece materials**  
Steel and soft aluminum

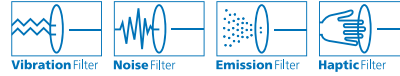
**Ordering note**

Please order COMBICLICK® backing pad separately on page 16.

**PFERD specification number**

CC-FS A-COOL

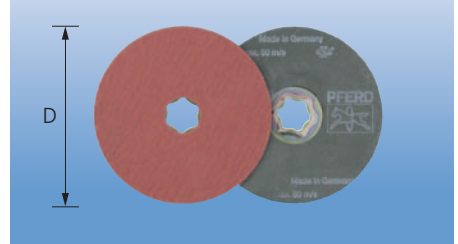
**PFERDERGONOMICS®**




**PFERDEFFICIENCY®**



**COMBICLICK® fibre discs  
Aluminum oxide A-COOL**



| Diameter (D)<br>[Inches] | Grit and EDP number |       |       |       |       |       |       | Max. RPM |  |
|--------------------------|---------------------|-------|-------|-------|-------|-------|-------|----------|---|
|                          | 50                  | 60    | 80    | 120   | 150   | 180   | 220   |          |   |
| 4-1/2                    | -                   | 40302 | 40303 | 40305 | 40306 | -     | 40308 | 13,300   | 25  |
| 5                        | 40310               | 40311 | 40312 | 40314 | 40315 | 40316 | 40317 | 12,200   | 25  |
| 7                        | 40328               | 40329 | 40330 | 40332 | 40333 | 40334 | 40335 | 8,500    | 25  |

For coarse but cool grinding at high stock removal rates. Zirconia alumina is a high-performance abrasive which delivers best results on powerful angle grinders at increased contact pressure.

Active additives in the coating ensure substantially improved stock removal and a reduced thermal load on poor heat conducting materials.

**Abrasive: Zirconia alumina Z-COOL (top-sized)**

**Workpiece materials**  
Stainless steel (INOX), bronze, titanium and nickel- and cobalt-based alloys

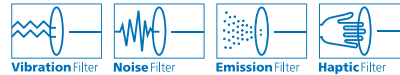
**Ordering note**

Please order COMBICLICK® backing pad separately on page 16.

**PFERD specification number**

CC-FS Z-COOL

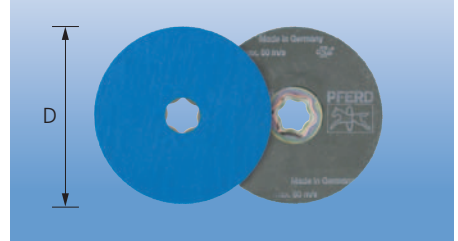
**PFERDERGONOMICS®**




**PFERDEFFICIENCY®**



**COMBICLICK® fibre discs  
Zirconia alumina Z-COOL**



| Diameter (D)<br>[Inches] | Grit and EDP number |       |       |       | Max. RPM |  |
|--------------------------|---------------------|-------|-------|-------|----------|---|
|                          | 36                  | 50    | 60    | 80    |          |   |
| 5                        | 40170               | 40171 | 40172 | 40173 | 12,200   | 25  |
| 7                        | 40188               | 40189 | 40190 | 40191 | 8,500    | 25  |

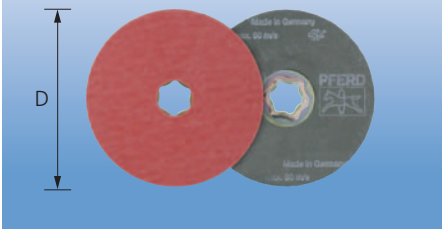


# COMBICLICK® fibre discs

Ceramic oxide CO-COOL, silicon carbide SiC



## COMBICLICK® fibre discs Ceramic oxide CO-COOL



For aggressive grinding achieving maximum stock removal on hard, poor heat conducting materials.

Active additives in the coating ensure a substantially improved abrasive performance while preventing loading and reducing heat build-up in the workpiece.

**Abrasive: Ceramic oxide CO-COOL (top-sized)**

### Workpiece materials

Stainless steel (INOX), titanium and nickel- and cobalt-based alloys

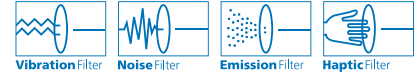
### Ordering note

Please order COMBICLICK® backing pad separately on page 16.

### PFERD specification number

CC-FS CO-COOL

### PFERDERGONOMICS®



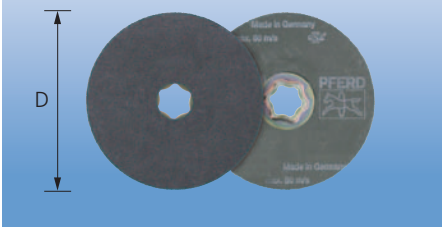
### PFERDEFFICIENCY®



| Diameter (D)<br>[Inches] | Grit and EDP number |       |       |       |       |       | Max. RPM |    |
|--------------------------|---------------------|-------|-------|-------|-------|-------|----------|----|
|                          | 24                  | 36    | 50    | 60    | 80    | 120   |          |    |
| 4                        | -                   | 40691 | 40692 | 40693 | 40694 | 40696 | 15,300   | 25 |
| 4-1/2                    | 40725               | 40726 | 40727 | 40728 | 40729 | 40731 | 13,300   | 25 |
| 5                        | 40732               | 40733 | 40734 | 40735 | 40736 | 40738 | 12,200   | 25 |
| 7                        | 40746               | 40747 | 40748 | 40749 | 40750 | 40752 | 8,500    | 25 |

## COMBICLICK® fibre discs Silicon carbide SiC

**NEW**



The silicon carbide SiC type is for working on aluminum, copper, bronze, titanium, high-alloy steels and fibre reinforced plastics.

Particularly recommended for use on titanium alloys.

The disc of choice in the aircraft industry, specifically where SiC is the only approved abrasive product for use on engine components.

**Abrasive: Silicon carbide SiC**

### Workpiece materials

Titanium and plastics

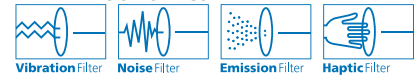
### Ordering note

Please order COMBICLICK® backing pad separately on page 16.

### PFERD specification number

CC-FS SiC

### PFERDERGONOMICS®



### PFERDEFFICIENCY®



| Diameter (D)<br>[Inches] | Grit and EDP number |       |       |       | Max. RPM |    |
|--------------------------|---------------------|-------|-------|-------|----------|----|
|                          | 36                  | 60    | 80    | 120   |          |    |
| 4-1/2                    | 40021               | 40022 | 40023 | 40024 | 13,300   | 25 |
| 5                        | 40028               | 40029 | 40030 | 40031 | 12,200   | 25 |





PFERD provides COMBICLICK® non-woven discs in the following types:

- PNER unitized
- VRH (hard) and
- VRW (soft).

COMBICLICK® non-woven discs are used in face-down grinding on variable speed angle grinders.

### Recommendation for use

Use COMBICLICK® non-woven discs in combination with the COMBICLICK® backing pad on variable speed angle grinders.

### Ordering note

Please order COMBICLICK® backing pad separately on page 16.

COMBICLICK® unitized discs achieve a very fine, uniform surface finish which, depending on requirements, is a sufficient preparation for high-gloss polishing. Recommended for work on large surfaces on components made of stainless steel (INOX).

**Abrasive: Aluminum oxide A  
Silicon carbide SiC**

### Ordering note

The different thicknesses/hardnesses of the non-woven material are colour-coded:

- (W) soft = grey
- (MW) medium-soft = light blue
- (MH) medium-hard = dark blue
- (H) hard = red

For more information about unitized products see page 73.

### Safety notes

For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.

- = Wear eye protection!
- = Wear a dust mask!
- = Wear hearing protection!
- = Only use with backing pad!
- = Please read the safety instructions!
- = Not permitted for wet grinding!



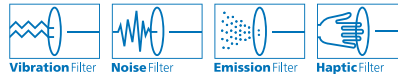
### Recommendation for use

COMBICLICK® unitized discs PNER type achieve their best performance at a recommended peripheral speed of 3,000 - 6,900 SFPM.

### PFERD specification number

- CC-PNER W
- CC-PNER MW
- CC-PNER MH
- CC-PNER H

### PFERDERGONOMICS®



### PFERDEFFICIENCY®



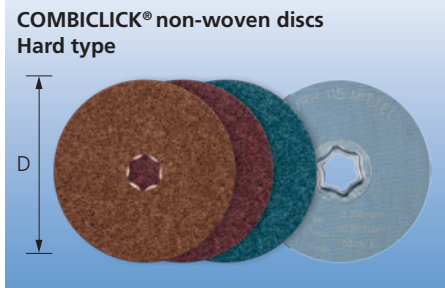
### COMBICLICK® unitized discs PNER type



| Diameter (D) [Inches] | Abrasive        | Grit size | Density          | Spec. | EDP number | Recom. speed RPM | Max. RPM |   |
|-----------------------|-----------------|-----------|------------------|-------|------------|------------------|----------|---|
| 4                     | Silicon carbide | fine      | soft (W)         | 2SF   | 48140      | 5,700            | 9,550    | 5 |
| 4                     | Silicon carbide | fine      | medium-soft (MW) | 3SF   | 48142      | 5,700            | 9,550    | 5 |
| 4                     | Silicon carbide | fine      | medium-hard (MH) | 6SF   | 48144      | 5,700            | 9,550    | 5 |
| 4                     | Aluminum oxide  | fine      | hard (H)         | 8AM   | 48146      | 5,700            | 9,550    | 5 |
| 4-1/2                 | Silicon carbide | fine      | soft (W)         | 2SF   | 48150      | 5,000            | 8,350    | 5 |
| 4-1/2                 | Silicon carbide | fine      | medium-soft (MW) | 3SF   | 48154      | 5,000            | 8,350    | 5 |
| 4-1/2                 | Silicon carbide | fine      | medium-hard (MH) | 6SF   | 48158      | 5,000            | 8,350    | 5 |
| 4-1/2                 | Aluminum oxide  | fine      | hard (H)         | 8AM   | 48162      | 5,000            | 8,350    | 5 |
| 5                     | Silicon carbide | fine      | soft (W)         | 2SF   | 48166      | 4,500            | 7,650    | 5 |
| 5                     | Silicon carbide | fine      | medium-soft (MW) | 3SF   | 48170      | 4,500            | 7,650    | 5 |
| 5                     | Silicon carbide | fine      | medium-hard (MH) | 6SF   | 48174      | 4,500            | 7,650    | 5 |
| 5                     | Aluminum oxide  | fine      | hard (H)         | 8AM   | 48178      | 4,500            | 7,650    | 5 |

# COMBICLICK® non-woven

## NEW COMBICLICK® non-woven discs



For general work on metal surfaces e.g. removal of rough grinding traces, removal of oxidation and for light deburring work.

### Abrasive: Aluminum oxide A

Available grit sizes:  
Coarse = yellow-brown  
Medium = red-brown  
Very fine = blue

### Application examples

- Removing heat discoloration on components made of stainless steel (INOX).
- Fine-grinding of large surfaces in equipment, tank and pressure vessel constructions.

### Recommendation for use

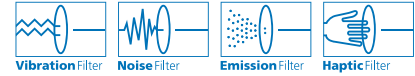
COMBICLICK® non-woven discs hard type achieve their best performance at a

recommended peripheral speed of 3,000 - 4,000 SFPM. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and disc wear.

### PFERD specification number

CC-VRH

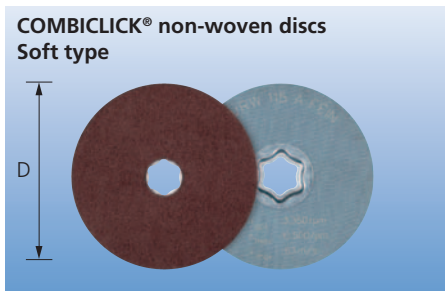
### PFERDERGONOMICS®



### PFERDEFFICIENCY®



| Diameter (D)<br>[Inches] | Grit and EDP number |        |           | Recom. speed<br>RPM | Max. RPM |    |
|--------------------------|---------------------|--------|-----------|---------------------|----------|----|
|                          | coarse              | medium | very fine |                     |          |    |
| 4                        | 48094               | 48095  | 48097     | 3,800               | 12,000   | 10 |
| 4-1/2                    | 48100               | 48101  | 48103     | 3,300               | 10,500   | 10 |
| 5                        | 48110               | 48111  | 48113     | 3,100               | 9,650    | 10 |



For very fine grinding of surfaces and contours, as well as cleaning work on metals and painted surfaces. The open structure and high flexibility of the non-woven material prevents clogging of the disc.

### Abrasive: Aluminum oxide A

Available grit sizes:  
100 = medium  
180 = fine  
280 = very fine

### Application examples

- Matt finishing or structuring of components made of stainless steel (INOX).
- Very fine grinding of brass, copper, titanium and aluminum.

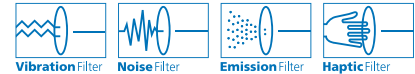
### Recommendation for use

COMBICLICK® non-woven discs soft type achieve their best performance at a recommended peripheral speed of 3,000 - 4,000 SFPM. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and disc wear.

### PFERD specification number

CC-VRW

### PFERDERGONOMICS®



### PFERDEFFICIENCY®



| Diameter (D)<br>[Inches] | Grit and EDP number |       |           | Recom. speed<br>RPM | Max. RPM |    |
|--------------------------|---------------------|-------|-----------|---------------------|----------|----|
|                          | medium              | fine  | very fine |                     |          |    |
| 4                        | 48127               | 48128 | 48129     | 3,800               | 12,000   | 10 |
| 4-1/2                    | 48131               | 48132 | 48133     | 3,300               | 10,500   | 10 |
| 5                        | 48135               | 48136 | 48137     | 3,100               | 9,650    | 10 |



For pre-polishing and high-gloss polishing of medium- to large-sized components, PFERD provides COMBICLICK® felt discs in a range of diameters.

COMBICLICK® felt discs are used with polishing pastes in face-down grinding on variable speed angle grinders.

### Application examples

- High-gloss polishing of stainless steel (INOX) components in chemical plant construction.
- Mirror polishing of large press or injection moulds.







### Recommendations for use

- Felt discs achieve their best performance at a recommended cutting speed of 1,000 - 2,000 SFPM. This provides an ideal compromise between polishing performance, thermal load on the workpiece and disc wear.
- When changing the polishing paste, employ a new, unused felt disc.

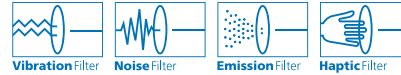
### PFERD specification number CC-FR

### Safety notes

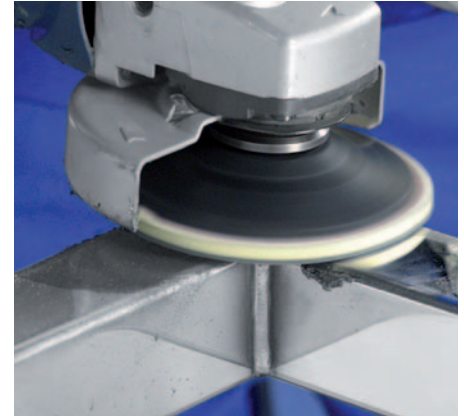
For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.

-  = Wear eye protection!
-  = Wear a dust mask!
-  = Wear hearing protection!
-  = Only use with backing pad!
-  = Please read the safety instructions!
-  = Not permitted for wet grinding!

### PFERDERGONOMICS®



### PFERDEFFICIENCY®




### Ordering note

Please order COMBICLICK® backing pad separately on page 16.

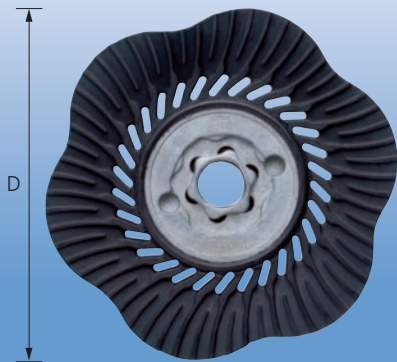
For more information about polishing products see page 98.



| Diameter (D)<br>[Inches] | EDP number | Recom. speed<br>RPM | Max. RPM |  |
|--------------------------|------------|---------------------|----------|---|
| 4                        | 48704      | 1,900               | 12,000   | 5   |
| 4-1/2                    | 48705      | 1,650               | 10,500   | 5   |
| 5                        | 48706      | 1,500               | 9,650    | 5   |



### COMBICLICK® backing pads



This backing pad permits the use of COMBICLICK® discs on all common angle grinders.

The cooling slot geometry ensures a high delivery of air through the backing pad, thus significantly reducing thermal loads on the abrasive material and workpiece.

The patented COMBICLICK® mounting system minimizes disc changing times.

**PFERD specification number**  
CC-GT

#### PFERDERGONOMICS®



#### PFERDEFFICIENCY®



| Disc diameter (D) [Inches] | Thread size | EDP number | Max. RPM |   |
|----------------------------|-------------|------------|----------|---|
| 4                          | 3/8-24      | 69467      | 15,300   | 1 |
| 4                          | M10 x 1.50  | 69468      | 15,300   | 1 |
| 4-1/2 and 5                | 5/8-11      | 69470      | 13,300   | 1 |
| 4-1/2 and 5                | M14 x 2.0   | 69471      | 13,300   | 1 |
| 7                          | 5/8-11      | 69474      | 8,500    | 1 |
| 7                          | M14 x 2.0   | 69475      | 8,500    | 1 |

## NEW COMBICLICK® kits

### COMBICLICK® kits



COMBICLICK® kits offer a convenient way to get started with the system. A wide variety of coated and non-woven materials are included to test performance and surface finish results to help determine the ideal product selections for your applications prior to bulk purchases.

The included discs provide solutions for rough grinding, fine grinding, surface conditioning, prepolish and polishing to a mirror finish.

#### Ordering note

This set ships with a sample quantity (100 grams) of a universal polishing paste. All polishing pastes can be used with the system. Please see page 104 for a complete selection of polishing pastes and grinding compounds.

**PFERD specification number**  
CC-SET

| Disc diameter [Inches] | Thread size | EDP number | Kit contents   |                |   |
|------------------------|-------------|------------|--|----------------|---|
|                        |             |            | Description of included components   | Qty included   |   |
| 4-1/2                  | 5/8-11      | 48192      | Backing pad<br>Ceramic oxide CO-COOL – 36, 120 grits<br>Aluminum oxide A-COOL – 220 grit | 1 ea.<br>3 ea. | 1 |
| 4-1/2                  | M14 x 2.0   | 48193      | Surface conditioning – coarse (100 G), medium (180 M), very fine (240 F)                 | 3 ea.          | 1 |
| 5                      | 5/8-11      | 48194      | Finishing – medium (100), fine (180), very fine (280)<br>Unitized disc – SiC, soft       | 1 ea.<br>1 ea. | 1 |
| 5                      | M14 x 2.0   | 48195      | Felt disc<br>Polishing paste – white, general purpose                                    | 1 ea.<br>1 ea. | 1 |

The extensive range of fibre discs provides the optimum product for any machining application, from coarse to fine grinding. PFERD provides fibre discs with various

- grit sizes,
- abrasives and
- dimensions.

In accordance with ISO 16057, PFERD fibre discs are manufactured in shape A2, type F, and designated "vulcanized fibre discs".

### Advantages

- Long disc life.
- Uniform grinding pattern.
- Very high stock removal.
- High flexibility.
- Very good grain adhesion.

### Application examples

- Machining of weld seams.
- Deburring of steel components.
- Coarse grinding work.
- Fine grinding of stainless steel (INOX) components.
- Removal of mill and casting scale.

### Recommendation for use

Use fibre discs according to ISO 15636 with backing pads on most available angle grinders.

### Safety notes

- The maximum approved peripheral speed is 15,800 SFPM (80 m/s).
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



= Wear eye protection!



= Wear a dust mask!



= Wear hearing protection!



= Only use with backing pad!



= Please read the safety instructions!



= Read the Safety Data Sheets (SDS) before using any materials!



= Not permitted for wet grinding!

### Ordering note

Please order backing pad separately. More detailed information and ordering data for backing pads can be found on page 20 and 21.



### Dust warning

Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.

### The fast way to the best disc

| Workpiece material ▼      |   | Abrasives ▶   | Alum. oxide A | Alum. oxide A-COOL | Zirconia alum. Z | Zirconia alum. Z-COOL | Ceramic oxide CO | Ceramic oxide CO-COOL |
|---------------------------|---|---|---------------|--------------------|------------------|-----------------------|------------------|-----------------------|
| Steel, cast steel         | Non-hardened, non-heat-treated steels       | Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel                           | ●             |                    | ○                |                       | ●                |                       |
|                           | Hardened, heat-treated steels               | Tool steels, tempering steels, alloyed steels, cast steel   | ○             |                    | ●                |                       | ●                |                       |
| Stainless steel (INOX)    | Rust- and acid-resistant steels             | Austenitic and ferritic stainless steels  |               | ●                  | ○                | ●                     |                  | ●                     |
| Non-ferrous metals        | Soft non-ferrous metals, non-ferrous metals | Soft aluminum alloys  | ○             | ●                  |                  | ○                     |                  | ○                     |
|                           |   | Brass, copper, zinc   | ●             |                    | ○                |                       | ○                |                       |
|                           | Hard non-ferrous metals                     | Hard aluminum alloys  | ●             |                    | ○                |                       | ○                |                       |
|                           |   | Bronze, titanium  |               |                    | ○                | ●                     | ○                | ●                     |
|                           | High-temperature-resistant materials        | Nickel- and cobalt-based alloys   |               |                    | ○                | ●                     | ○                | ●                     |
| Cast iron                 | Grey cast iron, white cast iron             | Cast iron with flake graphite, with nodular graphite cast iron, white annealed cast iron, black cast iron | ●             |                    | ○                |                       | ●                |                       |
| Plastics, other materials |   | Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint   | ●             |                    |                  |                       |                  |                       |

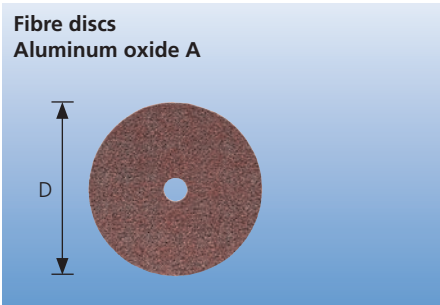
● = highly recommended

○ = recommended

# Fibre discs

## Aluminum oxide A, zirconia alumina Z

### Fibre discs Aluminum oxide A



For general-purpose grinding, from coarse to fine, in diverse applications (industry, trades, DIY).

**Abrasive: Aluminum oxide A**

**Workpiece materials**


Steel, non-ferrous metals, cast iron and plastics

**Ordering note**

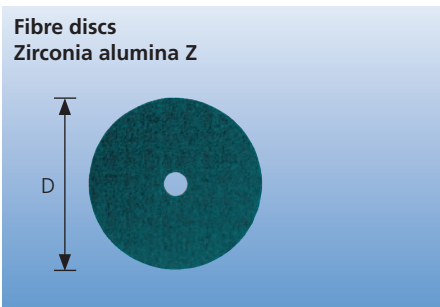
Please order backing pad separately.  
See pages 20-21.

**PFERD specification number**

FS A

| Diameter (D) x arbor hole<br>[Inches] | Grit and EDP number |       |       |       |       |       |       |       | Max.<br>RPM |  |
|---------------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------------|---|
|                                       | 16                  | 24    | 36    | 50    | 60    | 80    | 100   | 120   |             |   |
| 4-1/2 x 7/8                           | 62451               | 62452 | 62453 | 62454 | 62455 | 62456 | 62457 | 62458 | 13,300      | 25  |
| 5 x 7/8                               | 62501               | 62502 | 62503 | 62504 | 62505 | 62506 | 62507 | 62508 | 12,200      | 25  |
| 6 x 7/8                               | 40000               | 40001 | 40002 | 40003 | 40004 | 40005 | 40006 | -     | 10,200      | 25  |
| 7 x 7/8                               | 62701               | 62702 | 62703 | 62704 | 62705 | 62706 | -     | -     | 8,500       | 25  |

### Fibre discs Zirconia alumina Z



Designed for coarse grinding and high stock removal, with an extended service life. Zirconia alumina is a high-performance abrasive which delivers best results on high-powered angle grinders at increased contact pressure.

**Abrasive: Zirconia alumina Z**

**Workpiece material**


Hardened, heat-treated steels

**Ordering note**

Please order backing pad separately.  
See pages 20-21.

**PFERD specification number**

FS Z

| Diameter (D) x arbor hole<br>[Inches] | Grit and EDP number |       |       |       |       | Max. RPM |  |
|---------------------------------------|---------------------|-------|-------|-------|-------|----------|---|
|                                       | 24                  | 36    | 50    | 60    | 80    |          |   |
| 4-1/2 x 7/8                           | 62462               | 62463 | 62464 | 62465 | 62466 | 13,300   | 25  |
| 5 x 7/8                               | 62522               | 62523 | 62524 | 62525 | 62526 | 12,200   | 25  |
| 6 x 7/8                               | 40010               | 40011 | 40012 | 40013 | 40014 | 10,200   | 25  |
| 7 x 7/8                               | 62712               | 62713 | 62714 | 62715 | 62716 | 8,500    | 25  |



For aggressive grinding achieving maximum stock removal rates. While providing a very long service life. Their ceramic grain is particularly well suited for working on hard materials and coatings. For best results, use with high-powered angle grinders.

**Abrasive: Ceramic oxide CO**

**Workpiece materials**

Steel and cast iron

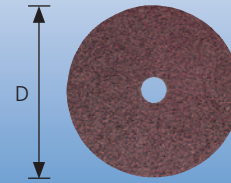
**Ordering note**


Please order backing pad separately. See pages 20-21.

**PFERD specification number**

FS CO

**Fibre discs  
Ceramic oxide CO**



| Diameter (D) x arbor hole<br>[Inches] | Grit and EDP number |       |       |       |       |       | Max. RPM |  |
|---------------------------------------|---------------------|-------|-------|-------|-------|-------|----------|---|
|                                       | 24                  | 36    | 50    | 60    | 80    | 120   |          |   |
| 4-1/2 x 7/8                           | 62410               | 62411 | 62412 | 62413 | 62414 | 62415 | 13,300   | 25  |
| 5 x 7/8                               | 62510               | 62511 | 62512 | 62513 | 62514 | 62515 | 12,200   | 25  |
| 7 x 7/8                               | 62743               | 62744 | 62745 | 62746 | 62747 | 62748 | 8,500    | 25  |

For general-purpose grinding, from coarse to ultra-fine, on poor heat-conducting materials.

Active additives in the coating ensure substantially increased stock removal while preventing loading and heat build-up in the workpiece.

**Abrasive: Aluminum oxide A-COOL  
(top-sized)**

**Workpiece materials**

Steel and soft aluminum

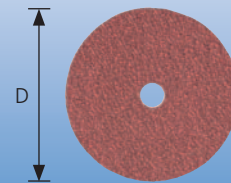
**Ordering note**


Please order backing pad separately. See pages 20-21.

**PFERD specification number**

FS A-COOL

**Fibre discs  
Aluminum oxide A-COOL**

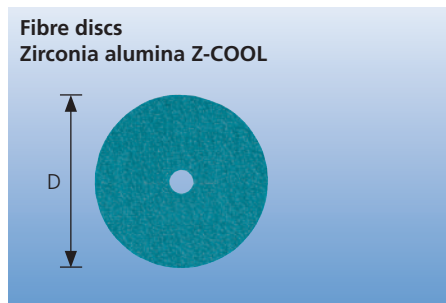


| Diameter (D) x arbor hole<br>[Inches] | Grit and EDP number |       |       |       |       |       |       |       | Max. RPM |  |
|---------------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|----------|---|
|                                       | 50                  | 60    | 80    | 100   | 120   | 150   | 180   | 220   |          |   |
| 4-1/2 x 7/8                           | 40048               | 40049 | 40050 | 40051 | 40052 | 40053 | 40054 | 40055 | 13,300   | 25  |
| 5 x 7/8                               | 40057               | 40058 | 40059 | 40060 | 40061 | 40062 | 40063 | 40064 | 12,200   | 25  |
| 7 x 7/8                               | 40075               | 40076 | 40077 | 40078 | 40079 | 40080 | 40081 | 40082 | 8,500    | 25  |



# Fibre discs

## Zirconia alumina Z-COOL, ceramic oxide CO-COOL



For coarse but cool grinding at high stock removal rates. Zirconia alumina is a high-performance abrasive which delivers best results on powerful angle grinders at increased contact pressure.


Active additives in the coating ensure substantially improved stock removal and a reduced thermal load on poorly heat conducting materials.

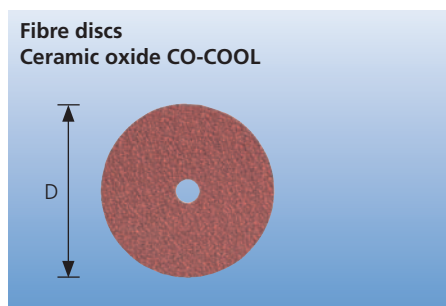
**Abrasive: Zirconia alumina Z-COOL (top-sized)**

**Workpiece materials**  
Stainless steel (INOX), bronze, titanium and nickel- and cobalt-based alloys

**Ordering note**  
Please order backing pad separately. See below and page 21.

**PFERD specification number**  
FS Z-COOL

| Diameter (D) x arbor hole [Inches] | Grit and EDP number |       |       |       | Max. RPM |  |
|------------------------------------|---------------------|-------|-------|-------|----------|---|
|                                    | 36                  | 50    | 60    | 80    |          |   |
| 4-1/2 x 7/8                        | 62468               | 62469 | 62470 | 62471 | 13,300   | 25  |
| 5 x 7/8                            | 62528               | 62529 | 62530 | 62531 | 12,200   | 25  |
| 7 x 7/8                            | 62718               | 62719 | 62720 | 62721 | 8,500    | 25  |




For aggressive grinding achieving maximum stock removal on hard, poor heat conducting materials. Active additives in the coating ensure a substantially improved abrasive performance while preventing loading and reducing heat build-up in the workpiece.

**Abrasive: Ceramic oxide CO-COOL (top-sized)**

**Workpiece materials**  
Stainless steel (INOX), titanium and nickel- and cobalt-based alloys

**Ordering note**  
Please order backing pad separately. See below and page 21.

**PFERD specification number**  
FS CO-COOL

| Diameter (D) x arbor hole [Inches] | Grit and EDP number |       |       |       |       |       | Max. RPM |  |
|------------------------------------|---------------------|-------|-------|-------|-------|-------|----------|---|
|                                    | 24                  | 36    | 50    | 60    | 80    | 120   |          |   |
| 4-1/2 x 7/8                        | 62416               | 62417 | 62418 | 62419 | 62420 | 62421 | 13,300   | 25  |
| 5 x 7/8                            | 62516               | 62517 | 62518 | 62519 | 62520 | 62521 | 12,200   | 25  |
| 6 x 7/8                            | 40271               | 40272 | 40273 | 40274 | -     | -     | 10,200   | 25  |
| 7 x 7/8                            | 62749               | 62750 | 62751 | 62752 | 62753 | 62754 | 8,500    | 25  |


## Backing pads



Backing pads for use with PFERD zirconia and ceramic discs. Plastic air cooled pads present the tough grain to the workpiece with force for maximized disc performance, but minimal pad flexibility. Rib design allows for better cooling, which improves disc life.

**Ordering note**  
Retaining nuts and spanner wrench sold separately.

**PFERD specification number**  
GTP

| Diameter (D) x thread size [Inches] | EDP number | Max. RPM |  |
|-------------------------------------|------------|----------|---|
| 4-1/2 x 7/8                         | 69465      | 20,000   | 1   |
| 5 x 7/8                             | 69530      | 18,000   | 1   |
| 7 x 7/8                             | 69715      | 10,000   | 1   |



Rubber backing pads for use with 7/8" arbor hole fibre discs. Available with a smooth surface or ribbed surface. Rib design allows for better cooling, which improves disc life. These pads are available in three densities. For general purpose grinding, the regular density is recommended.

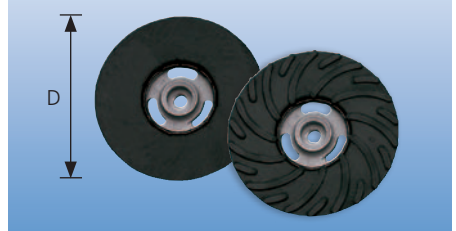
4-1/2" backing pads supplied with 5/8-11 threaded adapter.


### PFERD specification number

GT (Ribbed surface)

GTS (Smooth surface)

### Rubber backing pads for fibre discs Smooth and ribbed surface



| Diameter (D) x thread size<br>[Inches] | Backing density | EDP number     |                | Max. RPM |  |
|--|-----------------|----------------|----------------|----------|---|
|  |                 | Ribbed surface | Smooth surface |          |   |
| 4-1/2 x 5/8-11                         | Regular (R)     | 69455          | 69045          | 11,000   | 1   |
| 5 x 5/8-11                             | Regular (R)     | 69525          | 69050          | 10,000   | 1   |
| 6 x 5/8-11                             | Regular (R)     | 69626          | 69625          | 8,500    | 1   |
| 7 x 5/8-11                             | Flexible (F)    | 69704          | 69074          | 7,000    | 1   |
| 7 x 5/8-11                             | Regular (R)     | 69705          | 69075          | 8,500    | 1   |
| 7 x 5/8-11                             | Hard (H)        | 69706          | 69076          | 8,500    | 1   |


Replacement retaining nuts and spanner wrenches for fibre disc backing pads.

### PFERD specification number

FL-GT (Nut)

### Spare retaining nuts & spanner wrench



| Description    | Grinder size | EDP number |  |
|----------------|--------------|------------|---|
| 5/8-11 nut     | (4-5)        | 69107      | 1   |
| 5/8-11 nut     | (7-9)        | 69108      | 1   |
| 3/8-24 nut     | (4-1/2)      | 69113      | 1   |
| Spanner wrench | -            | 69115      | 1   |



# PSA discs

## Aluminum oxide A, zirconia alumina Z, holder

Heavy-duty "X" weight resin cloth with a special hot melt adhesive coating system produces a disc that will withstand even the most grueling applications.

They adhere securely to the holder without risk of slipping or flying off. When removed from the tool, they leave no residue.

### Safety notes



= Wear eye protection!



= Wear hearing protection!



= Wear gloves!



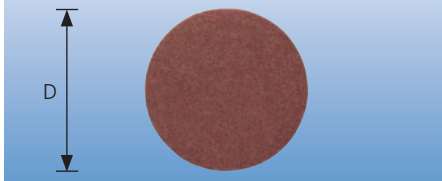
= Please read the safety instructions!



= Read the Safety Data Sheets (SDS) before using any materials!



### PSA discs Aluminum oxide A



For general-purpose grinding, from coarse to very fine, in diverse applications.


**Abrasive: Aluminum oxide A**

#### Ordering note

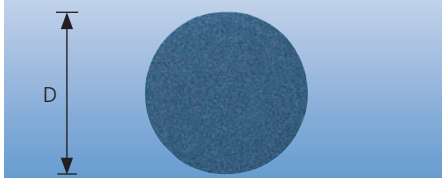
Please order holder separately.

#### PFERD specification number

PSA-A/O

| Diameter (D)<br>[Inches] | Grit and EDP number |       |       |       |       |       |       |       |       |       |       |       |  |
|--------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
|                          | 36                  | 40    | 50    | 60    | 80    | 100   | 120   | 150   | 180   | 220   | 240   | 320   |   |
| 5                        | 47361               | 47362 | 47363 | 47364 | 47365 | 47366 | 47367 | 47368 | 47369 | 47370 | 47371 | 47372 | 50  |
| 6                        | 47374               | 47375 | 47376 | 47377 | 47378 | 47379 | 47380 | 47381 | 47382 | 47383 | 47384 | 47385 | 50  |

### PSA discs Zirconia alumina Z



Designed for coarse grinding and high stock removal, these discs nevertheless attain a long service life.


**Abrasive: Zirconia alumina Z**

#### Ordering note

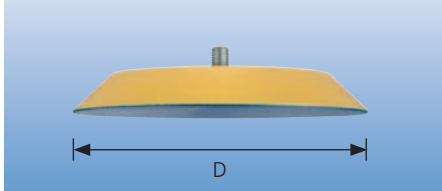
Please order holder separately.

#### PFERD specification number

PSA-Z

| Diameter (D)<br>[Inches] | Grit and EDP number |       |       |       |       |  |
|--------------------------|---------------------|-------|-------|-------|-------|---|
|                          | 36                  | 40    | 60    | 80    | 120   |   |
| 5                        | 47560               | 47561 | 47563 | 47564 | 47566 | 50  |
| 6                        | 47570               | 47571 | 47573 | 47574 | 47576 | 50  |


### PSA disc holder



Backing pad for use with PFERD PSA-discs.  
For threaded spindle (dual action machines).

**PFERD specification number**

SKH

| Diameter (D)<br>[Inches] | Thread  | EDP number | Max. RPM |  |
|--------------------------|---------|------------|----------|---|
| 5                        | 5/16-24 | 47266      | 10,000   | 1   |
| 6                        | 5/16-24 | 47268      | 10,000   | 1   |

The COMBIDISC® range covers a large selection of quick-change grinding discs. From coarse machining and surface texturing to face-down mirror polishing – the range provides the optimal disc, even for complicated applications.

### Advantages

- Easy to use.
- Rapid disc change.
- No adhesion, no slipping.
- No loosening under the influence of heat.
- Vibration-free operation.
- Disc is always perfectly centered.

### Application examples

- Tool and mould construction, modelling.
- Mechanical engineering, automotive construction.
- Aeronautical and aerospace industry.
- Aircraft engine construction and repair.
- Equipment, tank and pressure vessel construction (e.g. for foodstuff and chemical industry).
- Fettling of small parts.

### Safety notes

- The maximum permitted peripheral speed is 9,800 SFPM.
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



= Wear eye protection!



= Wear hearing protection!



= Wear gloves!



= Please read the safety instructions!



= Read the Safety Data Sheets (SDS) before using any materials!

### Dust warning

Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.

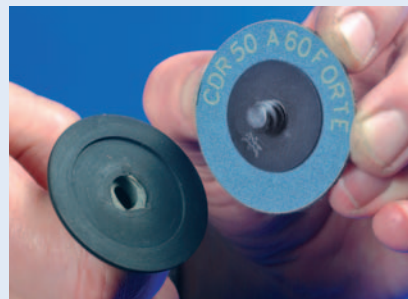
### PFERD offers two mounting system alternatives

#### CD system



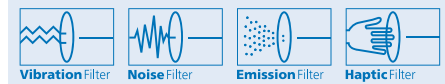
**Mounting side:** Screw connection with female thread (metal).  
Also suitable for the following systems available on the market: PSG, Power Lock Type II "turn on", SocAtt, Turn-On.

#### CDR system



**Mounting side:** Screw connection with male thread (plastic).  
Also suitable for the following systems available on the market: Roloc™, Lockit, Speed Lok TR, Power Lock Type III, Fastlock-System B, Roll-On.

PFERDERGONOMICS® recommends COMBIDISC® system as a solution to sustainably reduce vibration, noise and dust levels produced in the workplace and to improve working comfort.



PFERDEFFICIENCY® recommends COMBIDISC® products to reduce disc change and setup times.



#### PFERDMEDIA

To see it in action, please visit [pferdusa.com/vcombidisc](http://pferdusa.com/vcombidisc)

# COMBIDISC® quick change discs

## General information



### Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the disc diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the COMBIDISC® disc and tool drive.

#### Example

CD 50 A 60 COOL, 2" Dia.

EDP 42219

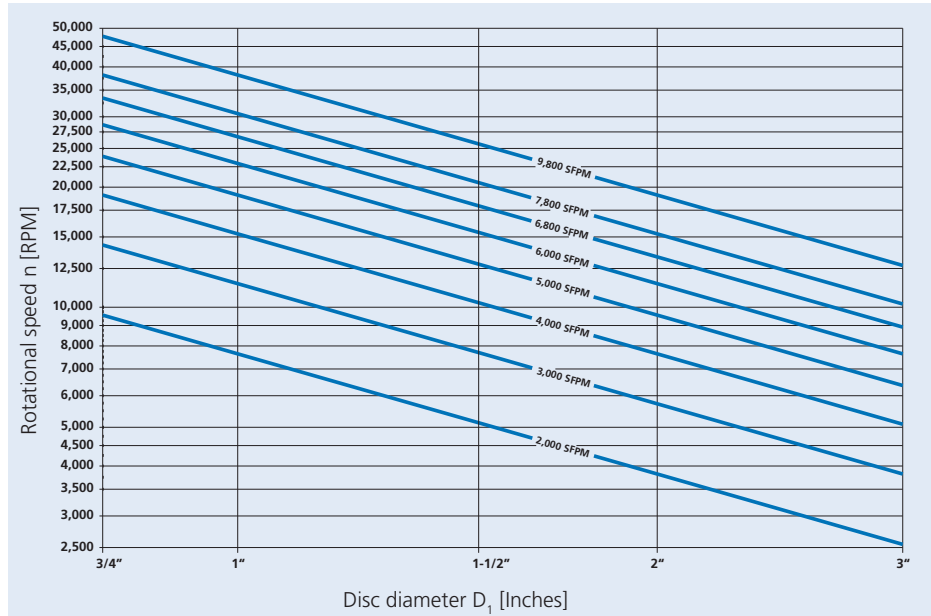
Operation: Grinding of stainless steel materials

Peripheral speed: 4,000 - 5,000 SFPM

**Rotational speed: 7,600 - 9,600 RPM**

### Safety notes

- The maximum permissible peripheral speed is 9,800 SFPM.
- For safety reasons, the stated max. RPM level must not be exceeded.



### The fast way to the best disc

| Application  | Recommended peripheral speed [SFPM] |                    |                    |                    |                    |       |       |       | Recommended discs                                 |
|--|-------------------------------------|--------------------|--------------------|--------------------|--------------------|-------|-------|-------|---|
|  | 1,000                               | 2,000              | 3,000              | 4,000              | 5,000              | 6,000 | 6,900 | 7,800 |   |
| Grinding of steel and cast steel   |                                     |                    |                    | 4,000 - 6,900 SFPM |                    |       |       |       | Abrasive discs A, A-PLUS, Z                       |
| Grinding of stainless steel (INOX)   |                                     |                    |                    | 4,000 - 5,000 SFPM |                    |       |       |       | Abrasive discs A-COOL, CO-COOL                    |
| Coarse grinding of steel and cast steel  |                                     |                    |                    |                    | 5,000 - 7,800 SFPM |       |       |       | Mini-POLIFAN®, mini fibre discs, abrasive discs Z |
| Grinding of high-temperature-resistant materials (nickel- and cobalt-based alloys) |                                     | 2,000 - 4,000 SFPM |                    |                    |                    |       |       |       | Abrasive discs SiC, Z and CO-COOL                 |
| Grinding of hard non-ferrous metals, titanium, bronze, hard aluminum alloys        |                                     |                    | 3,000 - 6,900 SFPM |                    |                    |       |       |       | Abrasive discs SiC, A-COOL, CO-COOL               |
| Grinding of soft non-ferrous metals, brass, copper, aluminum alloys                |                                     |                    |                    |                    | 5,000 - 7,800 SFPM |       |       |       | Abrasive discs A, A-PLUS, A-COOL                  |
| Grinding of hard metal, hard material coatings, hard facings, glass, GRP, CRP      |                                     | 2,000 - 4,000 SFPM |                    |                    |                    |       |       |       | Diamond abrasive discs                            |
| Cleaning, texturing  |                                     | 2,000 - 5,000 SFPM |                    |                    |                    |       |       |       | Non-woven and POLICLEAN® discs, brushes           |
| Polishing  | 1,000 - 2,000 SFPM                  |                    |                    |                    |                    |       |       |       | Felt discs  |



Mini-POLIFAN® flap discs with **aluminum oxide A grain** perform well in general-purpose coarse grinding applications. They deliver high stock removal rates on diverse materials. Ideal for weld removal in hard-to-reach areas. These mini flap discs excel in performance when compared to plain coated abrasive discs in terms of longevity and grinding performance.

Mini-POLIFAN® flap discs with **zirconia alumina Z grain** perform well in general-purpose grinding applications, providing ultra-high stock removal. Particularly suitable for weld removal in hard-to-reach areas. These mini flap discs excel in performance when compared to plain coated abrasive discs in terms of service life and grinding performance.

**Abrasive: Aluminum oxide A  
Zirconia alumina Z**

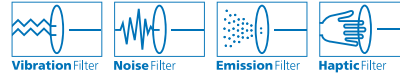
**Ordering note**

For type CD, order drive arbor below separately, or may also be used with Type CD and CDR COMBIDISC® backing pads on page 34.

**PFERD specification number**

CD PFF A  
CDR PFF A

**PFERDERGONOMICS®**



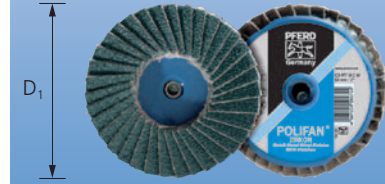
**PFERDEFFICIENCY®**



**COMBIDISC® Mini-POLIFAN® discs  
Aluminum oxide A**



**Zirconia alumina Z**



| Diameter (D <sub>1</sub> )<br>[Inches] | Grit and EDP number |       |       |       | Recom. speed<br>RPM | Max. RPM |    |
|--|---------------------|-------|-------|-------|---------------------|----------|----|
|  | 40                  | 60    | 80    | 120   |                     |          |    |
| <b>Aluminum oxide A</b>                |                     |       |       |       |                     |          |    |
| <b>Type CD</b>                         |                     |       |       |       |                     |          |    |
| 2                                      | 42802               | 42803 | 42804 | 42805 | 12,000 - 14,000     | 19,100   | 10 |
| 3                                      | 42808               | 42809 | 42810 | 42811 | 8,000 - 10,000      | 12,700   | 10 |
| <b>NEW Type CDR</b>                    |                     |       |       |       |                     |          |    |
| 2                                      | 42912               | 42913 | 42914 | 42915 | 12,000 - 14,000     | 19,100   | 10 |
| 3                                      | 42918               | 42919 | 42920 | 42921 | 8,000 - 10,000      | 12,700   | 10 |
| <b>Zirconia alumina Z</b>              |                     |       |       |       |                     |          |    |
| <b>Type CD</b>                         |                     |       |       |       |                     |          |    |
| 2                                      | 42814               | 42815 | 42816 | 42817 | 12,000 - 14,000     | 19,100   | 10 |
| 3                                      | 42820               | 42821 | 42822 | 42823 | 8,000 - 10,000      | 12,700   | 10 |
| <b>NEW Type CDR</b>                    |                     |       |       |       |                     |          |    |
| 2                                      | 42924               | 42925 | 42926 | 42927 | 12,000 - 14,000     | 19,100   | 10 |
| 3                                      | 42930               | 42931 | 42932 | 42933 | 8,000 - 10,000      | 12,700   | 10 |



Matching arbor for use with COMBIDISC® Mini-POLIFAN® discs with special thread.

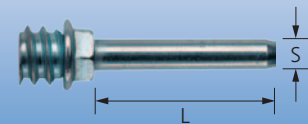
**Safety note**

Max. operating speed 9,800 SFPM.

**PFERD specification number**

BO PFF

**Drive arbor  
for COMBIDISC® Mini-POLIFAN® discs  
and COMBIDISC® brush**



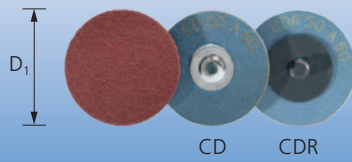
| Shank diameter (S)<br>[Inches] | Shank length (L)<br>[Inches] | EDP number | Suitable diameters<br>[Inches] |   |
|--------------------------------|------------------------------|------------|--------------------------------|---|
| 1/4                            | 1-1/2                        | 42851      | 2                              | 1 |
| 1/4                            | 1-1/2                        | 42852      | 3                              | 1 |

# COMBIDISC® quick change discs

## Abrasive discs



### COMBIDISC® abrasive discs Aluminum oxide A



COMBIDISC® abrasive discs with aluminum oxide A grain are for use on metals and other materials.

For general-purpose grinding from coarse to very fine, in diverse applications (industry, trades, DIY).

**Abrasive: Aluminum oxide A**

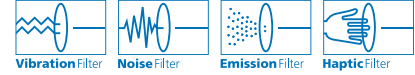
#### Ordering note

Please order backing pad separately (listed on page 34).

#### PFERD specification number

CD A  
CDR A

#### PFERDERGONOMICS®

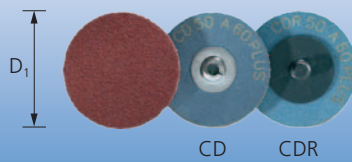


#### PFERDEFFICIENCY®



| Diameter (D <sub>1</sub> )<br>[Inches] | Grit and EDP number |       |       |       |       |       |       | Recom. speed<br>RPM |     |
|--|---------------------|-------|-------|-------|-------|-------|-------|---------------------|-----|
|  | 36                  | 50    | 60    | 80    | 120   | 180   | 320   |                     |     |
| <b>Type CD</b>                         |                     |       |       |       |       |       |       |                     |     |
| 1                                      | -                   | -     | 42136 | 42137 | 42139 | 42141 | 42143 | 15,000 - 26,000     | 100 |
| 1-1/2                                  | 42145               | -     | 42148 | 42149 | 42151 | 42153 | 42155 | 10,000 - 16,000     | 100 |
| 2                                      | 42157               | 42159 | 42160 | 42161 | 42163 | 42165 | 42167 | 8,000 - 13,000      | 100 |
| 3                                      | 42169               | 42171 | 42172 | 42173 | 42175 | 42177 | 42179 | 5,000 - 9,000       | 50  |
| <b>Type CDR</b>                        |                     |       |       |       |       |       |       |                     |     |
| 1                                      | -                   | -     | 42481 | 42482 | 42484 | 42486 | 42488 | 15,000 - 26,000     | 100 |
| 1-1/2                                  | 42490               | -     | 42493 | 42494 | 42496 | 42498 | 42500 | 10,000 - 16,000     | 100 |
| 2                                      | 42502               | 42504 | 42505 | 42506 | 42508 | 42510 | 42512 | 8,000 - 13,000      | 100 |
| 3                                      | 42514               | 42516 | 42517 | 42518 | 42520 | 42522 | 42524 | 5,000 - 9,000       | 50  |

### COMBIDISC® abrasive discs Aluminum oxide A-PLUS



The aluminum oxide A-PLUS version is universally recommended for all metals. A stronger backing material ensures superior stock removal rates. These discs are preferred for edge grinding, due to their outstanding tear resistance.

**Abrasive: Aluminum oxide A-PLUS**

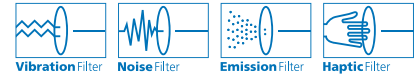
#### Ordering note

Please order backing pad separately (listed on page 34).

#### PFERD specification number

CD A-PLUS  
CDR A-PLUS

#### PFERDERGONOMICS®



#### PFERDEFFICIENCY®



| Diameter (D <sub>1</sub> )<br>[Inches] | Grit and EDP number |       |       |       | Recom. speed<br>RPM |     |
|--|---------------------|-------|-------|-------|---------------------|-----|
|  | 36                  | 60    | 80    | 120   |                     |     |
| <b>Type CD</b>                         |                     |       |       |       |                     |     |
| 2                                      | 42330               | 42331 | 42332 | 42333 | 8,000 - 13,000      | 100 |
| 3                                      | 42335               | 42336 | 42337 | 42338 | 5,000 - 9,000       | 50  |
| <b>Type CDR</b>                        |                     |       |       |       |                     |     |
| 2                                      | 42670               | 42671 | 42672 | 42673 | 8,000 - 13,000      | 100 |
| 3                                      | 42675               | 42676 | 42677 | 42678 | 5,000 - 9,000       | 50  |



The scalloped-edge pattern of COMBIDISC® A-CONTOUR eliminates edge cutting. The abrasive discs easily follow transitions and contours on complex workpieces. Especially recommended for working tight contours and concave surfaces with radius transitions. The special outer contour prevents the discs "cutting in" to the workpiece.

### Abrasive: Aluminum oxide A

#### Recommendation for use

COMBIDISC® aluminum oxide A-CONTOUR abrasive discs achieve their best output at the recommended peripheral speed of 4,000 - 6,900 SFPM.

#### Ordering note

We recommend using soft or medium 2" diameter abrasive disc holders to benefit fully from the flexibility of these abrasive discs.

Please order backing pad separately (listed on page 34).

#### PFERD specification number

CD A-CONTOUR  
CDR A-CONTOUR

#### PFERDERGONOMICS®



#### PFEREFFICIENCY®



| Diameter (D <sub>1</sub> ) [Inches] | Grit and EDP number |       |       |       | Recom. speed RPM |    |
|-------------------------------------|---------------------|-------|-------|-------|------------------|----|
|                                     | 60                  | 80    | 120   | 180   |                  |    |
| <b>Type CD</b>                      |                     |       |       |       |                  |    |
| 2-3/8                               | 42117               | 42118 | 42119 | 42120 | 7,500 - 11,000   | 50 |
| <b>Type CDR</b>                     |                     |       |       |       |                  |    |
| 2-3/8                               | 42425               | 42426 | 42427 | 42428 | 7,500 - 11,000   | 50 |

The aluminum oxide A-COOL version is designed for hard-to-machine materials such as stainless steel, Hastelloy®, Inconel®, etc. Active additive fillers in the coating increase the stock removal rate substantially while preventing loading and heat build-up.

#### Recommendation for use

Use with hard or medium disc holders only.

### Abrasive: Aluminum oxide A-COOL (top-sized)

#### Ordering note

Please order backing pad separately (listed on page 34).

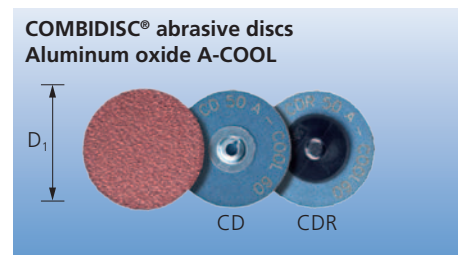
#### PFERD specification number

CD A-COOL  
CDR A-COOL

#### PFERDERGONOMICS®



#### PFEREFFICIENCY®



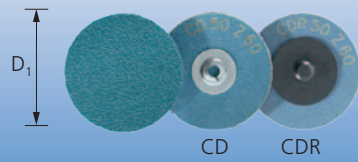
| Diameter (D <sub>1</sub> ) [Inches] | Grit and EDP number |       |       | Recom. speed RPM |     |
|-------------------------------------|---------------------|-------|-------|------------------|-----|
|                                     | 36                  | 60    | 80    |                  |     |
| <b>Type CD</b>                      |                     |       |       |                  |     |
| 2                                   | 42216               | 42219 | 42220 | 8,000 - 13,000   | 100 |
| 3                                   | 42224               | 42227 | 42228 | 5,000 - 9,000    | 50  |
| <b>Type CDR</b>                     |                     |       |       |                  |     |
| 2                                   | 42558               | 42561 | 42562 | 8,000 - 13,000   | 100 |
| 3                                   | 42565               | 42568 | 42569 | 5,000 - 9,000    | 50  |

# COMBIDISC® quick change discs

## Abrasive discs



### COMBIDISC® abrasive discs Zirconia alumina Z



COMBIDISC® abrasive discs with zirconia alumina Z grain are for use on all metals. These discs perform particularly well in coarse grinding applications.

**Recommendation for use**  
Use with hard or medium disc holders only.

**Abrasive: Zirconia alumina Z**

**Ordering note**  
Please order backing pad separately (listed on page 34).

### PFERD specification number

CD Z  
CDR Z

### PFERDERGONOMICS®

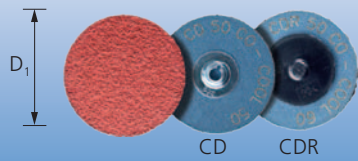


### PFERDEFFICIENCY®



| Diameter (D <sub>1</sub> )<br>[Inches] | Grit and EDP number |       |       |       | Recom. speed<br>RPM |     |
|--|---------------------|-------|-------|-------|---------------------|-----|
|  | 36                  | 50    | 60    | 80    |                     |     |
| <b>Type CD</b>                         |                     |       |       |       |                     |     |
| 2                                      | 42254               | 42256 | 42257 | 42258 | 8,000 - 13,000      | 100 |
| 3                                      | 42261               | 42263 | 42264 | 42265 | 5,000 - 9,000       | 50  |
| <b>Type CDR</b>                        |                     |       |       |       |                     |     |
| 2                                      | 42593               | 42595 | 42596 | 42597 | 8,000 - 13,000      | 100 |
| 3                                      | 42600               | 42602 | 42603 | 42604 | 5,000 - 9,000       | 50  |

### COMBIDISC® abrasive discs Ceramic oxide CO-COOL



Ceramic oxide (CO) is for use on alloyed and unalloyed steels, cast iron, and hard metal coatings.

Aggressive grinding action results in unsurpassed stock removal rates. Active additive fillers in the coating provide substantially improved abrasive performance while preventing loading and heat build-up.

**Abrasive: Ceramic oxide CO-COOL  
(top-sized)**

**Ordering note**  
Please order backing pad separately (listed on page 34).

### PFERD specification number

CD CO-COOL  
CDR CO-COOL

### PFERDERGONOMICS®



### PFERDEFFICIENCY®



| Diameter (D <sub>1</sub> )<br>[Inches] | Grit and EDP number |       |       |       |       | Recom. speed<br>RPM |     |
|--|---------------------|-------|-------|-------|-------|---------------------|-----|
|  | 24                  | 36    | 60    | 80    | 120   |                     |     |
| <b>Type CD</b>                         |                     |       |       |       |       |                     |     |
| 2                                      | 42280               | 42289 | 42292 | 42293 | 42295 | 8,000 - 13,000      | 100 |
| 3                                      | 42281               | 42296 | 42299 | 42300 | 42302 | 5,000 - 9,000       | 50  |
| <b>Type CDR</b>                        |                     |       |       |       |       |                     |     |
| 2                                      | 42619               | 42628 | 42631 | 42632 | 42634 | 8,000 - 13,000      | 100 |
| 3                                      | 42620               | 42635 | 42638 | 42639 | 42641 | 5,000 - 9,000       | 50  |





COMBIDISC® mini fibre disc with ceramic oxide grain is designed for very hard-to-machine materials such as stainless steel, Hastelloy®, Inconel®, titanium etc. Active additive fillers in the coating increase the stock removal rate substantially while preventing loading and heat build-up.

The fibre backing reinforces the disc and improves abrasive performance. Ideally suited for grinding on edges and weld seams of hard materials.

### Recommendation for use

Use with hard or medium disc holders only.

### Abrasive: Ceramic oxide CO-COOL

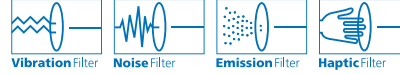
### Ordering note

Please order backing pad separately (listed on page 34).

### PFERD specification number

CDF CO-COOL  
CDFR CO-COOL

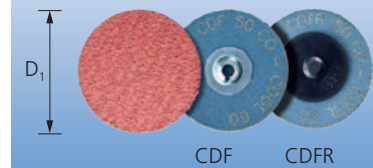
### PFERDERGONOMICS®



### PFEREFFICIENCY®



### COMBIDISC® mini fibre discs Ceramic oxide CO-COOL



| Diameter (D <sub>1</sub> )<br>[Inches] | Grit and EDP number |       |       |       | Recom. speed<br>RPM |     |
|--|---------------------|-------|-------|-------|---------------------|-----|
|  | 36                  | 50    | 80    | 120   |                     |     |
| <b>Type CDF</b>                        |                     |       |       |       |                     |     |
| 2                                      | 40492               | 40494 | 40496 | 40497 | 8,000 - 13,000      | 100 |
| 3                                      | 40499               | 40501 | 40503 | 40504 | 5,000 - 9,000       | 50  |
| <b>Type CDFR</b>                       |                     |       |       |       |                     |     |
| 2                                      | 40632               | 40634 | 40636 | 40637 | 8,000 - 13,000      | 100 |
| 3                                      | 40639               | 40641 | 40643 | 40644 | 5,000 - 9,000       | 50  |

Silicon carbide (SiC) COMBIDISC® discs are ideal for use on aluminum, copper, bronze, titanium, high-alloyed steels, fibreglass, carbon fibre, composites and plastics. They are the disc of choice for grinding titanium alloys, as their cool grinding properties help prevent thermal cracking.

Excellent for use in the aircraft industry, specifically where SiC is the only approved abrasive product for use on engine components.

### Abrasive: Silicon carbide SiC

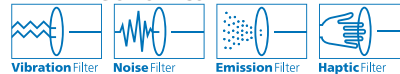
### Ordering note

Please order backing pad separately (listed on page 34).

### PFERD specification number

CD SiC  
CDR SiC

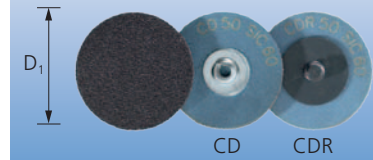
### PFERDERGONOMICS®



### PFEREFFICIENCY®



### COMBIDISC® abrasive discs Silicon carbide SiC



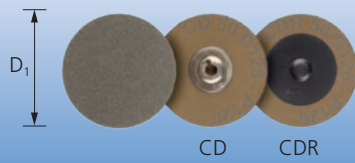
| Diameter (D <sub>1</sub> )<br>[Inches] | Grit and EDP number |       |       |       |       | Recom. speed<br>RPM |     |
|--|---------------------|-------|-------|-------|-------|---------------------|-----|
|  | 36                  | 60    | 80    | 120   | 240   |                     |     |
| <b>Type CD</b>                         |                     |       |       |       |       |                     |     |
| 2                                      | 42415               | 42416 | 42417 | 42418 | 42419 | 8,000 - 13,000      | 100 |
| 3                                      | 42420               | 42421 | 42422 | 42423 | 42424 | 5,000 - 9,000       | 50  |
| <b>Type CDR</b>                        |                     |       |       |       |       |                     |     |
| 2                                      | 42750               | 42751 | 42752 | 42753 | 42754 | 8,000 - 13,000      | 100 |
| 3                                      | 42755               | 42756 | 42757 | 42758 | 42759 | 5,000 - 9,000       | 50  |

# COMBIDISC® quick change discs

## Abrasive discs



### COMBIDISC® diamond abrasive discs



COMBIDISC® diamond abrasive discs are perfect for working on wear-resistant platings and for hard facings made of tungsten carbide, chromium carbide, titanium carbide etc. Particularly recommended for work on materials used for engine construction e.g. Hastelloy®, Inconel®, titanium and titanium alloys. Also for work on extremely hard materials such as tungsten carbide, glass, ceramic, enamel, stone and GRP/CRP.

#### Abrasive: Diamond

D 251 = P 60, D 126 = P 120, D 76 = P 220  
P = Grit size according to FEPA

#### Recommendation for use

Diamond abrasive discs perform best at the recommended peripheral speed of 2,000 - 4,000 SPPM.

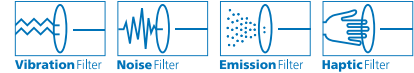
#### Ordering note

The grit sizes are given in µm. Please order backing pad separately (listed on page 34).

#### PFERD specification number

CD DIA  
CDR DIA

#### PFERDERGONOMICS®



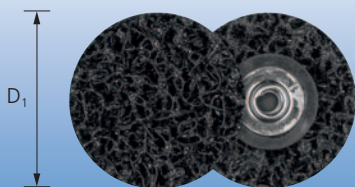
#### PFERDEFFICIENCY®



| Diameter (D <sub>1</sub> )<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM |    |
|--|---------------------|-------|-------|---------------------|----|
|  | 251                 | 126   | 76    |                     |    |
| <b>Type CD</b>                         |                     |       |       |                     |    |
| 1                                      | 40515               | 40516 | 40517 | 7,500 - 15,000      | 10 |
| 1-1/2                                  | 40518               | 40519 | 40520 | 5,000 - 10,000      | 10 |
| 2                                      | 40521               | 40522 | 40523 | 3,800 - 7,500       | 10 |
| 3                                      | 40524               | 40525 | 40526 | 2,500 - 5,000       | 10 |
| <b>Type CDR</b>                        |                     |       |       |                     |    |
| 1                                      | 40655               | 40656 | 40657 | 7,500 - 15,000      | 10 |
| 1-1/2                                  | 40658               | 40659 | 40660 | 5,000 - 10,000      | 10 |
| 2                                      | 40661               | 40662 | 40663 | 3,800 - 7,500       | 10 |
| 3                                      | 40664               | 40665 | 40666 | 2,500 - 5,000       | 10 |

## COMBIDISC® POLICLEAN® discs

### COMBIDISC® POLICLEAN® discs



Ideal for coarse face grinding applications such as removal of paint, scale, discolourations, rust, or adhesive residue.

#### Recommendation for use

For use with a hard or medium COMBIDISC® holder (backing pad).

#### Abrasive: Silicon carbide SiC

#### Ordering note

Please order backing pad separately (listed on page 34).

For more information about POLICLEAN® products see page 90.

#### PFERD specification number

CD PCLR  
CDR PCLR

#### PFERDERGONOMICS®



#### PFERDEFFICIENCY®



| Diameter (D <sub>1</sub> )<br>[Inches] | EDP number | Recom. speed<br>RPM |    |
|--|------------|---------------------|----|
| <b>Type CD</b>                         |            |                     |    |
| 2                                      | 44850      | 5,500 - 8,000       | 10 |
| 3                                      | 44851      | 3,800 - 5,000       | 10 |
| <b>Type CDR</b>                        |            |                     |    |
| 2                                      | 44853      | 5,500 - 8,000       | 10 |
| 3                                      | 44854      | 3,800 - 5,000       | 10 |

Recommended for general work on metal surfaces e.g. removal of rough grinding traces, removal of oxidation and for light deburring work.

**Abrasive: Aluminum oxide A**

Available grit sizes:  
 Coarse = yellow-brown  
 Medium = red-brown  
 Very fine = blue

**Application examples**

- Removing heat discolouration on components made of stainless steel (INOX).
- Fine-grinding of tight areas in equipment, tank and pressure vessel constructions.

**Recommendation for use**

COMBIDISC® non-woven discs hard type achieve their best performance at a recommended peripheral speed of 3,000 - 4,000 SFPM. This

provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and disc wear.

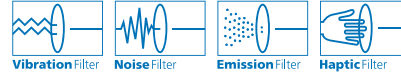
**Ordering note**

Please order backing pad separately (listed on page 34).

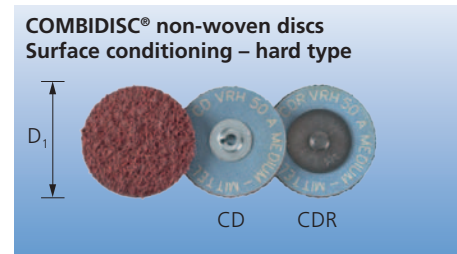
**PFERD specification number**

CD VRH A, CDR VRH A

**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



| Diameter (D <sub>1</sub> ) [Inches] | Grade and EDP number |        |           | Recom. speed RPM |    |
|-------------------------------------|----------------------|--------|-----------|------------------|----|
|                                     | coarse               | medium | very fine |                  |    |
| <b>Type CD</b>                      |                      |        |           |                  |    |
| 1-1/2                               | 43176                | 43177  | 43179     | 7,000 - 10,000   | 50 |
| 2                                   | 43180                | 43181  | 43183     | 6,000 - 8,000    | 50 |
| 3                                   | 43184                | 43185  | 43187     | 4,000 - 5,000    | 25 |
| <b>Type CDR</b>                     |                      |        |           |                  |    |
| 1-1/2                               | 43234                | 43235  | 43237     | 7,000 - 10,000   | 50 |
| 2                                   | 43238                | 43239  | 43241     | 6,000 - 8,000    | 50 |
| 3                                   | 43242                | 43243  | 43245     | 4,000 - 5,000    | 25 |
| 4                                   | 43246                | 43247  | 43248     | 2,850 - 4,000    | 25 |

Recommended for very fine grinding of surfaces and contours, as well as cleaning work on metals and painted surfaces. The open structure and high flexibility of the non-woven material prevents clogging of the disc.

**Abrasive: Aluminum oxide A**

Available grit sizes:  
 100 = medium  
 180 = fine  
 280 = very fine

**Application examples**

- Matt finishing or structuring of components made of stainless steel (INOX).
- Very fine grinding of brass, copper, titanium and aluminum.

**Recommendation for use**

COMBIDISC® non-woven discs soft type achieve their best performance at a recommended

peripheral speed of 3,000 - 4,000 SFPM. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and disc wear.

**Ordering note**

Please order backing pad separately (listed on page 34).

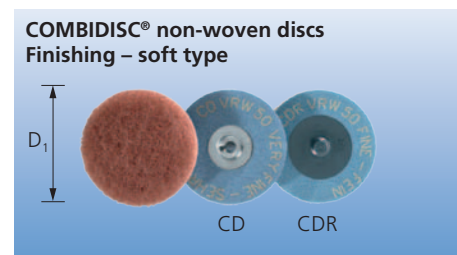
**PFERD specification number**

CD VRW A, CDR VRW A

**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



| Diameter (D <sub>1</sub> ) [Inches] | Grade and EDP number |       |           | Recom. speed RPM |    |
|-------------------------------------|----------------------|-------|-----------|------------------|----|
|                                     | medium               | fine  | very fine |                  |    |
| <b>Type CD</b>                      |                      |       |           |                  |    |
| 2                                   | 43200                | 43201 | 43203     | 5,500 - 8,000    | 50 |
| 3                                   | 43204                | 43205 | 43207     | 3,800 - 5,000    | 25 |
| <b>Type CDR</b>                     |                      |       |           |                  |    |
| 2                                   | 43258                | 43259 | 43261     | 5,500 - 8,000    | 50 |
| 3                                   | 43262                | 43263 | 43265     | 3,800 - 5,000    | 25 |

# COMBIDISC® quick change discs

## PNER unitized discs



COMBIDISC® PNER unitized discs are used for fine grinding on angle die grinders. The CD or CDR fastening elements are bonded to the unitized fleece.

They are recommended for working smaller and medium-sized areas on stainless steel (INOX) components.

**Abrasive: Aluminum oxide A  
Silicon carbide SiC**

### Ordering note

The different densities are colour-coded:

soft (W) = grey  
medium-hard (MH) = dark blue  
hard (H) = red

For more information about unitized products see page 73.

Please order backing pad separately (listed on page 34).

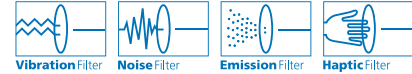
### Recommendation for use

COMBIDISC® unitized discs PNER achieve their best performance on variable-speed angle grinders at a cutting speed of about 5,000 - 6,000 SFPM.

### PFERD specification number




CD PNER, CDR PNER

### PFERDERGONOMICS®



### PFERDEFFICIENCY®



| Diameter (D <sub>1</sub> )<br>x thickness<br>[Inches]   | Abrasive        | Grit size | Density          | Spec. | EDP<br>number | Recom.<br>speed<br>RPM | Max. speed<br>RPM |  |
|---|-----------------|-----------|------------------|-------|---------------|------------------------|-------------------|--|
| <b>Type CD</b>   |                 |           |                  |       |               |                        |                   |  |
| 2 x 1/4   | Silicon carbide | fine      | soft (W)         | 2SF   | 48430         | 9,500                  | 19,100            | 25   |
| 2 x 1/4   | Aluminum oxide  | coarse    | soft (W)         | 2AM   | 48431         | 9,500                  | 19,100            | 25   |
| 2 x 1/4   | Silicon carbide | fine      | medium-hard (MH) | 6SF   | 48434         | 9,500                  | 19,100            | 25   |
| 2 x 1/4   | Aluminum oxide  | fine      | medium-hard (MH) | 6AF   | 48435         | 9,500                  | 19,100            | 25   |
| 2 x 1/4   | Aluminum oxide  | fine      | hard (H)         | 8AM   | 48438         | 9,500                  | 19,100            | 25   |
| 2 x 1/4   | Aluminum oxide  | coarse    | hard (H)         | 8AC   | 48439         | 9,500                  | 19,100            | 25   |
| 3 x 1/4   | Silicon carbide | fine      | soft (W)         | 2SF   | 48440         | 6,400                  | 12,500            | 25   |
| 3 x 1/4   | Aluminum oxide  | coarse    | soft (W)         | 2AM   | 48441         | 6,400                  | 12,500            | 25   |
| 3 x 1/4   | Silicon carbide | fine      | medium-hard (MH) | 6SF   | 48444         | 6,400                  | 12,500            | 25   |
| 3 x 1/4   | Aluminum oxide  | fine      | medium-hard (MH) | 6AF   | 48445         | 6,400                  | 12,500            | 25   |
| 3 x 1/4   | Aluminum oxide  | fine      | hard (H)         | 8AM   | 48448         | 6,400                  | 12,500            | 25   |
| 3 x 1/4   | Aluminum oxide  | coarse    | hard (H)         | 8AC   | 48449         | 6,400                  | 12,500            | 25   |
| <b>Type CDR</b>  |                 |           |                  |       |               |                        |                   |  |
| 2 x 1/4   | Silicon carbide | fine      | soft (W)         | 2SF   | 48450         | 9,500                  | 19,100            | 25   |
| 2 x 1/4   | Aluminum oxide  | coarse    | soft (W)         | 2AM   | 48451         | 9,500                  | 19,100            | 25   |
| 2 x 1/4   | Silicon carbide | fine      | medium-hard (MH) | 6SF   | 48454         | 9,500                  | 19,100            | 25   |
| 2 x 1/4   | Aluminum oxide  | fine      | medium-hard (MH) | 6AF   | 48455         | 9,500                  | 19,100            | 25   |
| 2 x 1/4   | Aluminum oxide  | fine      | hard (H)         | 8AM   | 48458         | 9,500                  | 19,100            | 25   |
| 2 x 1/4   | Aluminum oxide  | coarse    | hard (H)         | 8AC   | 48459         | 9,500                  | 19,100            | 25   |
| 3 x 1/4   | Silicon carbide | fine      | soft (W)         | 2SF   | 48460         | 6,400                  | 12,500            | 25   |
| 3 x 1/4   | Aluminum oxide  | coarse    | soft (W)         | 2AM   | 48461         | 6,400                  | 12,500            | 25   |
| 3 x 1/4   | Silicon carbide | fine      | medium-hard (MH) | 6SF   | 48464         | 6,400                  | 12,500            | 25   |
| 3 x 1/4   | Aluminum oxide  | fine      | medium-hard (MH) | 6AF   | 48465         | 6,400                  | 12,500            | 25   |
| 3 x 1/4   | Aluminum oxide  | fine      | hard (H)         | 8AM   | 48468         | 6,400                  | 12,500            | 25   |
| 3 x 1/4   | Aluminum oxide  | coarse    | hard (H)         | 8AC   | 48469         | 6,400                  | 12,500            | 25   |

For polishing medium sized surfaces using polishing paste bars, grinding paste or diamond polishing paste.

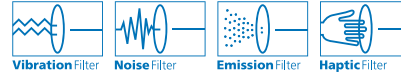
### Ordering note

Please order backing pad and polishing paste separately (backing pads listed on page 34, polishing pastes listed on page 104).

For more information about polishing products see page 98.

**PFERD specification number**  
CD FR

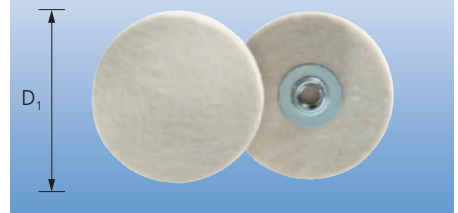
**PFERDERGONOMICS®**





**PFERDEFFICIENCY®**



### COMBIDISC® felt discs



| Diameter (D <sub>1</sub> ) [Inches]   | EDP number | Recom. speed RPM |    |
|---|------------|------------------|----|
| <b>Type CD</b>       |            |                  |    |
| 2   | 43215      | 2,000 - 4,000    | 10 |
| 3   | 43216      | 1,200 - 2,500    | 10 |
| <b>NEW Type CDR</b>  |            |                  |    |
| 2   | 43213      | 2,000 - 4,000    | 10 |
| 3   | 43214      | 1,200 - 2,500    | 10 |

Recommended for removal of soft materials such as adhesive, underbody coatings and for cleaning contours and edges.

### Recommendation for use

Use either the COMBIDISC® backing pad or the special drive arbor (EDP 42851). COMBIDISC® brushes perform best at the recommended peripheral speed of 2,000 - 3,000 SFPM.

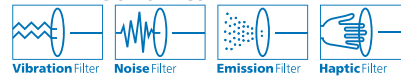
### Ordering note

Please refer to our "Power and maintenance brushes" catalogue (section 208) for detailed information on brushes.

Please order backing pad (listed on page 34) or drive arbor (listed on page 25) separately.

**PFERD specification number**  
CD-B

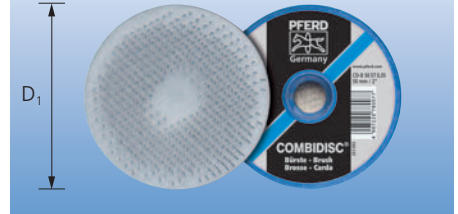
**PFERDERGONOMICS®**




**PFERDEFFICIENCY®**



### COMBIDISC® brush

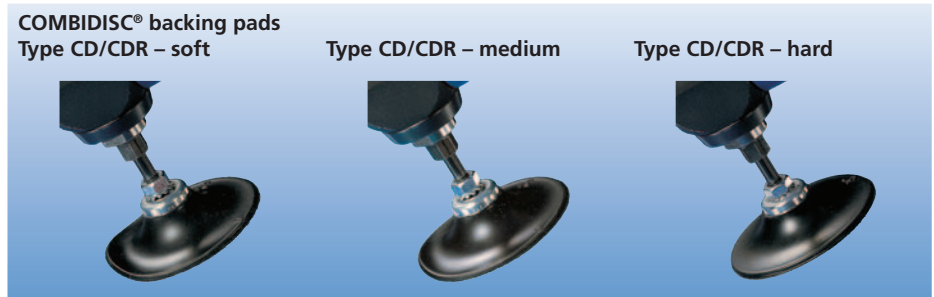


| Diameter (D <sub>1</sub> ) [Inches]  | EDP number | Wire material | Wire dia. [Inches] | Recom. speed RPM | Max. speed RPM | Suitable arbor |   |
|--|------------|---------------|--------------------|------------------|----------------|----------------|---|
| <b>Type CD</b>  |            |               |                    |                  |                |                |   |
| 2  | 44970      | Steel         | .014               | 5,000 - 6,000    | 19,100         | EDP 42851      | 5 |






# COMBIDISC® quick change discs

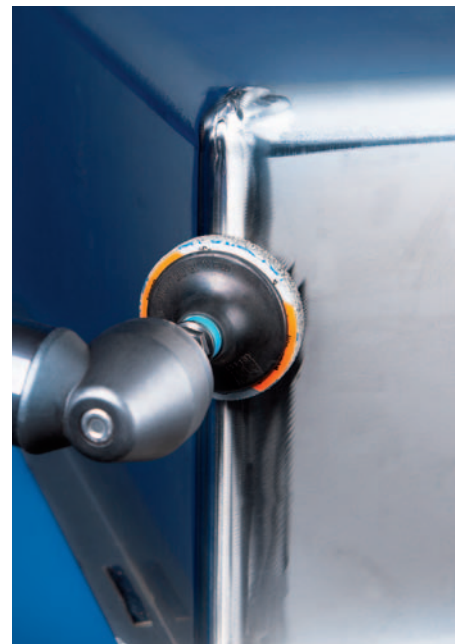
## Backing pads



Backing pads are available in three grades for each COMBIDISC® type. The photographs to the left illustrate the approximate flexibility of the three grades.

**PFERD specification number**  
SBH/SBHR

| Diameter [Inches] | Shank diameter [Inches] | EDP number   |  | Max. RPM |  |
|-------------------|-------------------------|--|--|----------|---|
|                   |                         | Type CD<br> | Type CDR<br> |          |   |
| <b>Soft</b>       |                         |  |  |          |   |
| 1-1/2             | 1/4                     | 42108  | 42456  | 20,000   | 1   |
| 2                 | 1/4                     | 42111  | 42459  | 20,000   | 1   |
| 3                 | 1/4                     | 42114  | 42462  | 12,000   | 1   |
| <b>Medium</b>     |                         |  |  |          |   |
| 1                 | 1/4                     | 42106  | 42454  | 40,000   | 1   |
| 1-1/2             | 1/4                     | 42109  | 42457  | 25,000   | 1   |
| 2                 | 1/4                     | 42112  | 42460  | 25,000   | 1   |
| 3                 | 1/4                     | 42115  | 42463  | 20,000   | 1   |
| 4                 | 1/4                     | -  | 42465  | 10,000   | 1   |
| <b>Hard</b>       |                         |  |  |          |   |
| 1-1/2             | 1/4                     | 42110  | 42458  | 30,000   | 1   |
| 2                 | 1/4                     | 42113  | 42461  | 30,000   | 1   |
| 3                 | 1/4                     | 42116  | 42464  | 20,000   | 1   |



Prep-to-paint set includes a selection of coated and non-woven abrasives for removal of surface imperfections such as rust, loose paint or cold drawn mill scale. Selected discs leave the proper surface finish for excellent wet and dry paint and coating adhesion.

### Contents of 2" CDR prep-to-paint set

- 1 pc. each of:
  - EDP 42460 – 2" CDR backing pad – medium
  - EDP 42913 – 2" CDR Mini-POLIFAN® disc A/O 60 grit
  - EDP 44853 – 2" CDR POLICLEAN® disc
- 4 pcs. of:
  - EDP 42506 – 2" CDR abrasice discs A/O 80 grit
  - EDP 43239 – 2" CDR surface conditioning discs medium



| Type                             | Full set EDP number |  |
|----------------------------------|---------------------|---|
| Prep-to-paint, 2" CDR attachment | 42789               | 1   |

Sanitary finish set includes a selection of coated and non-woven abrasives designed to achieve the industry standard for a sanitary finish.

### Contents of 2" CDR sanitary finish set

- 1 pc. each of:
  - EDP 42460 – 2" CDR backing pad – medium
  - EDP 42913 – 2" CDR Mini-POLIFAN® disc A/O 60 grit
- 4 pcs. of:
  - EDP 42506 – 2" CDR abrasice discs A/O 80 grit
  - EDP 42426 – 2" CDR abrasice discs CONTOUR A/O 80 grit
  - EDP 43239 – 2" CDR surface conditioning discs medium



| Type                               | Full set EDP number |  |
|------------------------------------|---------------------|---|
| Satinary finish, 2" CDR attachment | 42790               | 1   |

Mirror finishing set includes the required components to proceed from raw material removal to a full reflective surface.

### Contents of 2" CDR mirror finishing set

- 1 pc. each of:
  - EDP 42460 – 2" CDR backing pad – medium
  - EDP 42913 – 2" CDR Mini-POLIFAN® disc A/O 60 grit
  - EDP 48454 – 2" CDR unitized disc medium hard SiC fine
  - EDP 43213 – 2" CDR felt disc
  - EDP 48765 – Small bar pre-polishing paste (green)

- 2 pcs. of:
  - EDP 42426 – 2" CDR abrasice discs CONTOUR A/O 80 grit
- 3 pcs. of:
  - EDP 43239 – 2" CDR surface conditioning discs medium



| Type                             | Full set EDP number |  |
|----------------------------------|---------------------|---|
| Mirror finish, 2" CDR attachment | 42791               | 1   |

# Abrasive belts

## General information

PFERD offers a comprehensive range of short and long belts. They differ in their

- dimensions,
- grit sizes,
- flexibility and
- abrasive.

The PFERD range is tailored to the common belt grinders available on the market.

PFERD short and long belts are designated "abrasive belts" according to ISO 2976.

### Advantages

- High abrasive performance.
- High tensile strength with appropriate flexibility.
- Very good grit adhesion.
- Long belt life.

### Application examples

- Fine grinding of larger surfaces in multiple steps.
- Surface texturing.
- Creation of uniform visual effects on large surfaces.
- Polishing parts of railings with felt belts.

### Cutting speeds

The adjacent diagram allows you to determine the rotational speed [RPM] from a given cutting speed. For the recommended cutting speeds, see page 38.

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the diameter of the drive roll meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the recommended rotational speed [RPM] for the drive roll diameter selected.

#### Example

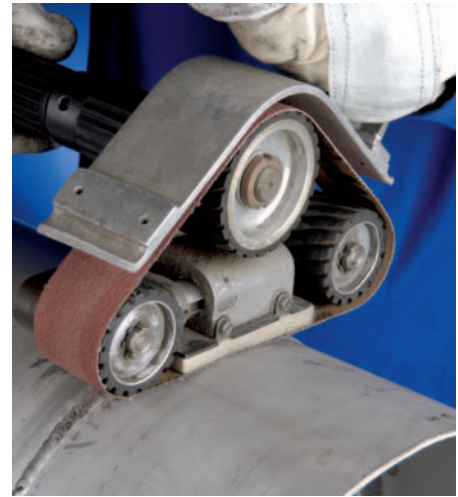
Drive wheel diameter: 5"  
 Peripheral speed: 4,000 - 6,000 SFPM  
**Rotational speed: 3,000 - 4,600 RPM**

### Safety notes

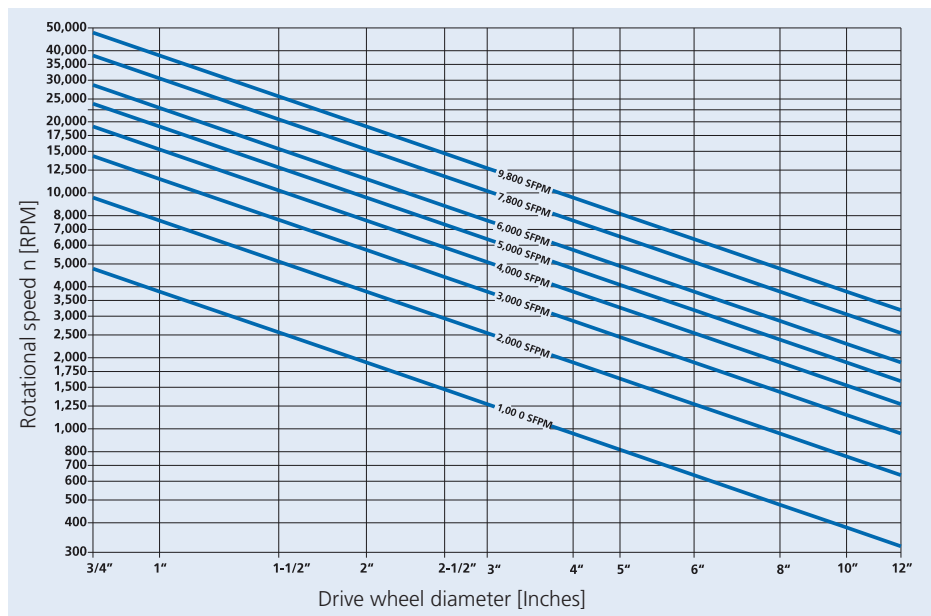
-  = Wear eye protection!
-  = Wear a dust mask!
-  = Wear hearing protection!
-  = Wear gloves!
-  = Please read the safety instructions!
-  = Read the Safety Data Sheets (SDS) before using any materials!
-  = Not permitted for wet grinding!

### Dust warning

Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a



respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.





### Variables influencing removal performance

This chart illustrates the variables that affect grinding results on the workpiece surface.

| Variable             | More aggressive,<br>Better cutting | Less aggressive,<br>Lower cutting |
|----------------------|------------------------------------|-----------------------------------|
| Workpiece feed speed | ← slower                           | faster →                          |
| Belt speed (SFPM)    | ← slower                           | faster →                          |
| Belt length          | ← longer                           | shorter →                         |
| Grit size            | ← coarse                           | fine →                            |
| Contact wheel: Type  | ← serrated                         | smooth →                          |
| Diameter             | ← smaller                          | larger →                          |
| Composition          | ← steel                            | rubber - canvas →                 |
| Feed pressure        | ← high                             | low →                             |
| Grinding aid         | ← straight oil                     | oil solubles - water - dry →      |
| Workpiece hardness   | ← softer                           | harder →                          |

### Troubleshooting – symptoms and solutions

This table is a partial listing of potential problems and possible solutions to grinding problems with abrasive belts. If you experience problems that cannot be solved using these recommendations, PFERD has trained technicians that will try to solve your problems via telephone or on-site at your location.



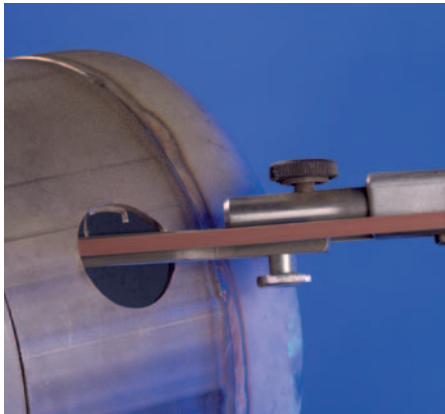
| Belt breakage  |  |
|--|--|
| Too much work pressure   | <ul style="list-style-type: none"> <li>■ reduce pressure</li> <li>■ use coarser grit</li> <li>■ change belts</li> </ul>              |
| Not enough belt tension under work load                                    | <ul style="list-style-type: none"> <li>■ increase tension (do not over-tighten)</li> </ul>   |
| Too much belt tension for grit use   | <ul style="list-style-type: none"> <li>■ adjust tension (should not be more than required under load to prevent slippage)</li> </ul> |
| Foreign materials caught between belt's backer and drive or contact wheels | <ul style="list-style-type: none"> <li>■ use dust collection system clean work area</li> </ul>                                       |
| Belts creased or damaged during handling                                   | <ul style="list-style-type: none"> <li>■ handle carefully, see storage and handling information</li> </ul>                           |

| Belt not tracking properly   |   |
|--|---|
| Tracking mechanism not properly adjusted                                     | <ul style="list-style-type: none"> <li>■ follow machine manual to properly adjust tracking</li> </ul>         |
| Damaged or fluttering edges of belt  | <ul style="list-style-type: none"> <li>■ increase belt tension, replace belt if necessary</li> </ul>          |
| Belt runs off due to slippage under load                                     | <ul style="list-style-type: none"> <li>■ increase tension to prevent slippage (do not overtighten)</li> </ul> |
| Tapered contact roll or idler roll, idler roll and contact roll not parallel | <ul style="list-style-type: none"> <li>■ redress roll to remove taper, align to parallel</li> </ul>           |

| Poor grinding results                                     |  |
|---|--|
| Burnishing of work surface – indication of over-used belt | <ul style="list-style-type: none"> <li>■ use belt only as long as efficient</li> <li>■ use proper feed speeds</li> </ul>   |
| Streaks and/or ridges on workpiece                        | <ul style="list-style-type: none"> <li>■ clean or redress contact roll</li> <li>■ clean platen, replace felt or graphite</li> <li>■ check dust collection for blockages</li> </ul> |
| Too coarse finish   | <ul style="list-style-type: none"> <li>■ use finer grit</li> <li>■ increase SFPM</li> <li>■ apply more feed pressure</li> </ul>  |
| Too fine finish   | <ul style="list-style-type: none"> <li>■ use coarser grit</li> <li>■ decrease SFPM</li> <li>■ apply less feed pressure</li> </ul>  |

### Recommendations for use of abrasive belts

| Workpiece material           |  |   | Application        | Surface roughness | Grit size | Recom. abrasive grit                              | Recom. peripheral speed [SFPM] |
|------------------------------|--|---|--------------------|-------------------|-----------|---|--------------------------------|
| Steel, cast steel            | Non-hardened, non-heat treated steels up to 38 HRC (<1,200 N/mm <sup>2</sup> ) | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steels    | coarse grinding    | coarse            | coarse    | Aluminum oxide A POLIVLIES®                       | 4,900 - 6,900                  |
|                              |  |   | fine grinding      | ▼                 | ▼         |   |                                |
|                              |  |   | very fine grinding | fine              | fine      |   |                                |
|                              | Hardened, heat-treated steels exceeding 38 HRC (>1,200 N/mm <sup>2</sup> )     | Tool steels, tempered steels, alloyed steels, cast steels   | coarse grinding    | coarse            | coarse    | Aluminum oxide A Zirconia alumina Z POLIVLIES®    | 3,900 - 5,900                  |
|                              |  |   | fine grinding      | ▼                 | ▼         |   |                                |
|                              |  |   | very fine grinding | fine              | fine      |   |                                |
| Stainless steel (INOX)       | Rust and acid-resistant steels   | Austenitic and ferritic stainless steels  | coarse grinding    | coarse            | coarse    | Ceramic oxide CO-COOL POLIVLIES®                  | 2,900 - 4,900                  |
|                              |  |   | fine grinding      | ▼                 | ▼         |   |                                |
|                              |  |   | very fine grinding | fine              | fine      |   |                                |
| Non-ferrous metals           | Soft non-ferrous metals  | Aluminum-alloys, brass, copper, zinc  | coarse grinding    | coarse            | coarse    | Aluminum oxide A POLIVLIES®                       | 5,900 - 7,900                  |
|                              |  |   | fine grinding      | ▼                 | ▼         |   |                                |
|                              |  |   | very fine grinding | fine              | fine      |   |                                |
|                              | Hard non-ferrous metals  | Bronze, titanium, titanium alloys, aluminum alloys (high Si content)                                      | coarse grinding    | coarse            | coarse    | Ceramic oxide CO-COOL Aluminum oxide A POLIVLIES® | 3,900 - 5,900                  |
|                              |  |   | fine grinding      | ▼                 | ▼         |   |                                |
|                              |  |   | very fine grinding | fine              | fine      |   |                                |
|                              | High-temperature resistant materials   | Nickel-based alloys, cobalt-based alloys (aircraft engine and turbine construction)                       | coarse grinding    | coarse            | coarse    | Aluminum oxide A POLIVLIES®                       | 1,000 - 2,900                  |
|                              |  |   | fine grinding      | ▼                 | ▼         |   |                                |
|                              |  |   | very fine grinding | fine              | fine      |   |                                |
| Cast iron                    | Grey cast iron, white cast iron  | Cast iron with flake graphite, with nodular graphite cast iron, white annealed cast iron, black cast iron | coarse grinding    | coarse            | coarse    | Aluminum oxide A                                  | 4,900 - 6,900                  |
|                              |  |   | fine grinding      | ▼                 | ▼         |   |                                |
|                              |  |   | very fine grinding | fine              | fine      |   |                                |
| Plastics and other materials | Plastics, wood, paint  | Fibre-reinforced plastics, thermoplastics, woods, chipboard, paint, melamine                              | coarse grinding    | coarse            | coarse    | Aluminum oxide A                                  | 1,900 - 4,900                  |
|                              |  |   | fine grinding      | ▼                 | ▼         |   |                                |
|                              |  |   | very fine grinding | fine              | fine      |   |                                |



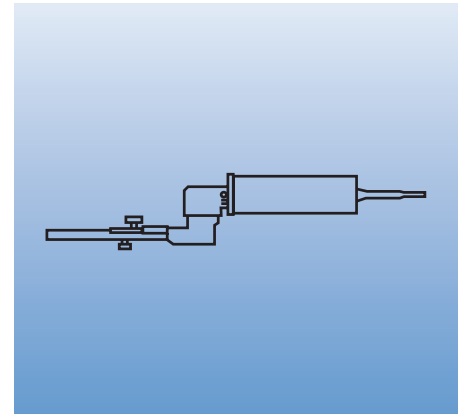
### Application examples

#### File belts

- Portable, light duty use.
- For grinding, deburring, finishing and polishing.
- Small area of surface contact.
- For use on hard-to-reach areas and contours, e.g., tubes, railings.

### Recommendation for use

Recommendations for use of these belts under various operating conditions, as well as belt/grinder compatibility information, are given in the table "Recommendations for use of abrasive belts" (page 38).



For general-purpose grinding, from coarse to fine in diverse applications.


#### Abrasive: Aluminum oxide A

#### PFERD specification number

BA-A

#### File belts Aluminum oxide A

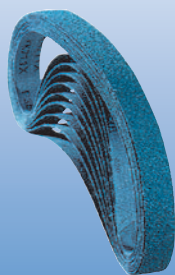


| Width x length<br>[Inches] | Grit and EDP number |       |       |       |       |       |       |  |
|----------------------------|---------------------|-------|-------|-------|-------|-------|-------|---|
|                            | 36                  | 40    | 50    | 60    | 80    | 100   | 120   |   |
| 1/8 x 12                   | -                   | -     | -     | 48947 | 48948 | -     | 48950 | 10  |
| 1/8 x 20-1/2               | -                   | -     | -     | 48955 | 48956 | -     | 48958 | 10  |
| 1/4 x 12                   | -                   | -     | -     | 48963 | 48964 | -     | 48966 | 10  |
| 1/4 x 18                   | 49000               | 49001 | 49002 | 49003 | 49004 | -     | 49006 | 10  |
| 1/4 x 20-1/2               | 48968               | 48969 | 48970 | 48971 | 48972 | -     | 48974 | 10  |
| 1/4 x 24                   | 49008               | 49009 | 49010 | 49011 | 49012 | -     | 49014 | 10  |
| 3/8 x 12                   | -                   | -     | -     | 48979 | 48980 | -     | 48982 | 10  |
| 3/8 x 13                   | 49016               | 49017 | 49018 | 49019 | 49020 | -     | 49022 | 10  |
| 1/2 x 12                   | 49024               | -     | 49026 | 49027 | 49028 | -     | 49030 | 10  |
| 1/2 x 18                   | 49032               | 49033 | 49034 | 49035 | 49036 | 49037 | 49038 | 10  |
| 1/2 x 20-1/2               | 48984               | 48985 | 48986 | 48987 | 48988 | -     | 48990 | 10  |
| 1/2 x 24                   | 49040               | 49041 | 49042 | 49043 | 49044 | 49045 | 49046 | 10  |
| 5/8 x 20-1/2               | -                   | -     | -     | 48995 | 48996 | -     | 48998 | 10  |
| 3/4 x 18                   | 49048               | 49049 | 49050 | 49051 | 49052 | -     | 49054 | 10  |
| 3/4 x 20-1/2               | -                   | 49057 | 49058 | 49059 | 49060 | -     | 49062 | 10  |
| 1 x 12                     | -                   | 49065 | 49066 | 49067 | 49068 | -     | 49070 | 10  |
| 1 x 30                     | -                   | -     | -     | 49086 | 49087 | -     | 49089 | 10  |

# Abrasive belts

## File belts

### File belts Zirconia alumina Z



Designed for coarse grinding and high stock removal, these belts attain a long service life. Zirconia alumina is a high-performance abrasive which delivers best results at increased contact pressure.

**Abrasive: Zirconia alumina Z**

**PFERD specification number**  
BA-Z



| Width x length<br>[Inches] | Grit and EDP number |       |       |       |    |
|----------------------------|---------------------|-------|-------|-------|----|
|                            | 36                  | 40    | 60    | 80    |    |
| 1/4 x 18                   | 49691               | 49692 | 49694 | 49695 | 10 |
| 1/4 x 24                   | 49696               | 49697 | 49699 | 49700 | 10 |
| 3/8 x 13                   | 49701               | 49702 | 49704 | 49705 | 10 |
| 1/2 x 12                   | 49712               | 49713 | 49715 | 49716 | 10 |
| 1/2 x 18                   | 49717               | 49718 | 49720 | 49730 | 10 |
| 1/2 x 24                   | 49734               | 49735 | 49738 | 49739 | 10 |
| 3/4 x 18                   | 49740               | 49741 | 49743 | 49744 | 10 |
| 3/4 x 20-1/2               | 49746               | 49747 | 49749 | 49750 | 10 |

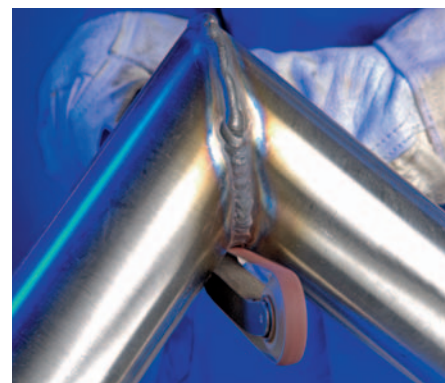
### File belts Ceramic grain CO-COOL



For aggressive grinding achieving maximum stock removal on hard, poor heat-conducting materials. Active additives in the coating ensure a substantially improved abrasive performance while preventing loading and reducing heat build-up in the workpiece.

**Abrasive: Ceramic oxide CO-COOL  
(top-sized)**

**PFERD specification number**  
BA-CO-COOL



| Width x length<br>[Inches] | Grit and EDP number |       |       |       |    |
|----------------------------|---------------------|-------|-------|-------|----|
|                            | 40                  | 50    | 60    | 80    |    |
| 1/4 x 18                   | 49497               | 49498 | 49499 | 49500 | 10 |
| 1/4 x 24                   | 49504               | 49505 | 49506 | 49507 | 10 |
| 3/8 x 13                   | 49511               | 49512 | 49513 | 49514 | 10 |
| 1/2 x 12                   | 49529               | 49530 | 49531 | 49532 | 10 |
| 1/2 x 18                   | 49536               | 49537 | 49538 | 49539 | 10 |
| 1/2 x 24                   | 49543               | 49544 | 49545 | 49546 | 10 |
| 3/4 x 18                   | 49560               | 49561 | 49562 | 49563 | 10 |
| 3/4 x 20-1/2               | 49567               | 49568 | 49569 | 49570 | 10 |



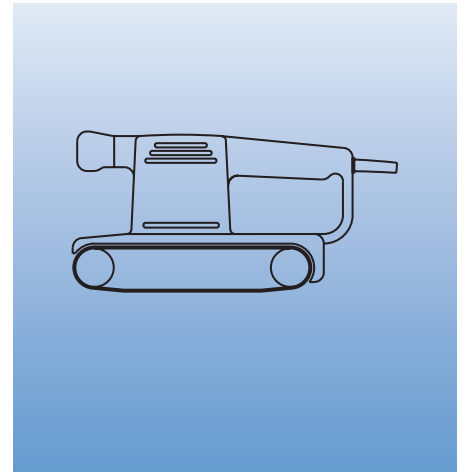
### Application examples

#### Portable belts

- Portable use for working large flat or near flat surfaces.
- For grinding, deburring, finishing and polishing.
- Removing rust and corrosion, surface conditioning.
- Belt designed for use on metals, wood, plastic, fibreglass and composites.

#### Recommendation for use

Recommendations for use of these belts under various operating conditions, as well as belt/grinder compatibility information, are given in the table "Recommendations for use of abrasive belts" (page 38).

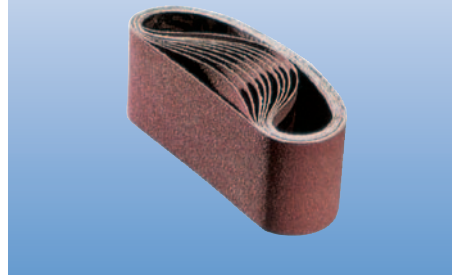


For general-purpose grinding, from coarse to fine in diverse applications.

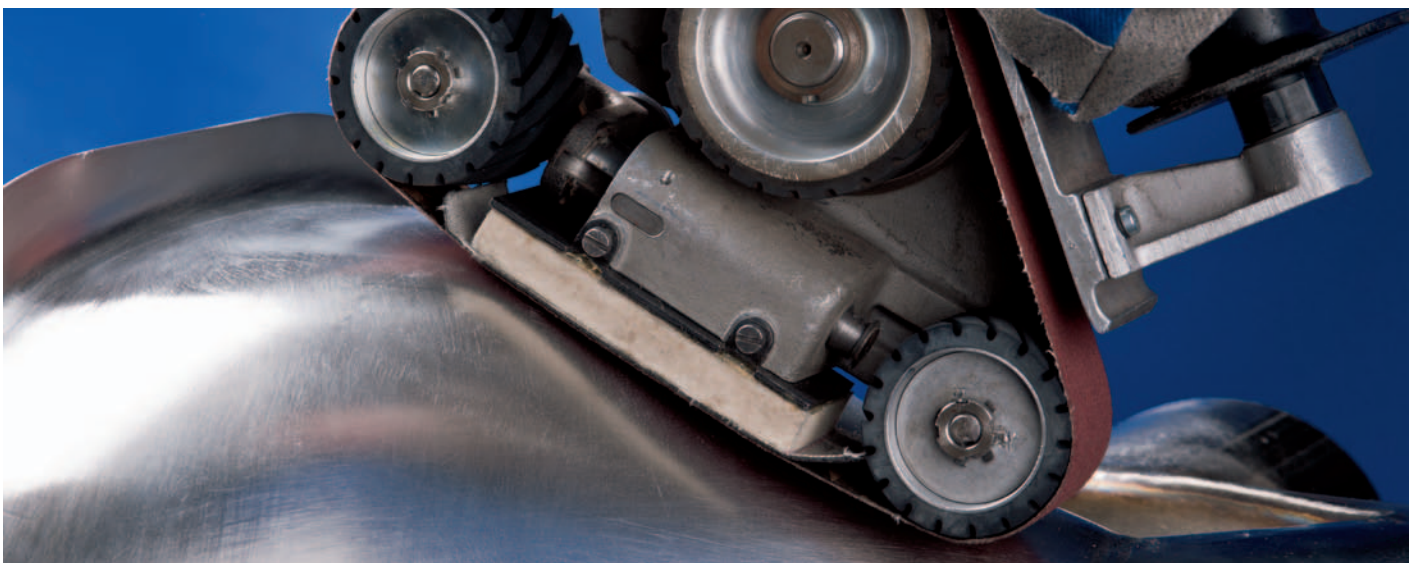
**Abrasive: Aluminum oxide A**

**PFERD specification number**  
BA-A

**Portable belts**  
**Aluminum oxide A**



| Width x length<br>[Inches] | Grit and EDP number |       |       |       |       |       |    |
|----------------------------|---------------------|-------|-------|-------|-------|-------|----|
|                            | 40                  | 50    | 60    | 80    | 100   | 120   |    |
| 3 x 21                     | 49211               | 49212 | 49213 | 49214 | 49215 | 49216 | 10 |
| 3 x 24                     | 49250               | 49251 | 49252 | 49253 | 49254 | 49255 | 10 |
| 3-1/2 x 15-1/2             | 49312               | -     | 49314 | 49315 | 49316 | 49317 | 10 |
| 4 x 24                     | 49360               | 49361 | 49362 | 49363 | 49364 | 49365 | 10 |



# Abrasive belts

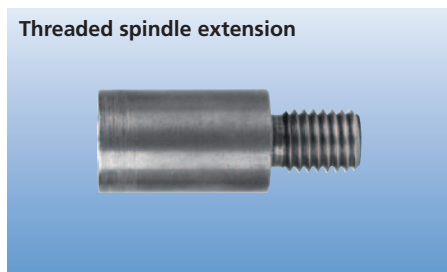
## **NEW** Pneumatic drums and accessories




Pneumatic drum holder for 3-1/2" x 15-1/2" belts. The cushioned grinding increases the service life of belts by reducing heat build-up and allowing more flexibility.

For use on linear finishing tool (EDP 91217) see our "Power tools" catalogue (section 209).

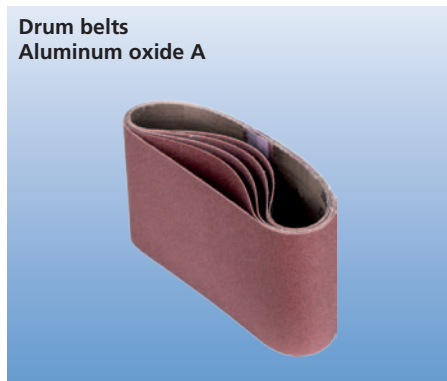
| For belt size [Inches] | Drum diameter [Inches] | Max. inflation | Internal thread | EDP number | Max. RPM |  |
|------------------------|------------------------|----------------|-----------------|------------|----------|---|
| 3-1/2 x 15-1/2         | 5                      | 15 psi         | 5/8-11          | 49985      | 3,800    | 1   |



Threaded spindle extension allows pneumatic drum to be mounted on linear finishing tool (EDP 91217), see our "Power tools" catalogue (section 209). Has internal and external 5/8-11 threads.


| Fits power tool spindle (internal thread) | External thread | EDP number |  |
|---|-----------------|------------|---|
| 5/8-11                                    | 5/8-11          | 49986      | 1   |

## **NEW** Belts for pneumatic drums



For general-purpose grinding, from coarse to fine in diverse applications.

**Abrasive: Aluminum oxide A**  
**PFERD specification number**  
 BA-A

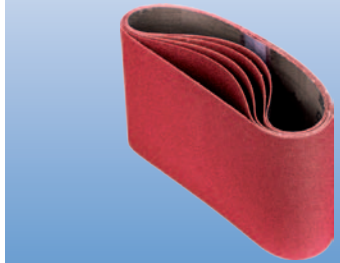
| Width x length [Inches] | Grit and EDP number |       |       |       |       |  |
|-------------------------|---------------------|-------|-------|-------|-------|---|
|                         | 40                  | 60    | 80    | 100   | 120   |   |
| 3-1/2 x 15-1/2          | 49312               | 49314 | 49315 | 49316 | 49317 | 10  |


For aggressive grinding achieving maximum stock removal on hard, poor heat-conducting materials. Active additives in the coating ensure a substantially improved abrasive performance while preventing loading and reducing heat build-up in the workpiece.

**Abrasive: Ceramic oxide CO-COOL (top-sized)**

**PFERD specification number**  
BA-CO-COOL

**Drum belts**  
Ceramic grain CO-COOL



| Width x length<br>[Inches] | Grit and EDP number |       |       |  |
|----------------------------|---------------------|-------|-------|---|
|                            | 40                  | 60    | 80    |   |
| 3-1/2 x 15-1/2             | 49641               | 49642 | 49643 | 10  |

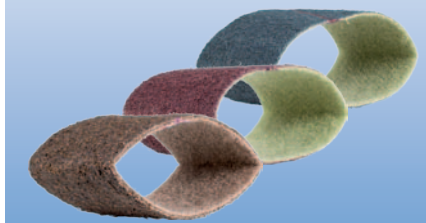
These heavy-duty non-woven surface conditioning belts are manufactured with aluminum oxide impregnated fibre mesh on a tough web backing. The grain is evenly dispersed on the material, resulting in a smooth, uniform finish. The open structure resists loading and can be used wet or dry. The synthetic material will not rust or corrode. Its life can be increased by washing after use. POLIVLIES® belts are designed for buffing, blending, cleaning, light deburring, finishing and polishing on all metals. Particularly well suited for use on stainless and aluminum.


**Abrasive: Aluminum oxide A**

100 C = coarse (colour: yellowish brown)  
180 M = medium (colour: reddish brown)  
240 F = fine (colour: blue)

**PFERD specification number**  
VB

**POLIVLIES® surface conditioning**  
Drum belts



| Width x length<br>[Inches] | Grit and EDP number |        |       |  |
|----------------------------|---------------------|--------|-------|---|
|                            | coarse              | medium | fine  |   |
| 3-1/2 x 15-1/2             | 43613               | 43614  | 43615 | 10  |



# Abrasive belts

## Benchstand and backstand belts



### Application examples

#### Benchstand belts

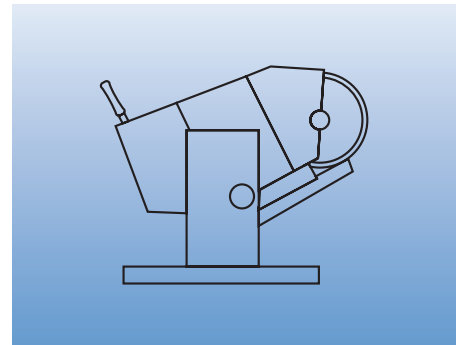
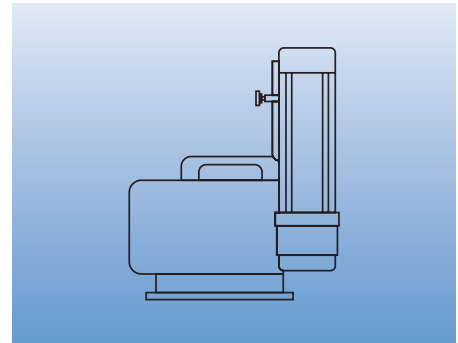
- Stationary machine for light to moderate duty use.
- Most machines are sanding attachments to bench grinders.
- Versatile, low powered machines for general purpose use.
- Grinding and finishing against platen or contact wheel.

#### Backstand belts

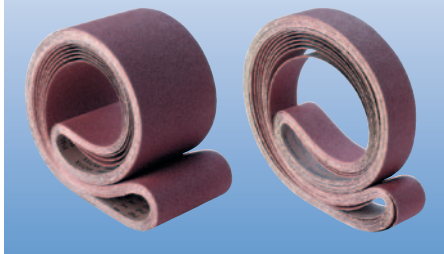
- Stationary, heavy-duty machine.
- Deburring, blending and finishing.
- Work performed at contact wheel for most aggressive action.
- Grinding and finishing castings and forgings.

### Recommendation for use

Recommendations for use of these belts under various operating conditions, as well as belt/grinder compatibility information, are given in the table "Recommendations for use of abrasive belts" (page 38).




### Benchstand and backstand belts Aluminum oxide A



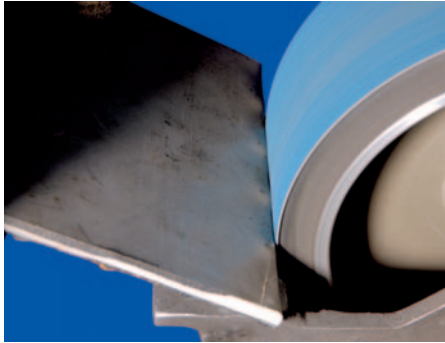
For general-purpose grinding, from coarse to fine in diverse applications.

**Abrasive: Aluminum oxide A**

**PFERD specification number**  
BA-A

| Width x length<br>[Inches] | Grit and EDP number |       |       |       |       |       | 120   |  |
|----------------------------|---------------------|-------|-------|-------|-------|-------|-------|---|
|                            | 24                  | 36    | 40    | 50    | 60    | 80    |       |   |
| <b>Benchstand belts</b>    |                     |       |       |       |       |       |       |   |
| 1 x 42                     | -                   | -     | 49093 | 49094 | 49095 | 49096 | 49098 | 10  |
| 1-1/2 x 60                 | -                   | -     | 49106 | -     | 49108 | 49109 | -     | 10  |
| 2 x 48                     | -                   | 49132 | 49133 | 49134 | 49135 | 49136 | 49138 | 10  |
| 2-1/2 x 60                 | -                   | 49179 | -     | 49181 | 49182 | 49183 | -     | 10  |
| 4 x 36                     | -                   | -     | 49373 | -     | 49375 | 49376 | 49378 | 10  |
| 6 x 48                     | 49463               | 49464 | 49465 | 49466 | 49467 | 49468 | 49470 | 10  |
| <b>Backstand belts</b>     |                     |       |       |       |       |       |       |   |
| 2 x 132                    | -                   | 49159 | -     | -     | 49162 | 49163 | -     | 10  |



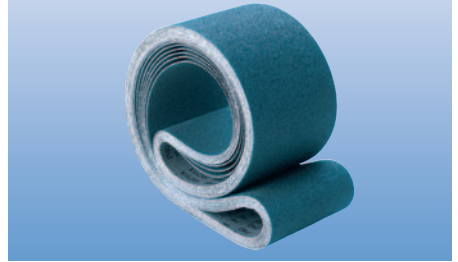



Designed for coarse grinding and high stock removal, these belts also attain a long service life. Zirconia alumina is a high-performance abrasive which delivers best results at increased contact pressure.

**Abrasive: Zirconia alumina Z**

**PFERD specification number**  
BA-Z

### Benchstand belts Zirconia alumina Z



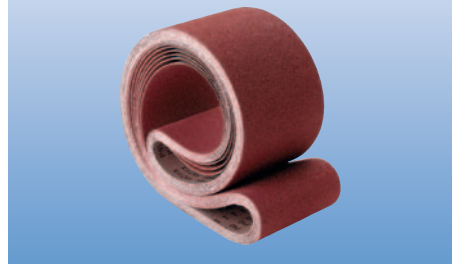
| Width x length<br>[Inches] | Grit and EDP number |       |       |  |
|----------------------------|---------------------|-------|-------|---|
|                            | 36                  | 60    | 80    |   |
| 2 x 48                     | 49786               | 49789 | 49790 | 10  |
| 2 x 60                     | 49792               | -     | 49796 | 10  |
| 2-1/2 x 60                 | 49828               | 49831 | 49832 | 10  |
| 4 x 36                     | 49879               | 49882 | 49883 | 10  |
| 6 x 48                     | 49885               | 49888 | 49889 | 10  |


For aggressive grinding achieving maximum stock removal on hard, poor heat-conducting materials. Active additives in the coating ensure a substantially improved abrasive performance while preventing loading and reducing heat build-up in the workpiece.

**Abrasive: Ceramic oxide CO-COOL  
(top-sized)**

**PFERD specification number**  
BA-CO-COOL

### Benchstand belts Ceramic grain CO-COOL



| Width x length<br>[Inches] | Grit and EDP number |       |       |  |
|----------------------------|---------------------|-------|-------|---|
|                            | 40                  | 60    | 80    |   |
| 1 x 42                     | 49574               | 49576 | 49577 | 10  |
| 1-1/2 x 60                 | 49581               | 49583 | 49584 | 10  |
| 2 x 48                     | 49588               | 49590 | 49591 | 10  |
| 2 x 60                     | 49595               | 49597 | 49598 | 10  |
| 2-1/2 x 60                 | 49616               | 49618 | 49619 | 10  |
| 4 x 36                     | 49658               | 49660 | 49661 | 10  |
| 6 x 48                     | 49672               | 49674 | 49675 | 10  |

Special-purpose accessory for cleaning loaded abrasive belts. ABRACLEAN provides powerful cleaning action on all coated abrasive products.


### Recommendations for use

- The ABRACLEAN cleaning stick cleans loaded belts and virtually any coated product. Just apply the rotating abrasive to the cleaning stick.
- Always use protective goggles when using this product.

**PFERD specification number**  
RG 300 50

### ABRACLEAN cleaning stick



| Length x height x width<br>[Inches] | EDP number |  |
|-------------------------------------|------------|---|
| 12 x 2 x 2                          | 62918      | 2   |

# Abrasive belts

## POLIVLIES® surface conditioning belts

### POLIVLIES® surface conditioning belts



These heavy-duty non-woven surface conditioning belts are manufactured with aluminum oxide impregnated fibre mesh on a tough web backing. The grain is evenly dispersed on the material, resulting in a smooth, uniform finish.

The open structure resists loading and can be used wet or dry. The synthetic material will not rust or corrode. Its life can be increased by washing after use.

POLIVLIES® belts are designed for buffing, blending, cleaning, light deburring, finishing and polishing on all metals. Particularly well suited for use on stainless steel and aluminum.

#### Abrasive: Aluminum oxide A


- 100 C = coarse (colour: yellowish brown)
- 180 M = medium (colour: reddish brown)
- 240 F = fine (colour: blue)

#### Recommendation for use

Please observe indicated direction of rotation.

#### PFERD specification number

VB

| Width x length<br>[Inches] | Grit size and EDP number |        |       |  |
|----------------------------|--------------------------|--------|-------|---|
|                            | coarse                   | medium | fine  |   |
| 1/4 x 12                   | 43634                    | 43635  | 43636 | 10  |
| 1/4 x 18                   | 43550                    | 43551  | 43552 | 10  |
| 1/4 x 20-1/2               | 43637                    | 43638  | 43639 | 10  |
| 1/4 x 24                   | 43553                    | 43554  | 43555 | 10  |
| 3/8 x 12                   | 43640                    | 43641  | 43642 | 10  |
| 1/2 x 12                   | 43643                    | 43644  | 43645 | 10  |
| 1/2 x 18                   | 43556                    | 43557  | 43558 | 10  |
| 1/2 x 20-1/2               | 43646                    | 43647  | 43648 | 10  |
| 1/2 x 24                   | 43559                    | 43560  | 43561 | 10  |
| 5/8 x 20-1/2               | 43649                    | 43650  | 43651 | 10  |
| 3/4 x 18                   | 43562                    | 43563  | 43564 | 10  |
| 3/4 x 20-1/2               | 43565                    | 43566  | 43567 | 10  |
| 3 x 24                     | 43607                    | 43608  | 43609 | 10  |
| 3-1/2 x 15-1/2             | 43613                    | 43614  | 43615 | 10  |





### Cloth-backed (HP)

For use on metals or wood. Designed for ultra heavy-duty applications, resists oil and petroleum.

### Cloth-backed (BG)

Recommended for use on metals or wood. A cost-efficient alternative for standard-duty applications.

### Abrasive: Aluminum oxide A

### Ordering note for aluminum oxide A (BG)

The grit sizes 100, 120, 150, 180, 220 and 240 are supplied in packaging units of 100 pieces.

### PFERD specification number


BG HP  
BG

### Abrasive sheets, cloth-backed Aluminum oxide A (HP) Aluminum oxide A (BG)

Cloth-backed (HP)



Cloth-backed (BG)

| Width x length [Inches]      | Grit and EDP number |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
|------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
|                              | 40                  | 60    | 80    | 100   | 120   | 150   | 180   | 220   | 240   | 280   | 320   | 400   | 444   | 999   |   |
| <b>Aluminum oxide A (HP)</b> |                     |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
| 9 x 11                       | 46912               | 46913 | 46914 | 46915 | 46916 | 46917 | 46918 | 46919 | 46920 | 46921 | 46922 | 46924 | 46925 | 46926 | 50  |
| <b>Aluminum oxide A (BG)</b> |                     |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
| 9 x 11                       | 46900               | 46901 | 46902 | 46903 | 46904 | 46905 | 46906 | 46907 | 46908 | -     | -     | -     | -     | -     | 50  |



### Paper-backed (water resistant) SiC

Can be used on paintwork and glass. Particularly recommended for wet grinding on conventional coating systems.

### Abrasive: Silicon carbide SiC

### PFERD specification number

BP SiC

### Paper-backed A

For removing paint and coatings from metal or wood.

### Abrasive: Aluminum oxide A

### Ordering note for aluminum oxide A

The grit sizes 40, 60 and 80 are supplied in packaging units of 50 pieces.

### PFERD specification number


BP A

### Abrasive sheets, paper-backed Aluminum oxide A Silicon carbide SiC (water resistant)


Aluminum oxide A



Silicon carbide SiC (water resistant)

| Width x length [Inches]                      | Grit and EDP number |       |       |       |       |       |       |       |       |       |  |
|--|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
|  | 40                  | 60    | 80    | 100   | 120   | 150   | 180   | 220   | 240   | 280   |   |
| <b>Silicon carbide SiC (water resistant)</b> |                     |       |       |       |       |       |       |       |       |       |   |
| 9 x 11                                       | -                   | -     | -     | 46927 | 46928 | 46929 | 46930 | 46931 | 46932 | 46933 | 50  |
| <b>Aluminum oxide A</b>                      |                     |       |       |       |       |       |       |       |       |       |   |
| 9 x 11                                       | 46942               | 46943 | 46944 | 46945 | 46946 | 46947 | 46948 | 46949 | 46950 | 46951 | 100   |

| Width x length [Inches]                      | Grit and EDP number |       |       |       |       |       |       |       |  |
|--|---------------------|-------|-------|-------|-------|-------|-------|-------|---|
|  | 320                 | 360   | 400   | 500   | 600   | 800   | 1000  | 1200  |   |
| <b>Silicon carbide SiC (water resistant)</b> |                     |       |       |       |       |       |       |       |   |
| 9 x 11                                       | 46934               | 46935 | 46936 | 46937 | 46938 | 46939 | 46940 | 46941 | 50  |
| <b>Aluminum oxide A</b>                      |                     |       |       |       |       |       |       |       |   |
| 9 x 11                                       | -                   | -     | 46952 | -     | -     | -     | -     | -     | 100   |

# Abrasive sheets

## POLINOX® hand pads, holder

### POLINOX® hand pads



Designed for light manual grinding, deburring and cleaning work on metals, plastics, fibreglass, fibre-reinforced plastics, stainless steel, aluminum, paint, coatings and fillers.

Due to their flexibility, POLINOX® hand pads provide outstanding results on contours and in hard-to-reach workpiece areas.

**Abrasive: Aluminum oxide A  
Silicon carbide SiC**

#### Application

- Light deburring work.
- Corrosion removal.
- Cleaning jobs in tool and mold-making.
- Fine grinding/patterning of stainless steel.

#### Recommendation for use

For dry or wet use.

#### PFERD specification number

PVSK

#### Maroon (general purpose)

Most widely used of all hand pads. Aluminum oxide grain, noted for its toughness and durability on tasks such as cleaning, deburring, rust removal, blending and finishing. May be used dry or with solvents.

#### Green (food service)

General purpose grade pads made from aluminum oxide. Commonly used in the food service industry, these pads are recommended for light duty and finishing applications.

#### Tan


This heavy-duty pad consists of a dense aluminum oxide grain concentration on heavy backing material. Designed for the most severe applications, it is extremely durable and resists tearing and fraying. Excellent for removal of oxidation, weld cleaning, deburring, and finishing stainless steel and aluminum.

#### White

This hand pad contains no abrasive. It is used primarily for applying lubricants, detergents, polishes, etc. to almost any material. Commonly used for cleaning plastics, glass, ceramics, porcelain, chrome, copper and stainless steel.

#### Grey

Ultra fine silicon carbide pad provides a precise, fine cutting action. Well suited for light cleaning and fine finishing on a variety of materials including metal, plastic, glass and wood.

| Width x length [Inches] | EDP number | Description     | Grit size | Abrasive        | Colour |  |
|-------------------------|------------|-----------------|-----------|-----------------|--------|---|
| 6 x 9                   | 44600      | general purpose | 180       | Aluminum oxide  | maroon | 20  |
| 6 x 9                   | 44606      | medium finish   | 100       | Aluminum oxide  | tan    | 20  |
| 6 x 9                   | 44609      | ultra fine      | 400       | Silicon carbide | grey   | 20  |
| 6 x 9                   | 44613      | food service    | 180       | Aluminum oxide  | green  | 20  |
| 6 x 9                   | 44618      | non-abrasive    | -         | None            | white  | 20  |

### Pad holder

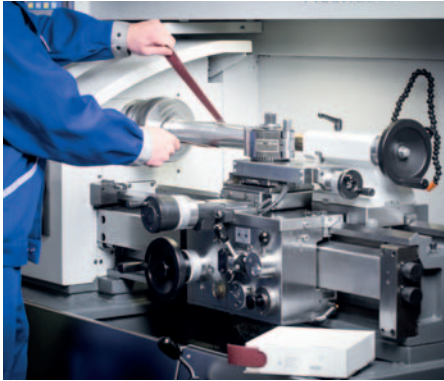


Ergonomic pad holder designed for use with 6 x 9" hand pads.

#### PFERD specification number

PVPH

| Dimension [Inches] | EDP number |  |
|--------------------|------------|---|
| 3-1/2 x 6          | 44620      | 1   |



Shop rolls are used in workshops, maintenance, tool-making, fabrication shops and production applications. The material can be torn by hand to any length for practicality and economy. Choose from a wide selection of type, sizes and grits.



Provides good heat resistance and smooth finishes. Aluminum oxide cloth, for use on ferrous and non-ferrous metals grinding flat or irregular surfaces, cleaning and polishing of rough ground workpieces.

**Abrasive: Aluminum oxide A**  
**PFERD specification number**  
 SBRG

### Light, flexible shop rolls



| Width [In] x length [Yds] | Grit and EDP number |       |       |       |       |       |       |       |       |       |       |       |   |
|---------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
|                           | 50                  | 60    | 80    | 100   | 120   | 150   | 180   | 220   | 240   | 320   | 400   | 500   |   |
| 1 x 50                    | 47101               | 47102 | 47103 | 47104 | 47105 | 47106 | 47107 | 47108 | 47109 | 47111 | 47112 | 47113 | 1 |
| 1-1/2 x 50                | 47151               | 47152 | 47153 | 47154 | 47155 | 47156 | 47157 | 47158 | 47159 | 47161 | 47162 | 47163 | 1 |
| 2 x 50                    | 47201               | 47202 | 47203 | 47204 | 47205 | 47206 | 47207 | 47208 | 47209 | 47211 | 47212 | 47213 | 1 |

Aluminum oxide cloth with a combination resin-over-resin bond most resistant to heat and moisture, very strong bond for best durability. For use on ferrous and non-ferrous metals grinding flat or irregular surfaces, cleaning and polishing of rough ground workpieces.

**Abrasive: Aluminum oxide A**  
**PFERD specification number**  
 SBRR

### Heavy-duty shop rolls

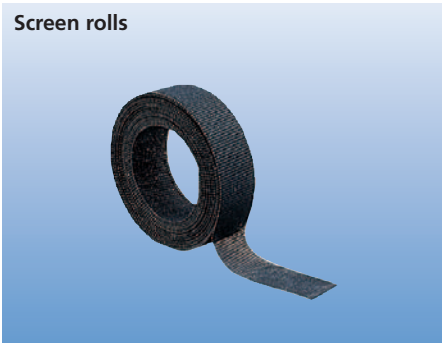


| Width [In] x length [Yds] | Grit and EDP number |       |       |       |       |       |       |       |       |       |   |
|---------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
|                           | 60                  | 80    | 100   | 120   | 150   | 180   | 220   | 240   | 320   | 400   |   |
| 1 x 50                    | 47116               | 47117 | 47118 | 47119 | 47120 | 47121 | -     | 47123 | 47125 | 47126 | 1 |
| 1-1/2 x 50                | 47166               | 47167 | 47168 | 47169 | 47170 | 47171 | 47172 | 47173 | 47175 | -     | 1 |
| 2 x 50                    | 47216               | 47217 | 47218 | 47219 | 47220 | 47221 | 47222 | 47223 | 47225 | 47226 | 1 |

# Abrasive rolls

## Screen rolls, roll holders, non-woven shop rolls


### Screen rolls



Silicon carbide screen cloth is highly resistant to loading. Offers long life on ferrous and nonferrous metals, soft metals such as copper and lead, wood, plastics, drywall joint compound and other materials. Double sided.

**Abrasive: Silicon carbide SiC**

**PFERD specification number**  
SBRS

| Width [In] x length [Yds] | Grit and EDP number |       |       |  |
|---------------------------|---------------------|-------|-------|---|
|                           | 80                  | 120   | 180   |   |
| 1-1/2 x 10                | 47233               | 47234 | 47235 | 1   |

### Shop roll holders SRH 1 and SRH 5



Two different holders are available for convenient storage of shop rolls - rip off any desired length:

Both holders are prepared for wall mounting.

**Single roll holder SRH 1 (empty)**


For 1", 1-1/2" or 2" roll width.

**PFERD specification number**

SRH

**Multi roll holder SRH 5 (empty)**

For 1", 1-1/2" or 2" roll width.  
Permits various roll width combinations, e.g., 5 x 2" or 5 x 1-1/2".

| Type        | No. of rolls | Suitable for roll widths [Inches] | Suitable for roll dia. [Inches] | EDP number |  |
|-------------|--------------|-----------------------------------|---------------------------------|------------|---|
| Single roll | 1            | 1, 1-1/2 or 2                     | 15                              | 47238      | 1   |
| Multi roll  | up to 5      | 1, 1-1/2 or 2                     | 10                              | 47239      | 1   |

### Non-woven shop rolls

**NEW**



Designed for light manual grinding, deburring and cleaning work on metals, plastics, fibreglass, fibre-reinforced plastics, stainless steel, aluminum, paint, coatings and fillers.

**Application**

- Light deburring work.
- Corrosion removal.
- Cleaning jobs in tool and mold-making.
- Fine grinding/patterning of stainless steel.

**Abrasives**


A/O = Aluminum oxide  
SiC = Silicon carbide

**Recommendation for use**

Suitable for dry or wet use.

**PFERD specification number**

VBR

| Width [In] x length [Yds] | Grit and EDP number |       |       |       | Abrasive |  |
|---------------------------|---------------------|-------|-------|-------|----------|---|
|                           | 100                 | 180   | 280   | 400   |          |   |
| 4 x 10                    | 43516               | 43517 | 43518 | -     | A/O      | 1   |
| 4 x 10                    | -                   | -     | -     | 43519 | SiC      | 1   |

For many different applications, PFERD provides a comprehensive range of abrasive spiral bands with various

- shapes,
- dimensions,
- abrasives,
- grit sizes.

Matching, reusable rubber drum holders in two different shapes are available for using abrasive spiral bands:

- cylindrical
- conical

The high degree of fitting accuracy between the components ensures that the abrasive spiral band remains securely attached to the rubber drum holder during use.

Abrasive spiral bands are designated "cylindrical abrasive sleeves" according to ISO 2421.

Cylindrical rubber drum holders are designated "holding fixtures of cylindrical abrasive sleeves" according to ISO 15637-1.

### Advantages

- Because of slots, the holder expands during use, guaranteeing that the abrasive spiral band is firmly clamped in place.
- Outstanding service life due to special manufacturing process – even under the most demanding operating conditions.
- Particularly high stock removal and high aggressiveness of the abrasive.

### Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the spiral band diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the abrasive spiral band and tool drive.

#### Example

1" x 1" A 60 (EDP 41982 + 41149)

Peripheral speed: 3,000 - 6,000 SFPM

**Rotational speed: 15,000 - 22,500 RPM**

### Recommendations for use

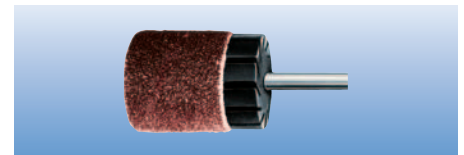
- Abrasive spiral bands can be mounted and removed by turning them slightly to the right.
- Abrasive spiral bands are easier to mount when the rubber drum holder is mounted on the tool drive.
- The secure attachment of the abrasive spiral band is only guaranteed if the minimum rotational speed is observed.
- Abrasive spiral bands achieve their best performance at a recommended cutting speed of 4,000 - 6,000 SFPM.

### Application examples

- Removing weld seams in steel construction.
- Fine grinding work in equipment, tank and vessel construction.
- Post-processing for assembly and repair work.
- Machining edges and contours in aircraft engine construction.

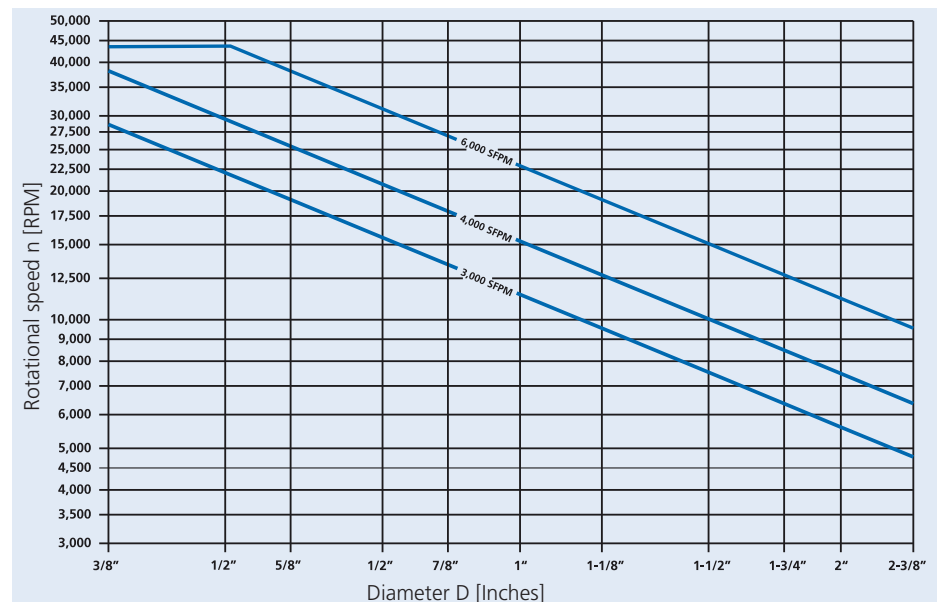
### Safety notes

- The maximum permitted peripheral speed is 6,000 SFPM.
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.
- Do not allow abrasive spiral bands to protrude beyond the rubber body.



### Dust warning

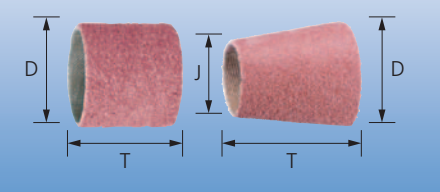
Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.



# Abrasive spiral bands, drum holders

## Abrasive spiral bands


### Abrasive spiral bands Aluminium oxide A



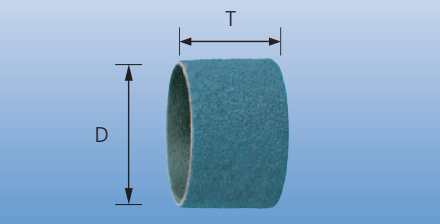
Abrasive spiral bands with aluminum oxide grain are universally recommended for many materials. Available in cylindrical shape or tapered drum shape.

**Abrasive: Aluminum oxide A**

**PFERD specification number**  
GSB A

| Diameter (D, J) x length (T)<br>[Inches] | Grit and EDP number |       |       |       |       |       | Suitable holder | Recom. speed<br>RPM |  |
|--|---------------------|-------|-------|-------|-------|-------|-----------------|---------------------|---|
|  | 40                  | 50    | 60    | 80    | 150   | 240   |                 |                     |   |
| <b>Cylindrical type</b>                  |                     |       |       |       |       |       |                 |                     |   |
| 3/8 x 3/4                                | -                   | -     | -     | 41022 | 41023 | 41024 | EDP 41966       | 30,000 - 44,000     | 100   |
| 1/2 x 1                                  | -                   | -     | -     | 41046 | 41049 | -     | EDP 41970       | 30,000 - 44,000     | 100   |
| 5/8 x 1-1/8                              | -                   | 41068 | 41069 | 41070 | 41072 | 41074 | EDP 41973       | 26,000 - 36,000     | 100   |
| 3/4 x 1                                  | -                   | -     | 41102 | 41103 | 41106 | -     | EDP 41976       | 20,000 - 30,000     | 100   |
| 7/8 x 3/4                                | -                   | 41131 | 41132 | 41133 | 41135 | 41137 | EDP 41979       | 18,000 - 26,000     | 100   |
| 1 x 1                                    | -                   | -     | 41149 | 41150 | 41153 | -     | EDP 41982       | 16,000 - 22,900     | 100   |
| 1-1/8 x 1-1/8                            | 41190               | 41191 | 41192 | 41193 | 41195 | 41197 | EDP 41985       | 13,000 - 19,100     | 100   |
| 1-1/2 x 1                                | 41200               | -     | 41202 | 41203 | 41206 | -     | EDP 41988       | 10,000 - 15,900     | 100   |
| 1-3/4 x 1-1/8                            | 41238               | 41239 | 41240 | 41241 | 41243 | 41245 | EDP 41991       | 8,500 - 12,700      | 100   |
| 2 x 1                                    | 41248               | -     | 41250 | 41251 | 41254 | -     | EDP 41994       | 7,500 - 11,200      | 100   |
| 2-3/8 x 1-1/8                            | 41295               | 41296 | 41297 | 41298 | 41300 | -     | EDP 41997       | 6,500 - 9,500       | 100   |
| <b>Tapered type</b>                      |                     |       |       |       |       |       |                 |                     |   |
| 3/4 to 1/2 x 2-1/2                       | 41350               | -     | 41351 | 41352 | 41353 | -     | EDP 42005       | 18,500 - 26,000     | 100   |
| 1-1/8 to 7/8 x 1-3/16                    | 41355               | -     | 41356 | 41357 | 41358 | -     | EDP 42007       | 10,000 - 15,900     | 100   |
| 1-1/2 to 7/8 x 2-3/8                     | 41360               | -     | 41361 | 41362 | 41363 | -     | EDP 42006       | 13,000 - 19,100     | 100   |

### Abrasive spiral bands, cylindrical type Zirconia alumina Z-COOL



The Z-COOL version of these abrasive bands provides particularly cool grinding action, and prevents loading. Ideal for use on stainless steel.

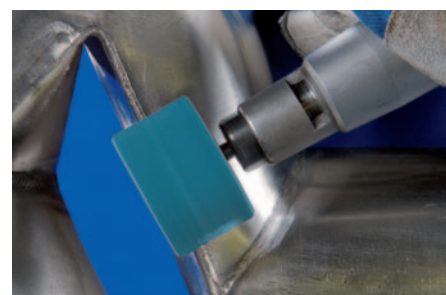
Zirconia grain provides high abrasive performance and long service life.


**Abrasive**

Grit 36, 50, 80 = Zirconia alumina Z-COOL  
(top-sized)

Grit 150 = Aluminum oxide A-COOL  
(top-sized)

**PFERD specification number**  
GSB Z-COOL



| Diameter (D) x length (T)<br>[Inches] | Grit and EDP number |       |       |       | Suitable holder | Recom. speed<br>RPM |  |
|---------------------------------------|---------------------|-------|-------|-------|-----------------|---------------------|---|
|                                       | 36                  | 50    | 80    | 150   |                 |                     |   |
| 5/8 x 1-1/8                           | -                   | 41405 | 41406 | 41407 | EDP 41973       | 26,000 - 36,000     | 100   |
| 7/8 x 3/4                             | -                   | 41408 | 41409 | 41410 | EDP 41979       | 18,000 - 26,000     | 100   |
| 1-1/8 x 1-1/8                         | 41415               | 41416 | 41417 | 41418 | EDP 41985       | 13,000 - 19,100     | 100   |
| 1-3/4 x 1-1/8                         | 41419               | 41420 | 41421 | 41422 | EDP 41991       | 8,500 - 12,700      | 100   |
| 2-3/8 x 1-1/8                         | 41427               | 41428 | 41429 | 41430 | EDP 41997       | 6,500 - 9,500       | 100   |

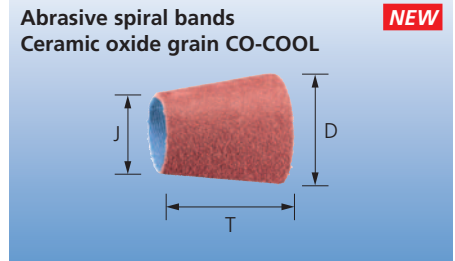



For aggressive grinding with maximum stock removal on hard and tough materials which do not conduct heat well.

Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

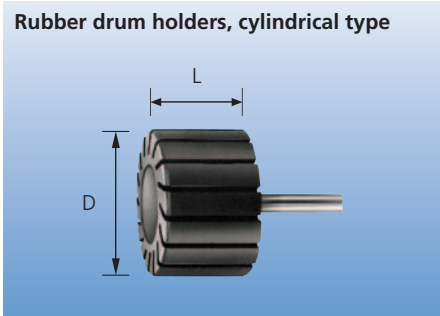
Available in cylindrical and conical shapes.

**Abrasive: Ceramic oxide grain CO-COOL**



| Diameter (D, J) x length (T)<br>[Inches] | Grit size and EDP number |       |       |       | Suitable holder | Recom. speed<br>RPM |  |
|--|--------------------------|-------|-------|-------|-----------------|---------------------|---|
|  | 36                       | 60    | 80    | 120   |                 |                     |   |
| <b>Tapered type</b>                      |                          |       |       |       |                 |                     |   |
| 3/4 to 1/2 x 2-1/2                       | 41388                    | 41389 | 41390 | 41391 | EDP 42005       | 18,500 - 26,000     | 100   |
| 1-1/8 to 7/8 x 1-3/16                    | 41392                    | 41393 | 41394 | 41395 | EDP 42007       | 10,000 - 15,900     | 100   |
| 1-1/2 to 7/8 x 2-3/8                     | 41396                    | 41397 | 41398 | 41399 | EDP 42006       | 13,000 - 19,100     | 100   |

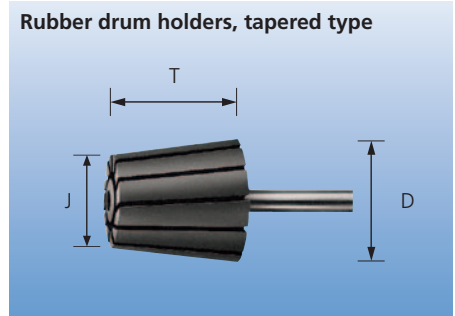
### Rubber drum holders, cylindrical type




Slotted rubber drum holders available in cylindrical shape or tapered drum shape.

**PFERD specification number**  
GK

### Rubber drum holders, tapered type



| Diameter (D, J) x length (T)<br>[Inches] | Shank dia.<br>[Inches] | EDP number | Min. RPM | Max. RPM |  |
|--|------------------------|------------|----------|----------|---|
| <b>Cylindrical type</b>                  |                        |            |          |          |   |
| 3/8 x 3/4                                | 1/4                    | 41966      | 30,000   | 44,000   | 5   |
| 1/2 x 1                                  | 1/4                    | 41970      | 30,000   | 44,000   | 5   |
| 5/8 x 1-1/8                              | 1/4                    | 41973      | 26,000   | 36,000   | 5   |
| 3/4 x 1                                  | 1/4                    | 41976      | 20,000   | 30,000   | 5   |
| 7/8 x 3/4                                | 1/4                    | 41979      | 18,000   | 26,000   | 5   |
| 1 x 1                                    | 1/4                    | 41982      | 16,000   | 22,900   | 5   |
| 1-1/8 x 1-1/8                            | 1/4                    | 41985      | 13,000   | 19,100   | 5   |
| 1-1/2 x 1                                | 1/4                    | 41988      | 10,000   | 15,900   | 5   |
| 1-3/4 x 1-1/8                            | 1/4                    | 41991      | 8,500    | 12,700   | 5   |
| 2 x 1                                    | 1/4                    | 41994      | 7,500    | 11,200   | 5   |
| 2-3/8 x 1-1/8                            | 1/4                    | 41997      | 6,500    | 9,500    | 5   |
| <b>Tapered type</b>                      |                        |            |          |          |   |
| 3/4 to 1/2 x 2-1/2                       | 1/4                    | 42005      | 19,000   | 26,000   | 5   |
| 1-1/2 to 7/8 x 2-3/8                     | 1/4                    | 42006      | 13,000   | 19,100   | 5   |
| 1-1/8 to 7/8 x 1-3/16                    | 1/4                    | 42007      | 10,000   | 15,900   | 5   |

# POLIROLL cartridge rolls

## General information

For work on hard-to-reach areas, PFERD provides POLIROLL cartridge rolls with various

- shapes,
- dimensions,
- abrasives and
- grit sizes.

POLIROLL cartridge rolls consist of a coated abrasive wound in a spiral. The abrasive grain is embedded in the resinoid coating on the strong cloth backing material for maximum abrasive performance.

Self-clamping due to a grooved conical arbor ensures that the cartridge rolls remain securely attached during use.

### Advantages

- As the outer abrasive material of POLIROLL cartridge rolls wears off, fresh abrasive grain is exposed.
- Very good stock removal.
- Easy to replace due to specialized holder.

### Application examples


- Deburring work on bores and hard-to-reach areas.
- Removal of fillet weld seams on metal structures.
- Deburring work on castings.


### Recommendations for use


- Always grind using the tip and not the surface, as otherwise the adhesive will be damaged by the heat produced.
- Always position the cartridge rolls with the bonded side towards the arbor.

### Safety notes


- The maximum permitted peripheral speed is 2,300 SFPM.
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.


 = Wear eye protection!


 = Wear a dust mask!

 = Wear hearing protection!

 = Wear gloves!

 = Please read the safety instructions!

 = Read the Safety Data Sheets (SDS) before using any materials!

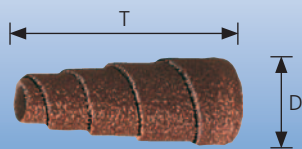
 = Not permitted for wet grinding!



### Dust warning

Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.

### POLIROLL tapered cartridge rolls



### Abrasive: Aluminum oxide A


#### Ordering note

Please order the arbors separately (see next page).

#### PFERD specification number

PRK



| Diameter (D) x length (T)<br>[Inches] | Arbor hole<br>[Inches] | Grit and EDP number |       |       |       | Suitable<br>arbors | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|------------------------|---------------------|-------|-------|-------|--------------------|---------------------|----------|---|
|                                       |                        | 60                  | 80    | 120   | 180   |                    |                     |          |   |
| 3/8 x 1                               | 1/8                    | 41800               | 41801 | 41803 | 41804 | EDP 42060          | 16,000              | 24,000   | 50  |
| 3/8 x 1-1/2                           | 1/8                    | 41807               | 41808 | 41810 | 41811 | EDP 42061          | 16,000              | 24,000   | 50  |
| 1/2 x 1                               | 1/8                    | 41817               | 41818 | 41820 | 41821 | EDP 42060          | 12,000              | 18,000   | 50  |
| 1/2 x 1-1/2                           | 1/8                    | 41827               | 41828 | 41830 | 41831 | EDP 42061          | 12,000              | 18,000   | 50  |
| 1/2 x 2                               | 1/8                    | 41837               | 41838 | 41840 | 41841 | EDP 42062          | 12,000              | 18,000   | 50  |
| 3/4 x 1-1/2                           | 3/16                   | 41874               | 41875 | 41876 | -     | EDP 42063          | 8,000               | 12,000   | 50  |
| 3/4 x 2                               | 3/16                   | 41882               | 41883 | 41884 | -     | EDP 42064          | 8,000               | 12,000   | 50  |



**Abrasive: Aluminum oxide A**

**Ordering note**


Please order the arbors separately.

**PFERD specification number**

PR

**POLIROLL  
untapered cartridge rolls**



| Diameter (D) x length (T)<br>[Inches] | Arbor hole<br>[Inches] | Grit and EDP number |       |       |       |       |       |       |       | Suitable arbors | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------------|----------|---|
|                                       |                        | 36                  | 60    | 80    | 100   | 120   | 180   | 240   | 320   |                 |                     |          |   |
| 1/4 x 1                               | 1/8                    | -                   | 41468 | 41469 | 41470 | 41471 | 41473 | 41474 | 41475 | EDP 42060       | 20,000              | 25,000   | 50  |
| 1/4 x 1-1/2                           | 1/8                    | -                   | 41479 | 41480 | 41481 | 41482 | 41484 | 41485 | 41486 | EDP 42061       | 20,000              | 25,000   | 50  |
| 5/16 x 1-1/2                          | 1/8                    | -                   | 41512 | 41513 | 41514 | 41515 | -     | -     | -     | EDP 42061       | 18,500              | 23,000   | 50  |
| 3/8 x 1                               | 1/8                    | -                   | 41523 | 41524 | 41525 | 41526 | -     | -     | -     | EDP 42060       | 16,000              | 24,000   | 50  |
| 3/8 x 1-1/2                           | 1/8                    | -                   | 41534 | 41535 | 41536 | 41537 | 41539 | 41540 | 41541 | EDP 42061       | 16,000              | 24,000   | 50  |
| 3/8 x 2                               | 1/8                    | -                   | 41545 | 41546 | 41547 | 41548 | -     | -     | -     | EDP 42062       | 16,000              | 24,000   | 50  |
| 1/2 x 1                               | 1/8                    | -                   | 41567 | 41568 | 41569 | 41570 | -     | -     | -     | EDP 42060       | 12,000              | 18,000   | 50  |
| 1/2 x 1-1/2                           | 1/8                    | 41586               | 41589 | 41590 | 41591 | 41592 | 41594 | 41595 | 41596 | EDP 42061       | 12,000              | 18,000   | 50  |
| 1/2 x 2                               | 1/8                    | -                   | 41600 | 41601 | 41602 | 41603 | -     | -     | -     | EDP 42062       | 12,000              | 18,000   | 50  |
| 5/8 x 1-1/2                           | 1/8                    | -                   | 41633 | 41634 | 41635 | 41636 | -     | -     | -     | EDP 42061       | 9,500               | 15,000   | 50  |
| 3/4 x 1                               | 1/8                    | -                   | 41666 | 41667 | 41668 | 41669 | -     | -     | -     | EDP 42060       | 8,000               | 12,000   | 50  |
| 3/4 x 1-1/2                           | 3/16                   | 41674               | 41677 | 41678 | 41679 | 41680 | -     | -     | -     | EDP 42063       | 8,000               | 12,000   | 50  |
| 3/4 x 2                               | 3/16                   | -                   | 41721 | 41722 | 41723 | 41724 | -     | -     | -     | EDP 42064       | 8,000               | 12,000   | 50  |
| 1 x 1-1/2                             | 1/4                    | 41740               | 41743 | 41744 | 41745 | 41746 | -     | -     | -     | EDP 42066       | 6,000               | 9,000    | 25  |
| 1 x 2                                 | 1/4                    | -                   | 41776 | 41777 | 41778 | 41779 | -     | -     | -     | EDP 42067       | 6,000               | 9,000    | 25  |


These arbors are intended specially for untapered and tapered POLIROLL cartridge rolls.

**PFERD specification number**

PRBO

**Arbors for POLIROLL cartridge rolls**



| Shank diameter<br>[Inches] | Pilot diameter<br>[Inches] | Pilot diameter<br>[Inches] | EDP number | Max. RPM |  |
|----------------------------|----------------------------|----------------------------|------------|----------|---|
| 1/4                        | 1/8                        | 1                          | 42060      | 25,000   | 1   |
| 1/4                        | 1/8                        | 1-1/2                      | 42061      | 25,000   | 1   |
| 1/4                        | 1/8                        | 2                          | 42062      | 24,000   | 1   |
| 1/4                        | 3/16                       | 1-1/2                      | 42063      | 12,000   | 1   |
| 1/4                        | 3/16                       | 2                          | 42064      | 12,000   | 1   |
| 1/4                        | 1/4                        | 1-1/2                      | 42066      | 9,000    | 1   |
| 1/4                        | 1/4                        | 2                          | 42067      | 9,000    | 1   |

PFERD provides POLICAP® abrasive caps and cones with various

- shapes,
- dimensions,
- abrasives and
- grit sizes.

POLICAP® abrasive caps have a seamless design for smooth operation, and the entire surface of the abrasive cap can be used. Matching, reusable holders in various shapes are available for using abrasive caps and cones. The high degree of fitting accuracy between the components ensures that the abrasive caps and cones remain securely attached to the holder during use.

### Advantages

- Because of slots, the holder expands during use, guaranteeing that the abrasive cap/cone is firmly clamped in place.
- Good dimensional stability and excellent fine grinding thanks to a special manufacturing process.
- Easy to change-out abrasive caps.



PFERDMEDIA

To see it in action, please visit [pferdusa.com/vpolicap](http://pferdusa.com/vpolicap)

### Application examples

- Fine grinding in tool and mould construction.
- Finishing on turbine blades after repair.
- Feather edging of radii at transitions after milling frames in aircraft construction.
- Fine grinding of hard-to-reach areas and bores.
- Levelling of transitions in fitting and pump construction.

### Recommendations for use

- Abrasive caps and cones can be mounted and removed by turning them slightly to the right.
- Abrasive caps and cones are easier to replace when the holder is mounted on the tool drive.
- Abrasive caps and cones achieve their best performance at a recommended cutting speed of 2,000 - 4,000 SFPM.

### Dust warning

Use of the products in this catalogue may create dust and other particles. To avoid any risk of

adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.

### Safety notes

- The maximum permitted peripheral speed is 5,000 SFPM.
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



#### Aluminum oxide A type (AL<sub>2</sub>O<sub>3</sub>)



For universal use on steel materials (hardened, tempered, non-hardened). Specially developed for specific tasks, e.g. in tool and mould construction and for appropriate repair work. Also suitable for working on plastics, wood and filler in model making.

#### SiC-COOL type (silicon carbide with abrasive grinding layer)



Ideal for working on components made of titanium, aluminum and their respective alloys. Outstandingly well suited to use in aircraft and turbine construction and the associated maintenance work. The special grain selection and the abrasive grinding additive in the bond enable cool grinding, reduce the workpiece temperature and prevent chip adhesion.

#### CO-COOL type (ceramic oxide grain with abrasive grinding layer)



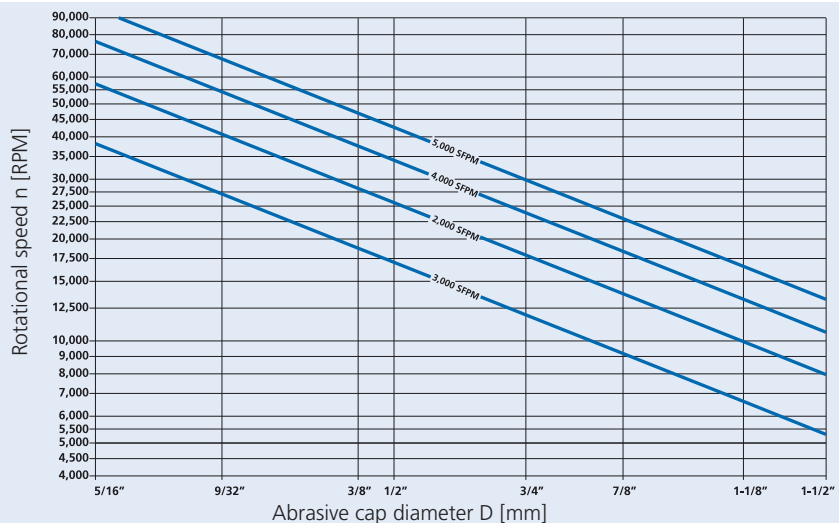
Due to the specific structure of the ceramic oxide grain and the abrasive bond components, ideally suited to working on stainless steels (INOX) and the heat-resistant nickel- and cobalt-based alloys often used in turbine construction, such as Inconel® and Hastelloy®. The abrasive grinding additives prevent clogging and permit cooler grinding with significantly higher stock removal.

### Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the abrasive cap diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] for the POLICAP® and tool drive.

#### Example

Shape A  
Diameter 3/8"  
EDP: 42010 (holder), 46036 (cap)  
Peripheral speed: 2,000 - 4,000 SFPM  
**Rotational speed: 19,000 - 38,000 RPM**



Cylindrical shape.

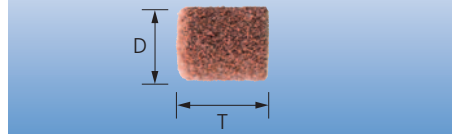
**Abrasive: Aluminum oxide A**


**Grit size colour code**

brown = 60 and 80 grit  
 black = 150 grit  
 reddish brown = 280 grit

**PFERD specification number**  
 PC A A

**POLICAP® abrasive cap, shape A**

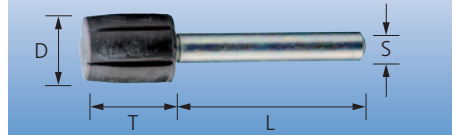



| Diameter (D) x length (T)<br>[Inches] | Grit and EDP number |       |       |       | Recom. speed<br>RPM | Suitable<br>holder |  |
|---------------------------------------|---------------------|-------|-------|-------|---------------------|--------------------|---|
|                                       | 60                  | 80    | 150   | 280   |                     |                    |   |
| 3/16 x 3/8                            | -                   | 46029 | 46030 | 46031 | 40,000              | EDP 42008          | 50  |
| 9/32 x 1/2                            | 46032               | -     | 46033 | 46034 | 30,000              | EDP 42009          | 50  |
| 3/8 x 5/8                             | 46035               | -     | 46036 | 46037 | 20,000              | EDP 42010          | 50  |
| 1/2 x 11/16                           | 46065               | -     | 46066 | 46067 | 16,000              | EDP 42021          | 50  |
| 5/8 x 1                               | 46068               | -     | 46069 | 46070 | 12,000              | EDP 42022          | 50  |

Cylindrical shape.

**PFERD specification number**  
 PCT A

**POLICAP® abrasive cap holder, shape A**



| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S)<br>[Inches] | EDP number | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|----------------------------|------------|---------------------|----------|--|
| 3/16 x 3/8                            | 1/8                        | 42008      | 40,000              | 95,000   | 5  |
| 9/32 x 1/2                            | 1/8                        | 42009      | 30,000              | 65,000   | 5  |
| 3/8 x 5/8                             | 1/8                        | 42010      | 20,000              | 45,000   | 5  |
| 1/2 x 11/16                           | 1/4                        | 42021      | 16,000              | 35,000   | 5  |
| 5/8 x 1                               | 1/4                        | 42022      | 12,000              | 30,000   | 5  |

POLICAP® shape A set contains 105 abrasive caps in various sizes and grits, and 5 rubber expanding heads, including all EDP numbers above. Cylindrical shape.

**Abrasive: Aluminum oxide A**

**Contents PCS 110 A**

10 ea. POLICAP® abrasive caps 3/16" - 9/32"  
 5 ea. POLICAP® abrasive caps 3/8" - 5/8"  
 1 ea. POLICAP® abrasive cap holders

**PFERD specification number**  
 PCS 110 A

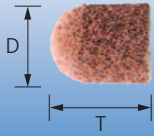
**POLICAP® set, shape A**



| Case dimensions<br>[Inches] | EDP number |  |
|-----------------------------|------------|---|
| 7 x 5-3/4 x 1-1/2           | 46093      | 1   |



### POLICAP® abrasive cap, shape C




Cylindrical shape with radius end.

**Abrasive: Aluminum oxide A  
SiC-COOL (Silicon carbide)  
Ceramic oxide grain CO-COOL**

#### Grit size colour code for aluminum oxide A

brown = 60 and 80 grit  
black = 150 grit  
reddish brown = 280 grit

**PFERD specification number**  
PC C A

| Diameter (D) x length (T)<br>[Inches] | Grit and EDP number |       |     |       |       | Recom. speed<br>RPM | Suitable<br>holder |  |
|---------------------------------------|---------------------|-------|-----|-------|-------|---------------------|--------------------|---|
|                                       | 60                  | 80    | 120 | 150   | 280   |                     |                    |   |
| <b>Aluminum oxide A</b>               |                     |       |     |       |       |                     |                    |   |
| 3/16 x 7/16                           | -                   | 46038 | -   | 46039 | 46040 | 40,000              | EDP 42011          | 50  |
| 9/32 x 1/2                            | 46041               | -     | -   | 46042 | 46043 | 30,000              | EDP 42012          | 50  |
| 3/8 x 5/8                             | 46044               | -     | -   | 46045 | 46046 | 20,000              | EDP 42013          | 50  |
| 1/2 x 11/16                           | 46071               | -     | -   | 46072 | 46073 | 16,000              | EDP 42023          | 50  |
| 5/8 x 1                               | 46074               | -     | -   | 46075 | 46076 | 12,000              | EDP 42024          | 50  |

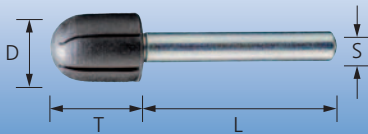
### **NEW** Silicon carbide SiC-COOL

|             |   |       |   |       |   |        |           |    |
|-------------|---|-------|---|-------|---|--------|-----------|----|
| 3/16 x 7/16 | - | 46101 | - | 46102 | - | 40,000 | EDP 42011 | 50 |
| 9/32 x 1/2  | - | 46104 | - | 46105 | - | 30,000 | EDP 42012 | 50 |
| 3/8 x 5/8   | - | 46107 | - | 46108 | - | 20,000 | EDP 42013 | 50 |
| 1/2 x 11/16 | - | 46110 | - | 46111 | - | 16,000 | EDP 42023 | 50 |
| 5/8 x 1     | - | 46113 | - | 46114 | - | 12,000 | EDP 42024 | 50 |

### **NEW** Ceramic oxide grain CO-COOL


|             |   |       |       |   |   |        |           |    |
|-------------|---|-------|-------|---|---|--------|-----------|----|
| 3/16 x 7/16 | - | 46116 | 46117 | - | - | 40,000 | EDP 42011 | 50 |
| 9/32 x 1/2  | - | 46119 | 46120 | - | - | 30,000 | EDP 42012 | 50 |
| 3/8 x 5/8   | - | 46122 | 46123 | - | - | 20,000 | EDP 42013 | 50 |
| 1/2 x 11/16 | - | 46125 | 46126 | - | - | 16,000 | EDP 42023 | 50 |
| 5/8 x 1     | - | 46128 | 46129 | - | - | 12,000 | EDP 42024 | 50 |

### POLICAP® abrasive cap holder, shape C



Cylindrical shape with radius end.

**PFERD specification number**  
PCT C

| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S)<br>[Inches] | EDP number | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|----------------------------|------------|---------------------|----------|---|
| 3/16 x 7/16                           | 1/8                        | 42011      | 40,000              | 95,000   | 5   |
| 9/32 x 1/2                            | 1/8                        | 42012      | 30,000              | 65,000   | 5   |
| 3/8 x 5/8                             | 1/8                        | 42013      | 20,000              | 45,000   | 5   |
| 1/2 x 11/16                           | 1/4                        | 42023      | 16,000              | 35,000   | 5   |
| 5/8 x 1                               | 1/4                        | 42024      | 12,000              | 30,000   | 5   |

### POLICAP® set, shape C



POLICAP® shape C set contains 105 abrasive caps in various sizes and grits, and 5 rubber expanding heads, including all EDP numbers above. Cylindrical shape with radius end.

**Abrasive: Aluminum oxide A**

#### Contents PCS 110 C

10 ea. POLICAP® abrasive caps 3/16" - 9/32"  
5 ea. POLICAP® abrasive caps 3/8" - 5/8"  
1 ea. POLICAP® abrasive cap holders

**PFERD specification number**  
PCS 110 C

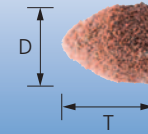
| Case dimensions<br>[Inches] | EDP number |  |
|-----------------------------|------------|---|
| 7 x 5-3/4 x 1-1/2           | 46094      | 1   |


Cylindrical shape with pointed cone end.

**Abrasive: Aluminum oxide A**
**Grit size colour code**

 brown = 60 and 80 grit  
 black = 150 grit  
 reddish brown = 280 grit

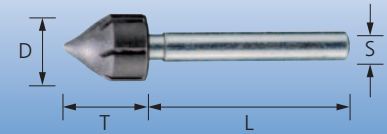
**PFERD specification number**  
 PC G A


**POLICAP® abrasive cap, shape G**


| Diameter (D) x length (T)<br>[Inches] | Grit and EDP number |       |       |       | Recom. speed<br>RPM | Suitable<br>holder |  |
|---------------------------------------|---------------------|-------|-------|-------|---------------------|--------------------|---|
|                                       | 60                  | 80    | 150   | 280   |                     |                    |   |
| 3/16 x 7/16                           | -                   | 46047 | 46048 | 46049 | 40,000              | EDP 42014          | 50  |
| 9/32 x 1/2                            | 46050               | -     | 46051 | 46052 | 30,000              | EDP 42015          | 50  |
| 3/8 x 5/8                             | 46053               | -     | 46054 | 46055 | 20,000              | EDP 42016          | 50  |
| 1/2 x 11/16                           | 46077               | -     | 46078 | 46079 | 16,000              | EDP 42025          | 50  |
| 5/8 x 1                               | 46080               | -     | 46081 | 46082 | 12,000              | EDP 42026          | 50  |

Cylindrical shape with pointed cone end.

**PFERD specification number**  
 PCT G

**POLICAP® abrasive cap holder, shape G**


| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S)<br>[Inches] | EDP number | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|----------------------------|------------|---------------------|----------|---|
| 3/16 x 7/16                           | 1/8                        | 42014      | 40,000              | 95,000   | 5   |
| 9/32 x 1/2                            | 1/8                        | 42015      | 30,000              | 65,000   | 5   |
| 3/8 x 5/8                             | 1/8                        | 42016      | 20,000              | 45,000   | 5   |
| 1/2 x 11/16                           | 1/4                        | 42025      | 16,000              | 35,000   | 5   |
| 5/8 x 1                               | 1/4                        | 42026      | 12,000              | 30,000   | 5   |

POLICAP® shape G set contains 105 abrasive caps in various sizes and grits, and 5 rubber expanding heads, including all EDP numbers above. Cylindrical shape with pointed cone end.

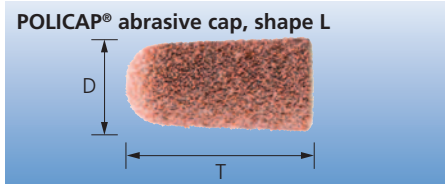
**Abrasive: Aluminum oxide A**
**Contents PCS 110 G**

 10 ea. POLICAP® abrasive caps 3/16" - 9/32"  
 5 ea. POLICAP® abrasive caps 3/8" - 5/8"  
 1 ea. POLICAP® abrasive cap holders

**PFERD specification number**  
 PCS 110 G

**POLICAP® set, shape G**


| Case dimensions<br>[Inches] | EDP number |  |
|-----------------------------|------------|---|
| 7 x 5-3/4 x 1-1/2           | 46095      | 1   |




Tapered radius end shape.

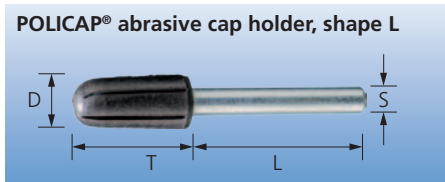
**Abrasive Aluminum oxide A**  
**Silicon carbide SiC-COOL**  
**Ceramic oxide grain CO-COOL**

**Grit size colour code for aluminum oxide A**

brown = 60 and 80 grit  
 black = 150 grit  
 reddish brown = 280 grit

**PFERD specification number**  
 PC L A


| Diameter (D) x length (T)<br>[Inches]  | Grit and EDP number |       |       |       |       | Recom. speed<br>RPM | Suitable<br>holder |  |
|--|---------------------|-------|-------|-------|-------|---------------------|--------------------|---|
|  | 60                  | 80    | 120   | 150   | 280   |                     |                    |   |
| <b>Aluminum oxide A</b>                |                     |       |       |       |       |                     |                    |   |
| 1/4 x 5/8                              | -                   | 46083 | -     | 46084 | 46085 | 40,000              | EDP 42017          | 50  |
| 7/16 x 1                               | 46056               | -     | -     | 46057 | 46058 | 20,000              | EDP 42018          | 50  |
| 5/8 x 1-1/4                            | 46059               | -     | -     | 46060 | 46061 | 12,000              | EDP 42019          | 50  |
| 27/32 x 1-9/16                         | 46062               | -     | -     | 46063 | 46064 | 9,000               | EDP 42020          | 50  |
| <b>NEW Silicon carbide SiC-COOL</b>    |                     |       |       |       |       |                     |                    |   |
| 1/4 x 5/8                              | -                   | 46131 | -     | 46132 | -     | 40,000              | EDP 42017          | 50  |
| 7/16 x 1                               | -                   | 46134 | -     | 46135 | -     | 20,000              | EDP 42018          | 50  |
| 5/8 x 1-1/4                            | -                   | 46137 | -     | 46138 | -     | 12,000              | EDP 42019          | 50  |
| 27/32 x 1-9/16                         | -                   | 46140 | -     | 46141 | -     | 9,000               | EDP 42020          | 50  |
| <b>NEW Ceramic oxide grain CO-COOL</b> |                     |       |       |       |       |                     |                    |   |
| 1/4 x 5/8                              | -                   | 46143 | 46144 | -     | -     | 40,000              | EDP 42017          | 50  |
| 7/16 x 1                               | -                   | 46146 | 46147 | -     | -     | 20,000              | EDP 42018          | 50  |
| 5/8 x 1-1/4                            | -                   | 46149 | 46150 | -     | -     | 12,000              | EDP 42019          | 50  |
| 27/32 x 1-9/16                         | -                   | 46152 | 46153 | -     | -     | 9,000               | EDP 42020          | 50  |



Tapered radius end shape.

**PFERD specification number**  
 PCT L



| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S)<br>[Inches] | EDP number | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|----------------------------|------------|---------------------|----------|---|
| 1/4 x 5/8                             | 1/4                        | 42017      | 40,000              | 95,000   | 5   |
| 7/16 x 1                              | 1/4                        | 42018      | 20,000              | 40,000   | 5   |
| 5/8 x 1-1/4                           | 1/4                        | 42019      | 12,000              | 30,000   | 5   |
| 27/32 x 1-9/16                        | 1/4                        | 42020      | 9,000               | 20,000   | 5   |



POLICAP® set 285 contains 270 abrasive caps in various sizes and grits, and 15 rubber expanding heads, shapes A, C, and G.

POLICAP® set 650 contains 640 abrasive caps in various sizes and grits, and 10 rubber expanding heads, shapes A and G.

**Abrasive: Aluminum oxide A**


**PFERD specification number**  
 PCS 285  
 PCS 650

**Contents PCS 285**

90 pcs. POLICAP® abrasive caps, shape A  
 90 pcs. POLICAP® abrasive caps, shape C  
 90 pcs. POLICAP® abrasive caps, shape G  
 in five dimensions and three grit sizes.  
 15 pcs. POLICAP® abrasive cap holders

**Contents PCS 650**

320 pcs. POLICAP® abrasive caps, shape A  
 320 pcs. POLICAP® abrasive caps, shape G  
 in five dimensions and three grit sizes.  
 10 pcs. POLICAP® abrasive cap holders

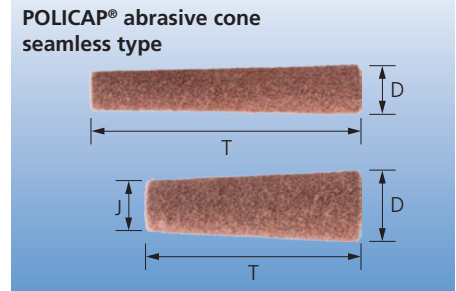
| Case dimensions<br>[Inches] | EDP number |         |  |
|-----------------------------|------------|---------|---|
|                             | PCS 285    | PCS 650 |   |
| 13 x 9-1/4 x 2              | 46090      | 46091   | 1   |




Tapered cylindrical shape.

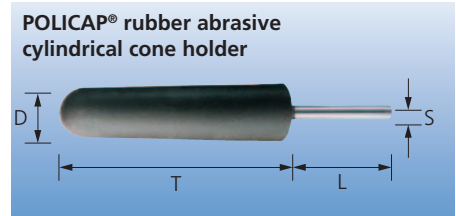
**Abrasive: Aluminum oxide A**
**Grit size colour code**


 brown = 60 grit  
 black = 150 grit  
 reddish brown = 280 grit

**PFERD specification number**  
 PCH L A


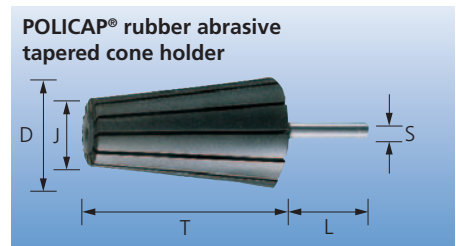
| Diameter (D, J) x length (T)<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Suitable holder |  |
|--|---------------------|-------|-------|---------------------|-----------------|---|
|  | 60                  | 150   | 280   |                     |                 |   |
| 5/16 x 3-3/8                             | 46008               | 46009 | 46010 | 12,000              | EDP 42001       | 10  |
| 1/2 x 3-3/8                              | 46011               | 46012 | -     | 12,000              | EDP 42002       | 10  |
| 3/4 x 3-3/8                              | 46014               | 46015 | -     | 12,000              | EDP 42003       | 10  |
| 7/8 x 3-3/8                              | 46017               | 46018 | -     | 12,000              | EDP 42004       | 10  |
| 3/4 to 1/2 x 2-1/2                       | 46020               | 46021 | -     | 20,000              | EDP 42005       | 10  |
| 1-1/2 to 7/8 x 2-3/8                     | 46023               | -     | -     | 14,000              | EDP 42006       | 10  |


Tapered cylindrical shape.

**PFERD specification number**  
 PCT L


| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S)<br>[Inches] | EDP number | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|----------------------------|------------|---------------------|----------|---|
| 5/16 x 3-3/8                          | 1/4                        | 42001      | 12,000              | 20,000   | 5   |
| 1/2 x 3-3/8                           | 1/4                        | 42002      | 12,000              | 15,000   | 5   |
| 3/4 x 3-3/8                           | 1/4                        | 42003      | 12,000              | 13,000   | 5   |
| 7/8 x 3-3/8                           | 1/4                        | 42004      | 12,000              | 12,000   | 5   |

Tapered drum shape.

**PFERD specification number**  
 GK


| Diameter (D, J) x length (T)<br>[Inches] | Shank dia. (S)<br>[Inches] | EDP number | Min. RPM | Max. RPM |  |
|--|----------------------------|------------|----------|----------|---|
| 3/4 to 1/2 x 2-1/2                       | 1/4                        | 42005      | 19,000   | 26,000   | 5   |
| 1-1/2 to 7/8 x 2-3/8                     | 1/4                        | 42006      | 13,000   | 19,100   | 5   |

# Flap wheels

## General information

PFERD provides mounted flap wheels with various

- grit sizes,
- abrasives and
- dimensions.

PFERD mounted flap wheels are supplied with the standard shank length of 1-1/2".

On request, we can manufacture mounted flap wheels with a threaded shank.

Please contact us.

The coated abrasive flaps are arranged radially around the axis of the flap wheel in a fan-type configuration. Due to their flexibility, they adapt ideally to the contours of the workpiece. The abrasive grit is embedded in a resinoid bond on the strong, flexible backing cloth. PFERD mounted flap wheels are designated "flap wheels with shaft" according to ISO 3919.

### Advantages

- High flexibility.
- High stock removal due to the aggressive coated abrasive.
- Carrier material wears off uniformly and without residue on the workpiece surface, meaning that sharp abrasive grit is exposed at all times.
- Due to the flat cast core construction, the face of the mounted flap wheels can be used to work very close to edges and in corners.

### Application examples

- Fine grinding on radii in tool and mould construction.
- Machining of small and hard-to-reach areas in apparatus engineering and tank construction.
- Machining of fittings made out of non-ferrous and light metals.
- Grinding of turbine blades in aircraft engine construction and repair.

### Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the flap wheel diameter meets the given cutting speed (diagonal). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the mounted flap wheels and tool drive.

#### Example

2" x 1" A 80 (EDP 45239)

Peripheral speed: 3,000 - 4,000 SFPM

Rotational speed: 5,600 - 7,500 RPM

PFERDERGONOMICS® recommends mounted flap wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.



### Recommendations for use

- Mounted flap wheels achieve their best performance at a recommended cutting speed of 3,000 - 4,000 SFPM. This provides an ideal compromise between stock removal, surface quality, thermal load on the workpiece and wear to the flap wheel.
- Flexible shafts, electric and air-powered straight grinders can be used as tool drives.



### Factors influencing the work result

#### ■ Flap wheel wear and thermal load

The reduction of the contact pressure and the peripheral speed, together with the addition of grinding oil, reduce flap wheel wear and the thermal load on the workpiece.

#### ■ Stock removal

An increase in stock removal should be attained by using a coarser grit size rather than by increasing the contact pressure in order to prevent unnecessary wear to the flap wheel and thermal load on the workpiece.

#### ■ Surface roughness

The increase in cutting speed results in a slightly finer surface. By increasing the contact pressure, the surface becomes slightly rougher. The softer the material to be worked, the rougher the surface (if the same grit size is used).

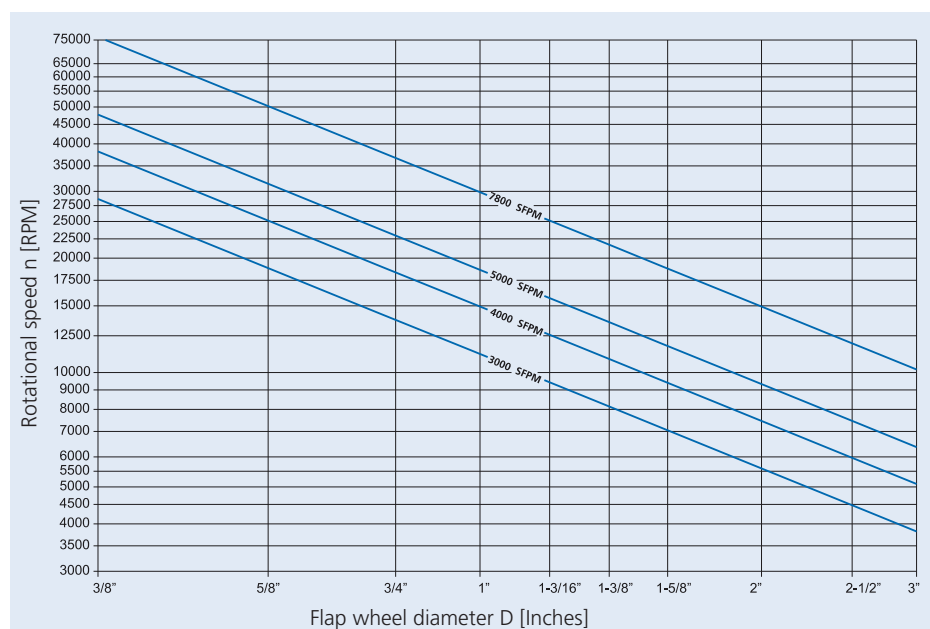
### Safety notes

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.
- Safety is only guaranteed if:
  - The clamping depth is at least 19/32".
  - The specified maximum rotational speed for unsupported shank lengths is not exceeded.



### Dust warning

Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.



Flap wheels with 1/8" shank and aluminum oxide A grain are recommended for all materials.

### Application examples

- Ideal for grinding in confined areas and hard-to-reach surfaces.
- For use in mold-making industry.
- From coarse grinding to preparing polishing.

**Abrasive: Aluminum oxide A**

### Workpiece materials

Steel, non-ferrous metals, cast iron and plastics

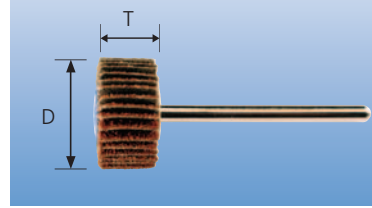
### PFERD specification number


F A 8

### PFERDERGONOMICS®



### Mini mounted flap wheels Aluminum oxide A



| Diameter (D) x length (T)<br>[Inches] | Shank dia.<br>[Inches] | Grit and EDP number |       |       |       |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|------------------------|---------------------|-------|-------|-------|-------|---------------------|----------|---|
|                                       |                        | 60                  | 80    | 120   | 180   | 240   |                     |          |   |
| 3/8 x 3/8                             | 1/8                    | 45070               | 45071 | 45072 | 45074 | 45075 | 38,000              | 75,000   | 10  |
| 3/8 x 5/8                             | 1/8                    | 45077               | 45078 | 45079 | 45081 | 45082 | 38,000              | 75,000   | 10  |
| 5/8 x 3/8                             | 1/8                    | 45091               | 45092 | 45093 | 45095 | 45096 | 25,000              | 50,000   | 10  |
| 5/8 x 5/8                             | 1/8                    | 45098               | 45099 | 45100 | 45102 | 45103 | 25,000              | 50,000   | 10  |
| 3/4 x 3/8                             | 1/8                    | 45154               | 45155 | 45156 | 45157 | 45158 | 19,000              | 38,100   | 10  |
| 1 x 1                                 | 1/8                    | 45178               | 45179 | 45180 | 45181 | 45182 | 15,000              | 25,000   | 10  |
| 1-3/16 x 3/8                          | 1/8                    | 45013               | 45014 | 45015 | 45016 | 45017 | 12,000              | 25,000   | 10  |



Flap wheels with 1/4" shank and aluminum oxide A grain are recommended for all materials.

**Abrasive: Aluminum oxide A**

### Workpiece materials

Steel, non-ferrous metals, cast iron and plastics

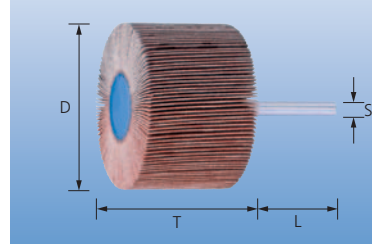
### PFERD specification number


F A 4

### PFERDERGONOMICS®



### Mounted flap wheels Aluminum oxide A

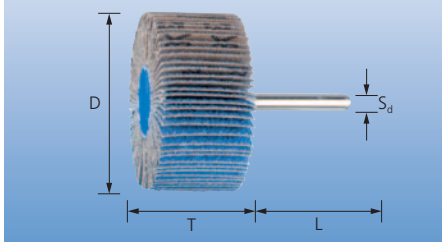


| Diameter (D) x length (T)<br>[Inches] | Shank dia.<br>(S <sub>d</sub> )<br>[Inches] | Grit and EDP number |       |       |       |       |       |       | Recom. speed<br>RPM | Max.<br>RPM |  |
|---------------------------------------|---|---------------------|-------|-------|-------|-------|-------|-------|---------------------|-------------|---|
|                                       |   | 40                  | 60    | 80    | 120   | 180   | 240   | 320   |                     |             |   |
| 3/4 x 3/8                             | 1/4   | -                   | 45160 | 45161 | 45162 | -     | -     | -     | 19,000              | 38,100      | 10  |
| 1 x 5/8                               | 1/4   | -                   | 45172 | 45173 | 45174 | 45175 | -     | -     | 15,000              | 25,000      | 10  |
| 1 x 1                                 | 1/4   | 45463               | 45184 | 45185 | 45186 | 45187 | 45188 | 45189 | 15,000              | 25,000      | 10  |
| 1-3/16 x 1/4                          | 1/4   | -                   | 45007 | 45008 | 45009 | -     | -     | -     | 12,000              | 25,000      | 10  |
| 1-3/8 x 5/8                           | 1/4   | -                   | 45226 | 45227 | 45228 | 45229 | 45230 | -     | 10,900              | 23,000      | 10  |
| 1-1/2 x 1/2                           | 1/4   | -                   | 45245 | 45246 | 45247 | -     | -     | -     | 9,600               | 23,000      | 10  |
| 1-1/2 x 1                             | 1/4   | -                   | 45232 | 45233 | 45234 | 45235 | 45236 | 45237 | 9,600               | 23,000      | 10  |
| 2 x 1/2                               | 1/4   | -                   | 45251 | 45252 | 45253 | -     | -     | -     | 7,000               | 23,000      | 10  |
| 2 x 3/4                               | 1/4   | -                   | 45258 | 45259 | 45260 | 45261 | -     | -     | 7,000               | 23,000      | 10  |
| 2 x 1                                 | 1/4   | 45461               | 45238 | 45239 | 45240 | 45241 | 45242 | 45243 | 7,000               | 23,000      | 10  |
| 2 x 1-1/2                             | 1/4   | -                   | 45190 | 45191 | 45192 | -     | -     | -     | 7,000               | 15,000      | 10  |
| 2-1/2 x 1/2                           | 1/4   | -                   | 45264 | 45265 | 45266 | -     | -     | -     | 6,300               | 23,000      | 10  |
| 2-1/2 x 1                             | 1/4   | -                   | 45270 | 45271 | 45272 | 45273 | 45274 | 45275 | 6,300               | 23,000      | 10  |
| 2-1/2 x 1-1/2                         | 1/4   | -                   | 45276 | 45277 | 45278 | -     | -     | -     | 6,300               | 13,000      | 10  |
| 3 x 1/2                               | 1/4   | -                   | 45196 | 45197 | 45198 | -     | -     | -     | 4,800               | 20,000      | 10  |
| 3 x 1                                 | 1/4   | 45462               | 45208 | 45209 | 45210 | 45211 | 45212 | 45213 | 4,800               | 20,000      | 10  |
| 3 x 2                                 | 1/4   | -                   | 45214 | 45215 | 45216 | -     | -     | -     | 4,800               | 6,000       | 10  |

# Flap wheels

## Mounted flap wheels

### Mounted flap wheels Zirconia alumina Z-COOL



Flap wheels with Z-COOL abrasive are purpose-designed for use on stainless steel and high-temperature alloys.

These provide high stock removal rates and particularly cool grinding action (abrasive will not load up).

**Abrasive: Zirconia alumina Z-COOL**


#### Workpiece materials

Stainless steel (INOX), bronze, titanium and nickel- and cobalt-based alloys

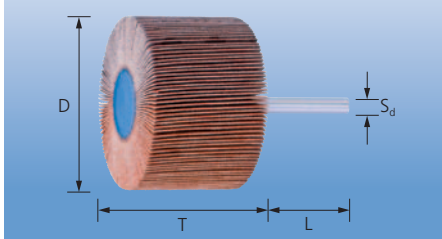
**PFERD specification number**  
F Z-COOL

**PFERDERGONOMICS®**



| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S <sub>d</sub> )<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|--|---------------------|-------|-------|---------------------|----------|---|
|                                       |  | 60                  | 80    | 120   |                     |          |   |
| 1 x 1                                 | 1/4                                      | 45465               | 45466 | 45467 | 15,000              | 25,000   | 10  |
| 1-1/2 x 1                             | 1/4                                      | 45469               | 45470 | 45471 | 9,600               | 25,000   | 10  |
| 2 x 1                                 | 1/4                                      | 45473               | 45474 | 45475 | 7,000               | 23,000   | 10  |
| 2-1/2 x 1                             | 1/4                                      | 45477               | 45478 | 45479 | 7,000               | 23,000   | 10  |
| 3 x 1                                 | 1/4                                      | 45481               | 45482 | 45483 | 4,800               | 20,000   | 10  |

### Mounted flap wheels Ceramic oxide CO-COOL



For aggressive grinding with maximum stock removal, especially on poor thermal conductive materials such as stainless steel and nickel-based alloys.

Grinding additives in the coating improve stock removal, prevent clogging and allow cooler grinding.

**Abrasive: Ceramic oxide CO-COOL**


#### Workpiece materials

Stainless steel (INOX), titanium and nickel- and cobalt-based alloys

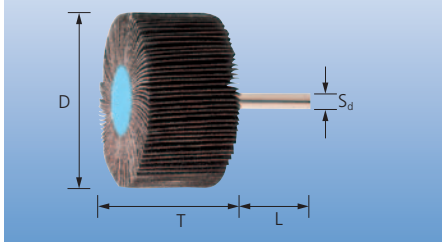
**PFERD specification number**  
F CO-COOL

**PFERDERGONOMICS®**



| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S <sub>d</sub> )<br>[Inches] | Grit and EDP number |       |       |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|--|---------------------|-------|-------|-------|---------------------|----------|---|
|                                       |  | 40                  | 60    | 80    | 120   |                     |          |   |
| 1 x 1                                 | 1/4                                      | 45279               | 45280 | 45281 | 45282 | 15,000              | 25,000   | 10  |
| 1-1/2 x 1                             | 1/4                                      | 45284               | 45285 | 45286 | 45287 | 9,600               | 25,000   | 10  |
| 2 x 1                                 | 1/4                                      | 45289               | 45290 | 45291 | 45292 | 7,000               | 23,000   | 10  |
| 3 x 1                                 | 1/4                                      | 45294               | 45295 | 45296 | 45297 | 4,800               | 20,000   | 10  |

### Mounted flap wheels Silicon carbide SiC



Flap wheels with silicon carbide (SiC) abrasive are for use on hard and tough materials, like titanium and its alloys.

These have an excellent grinding effect on copper and bronze.

The SiC abrasive produces a particularly fine surface finish.

**Abrasive: Silicon carbide SiC**


#### Workpiece materials

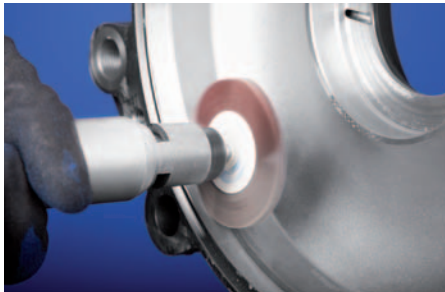
Titanium and plastics

**PFERD specification number**  
F C

**PFERDERGONOMICS®**



| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S <sub>d</sub> )<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|--|---------------------|-------|-------|---------------------|----------|---|
|                                       |  | 60                  | 80    | 120   |                     |          |   |
| 1 x 1                                 | 1/4                                      | 45485               | 45486 | 45487 | 15,000              | 25,000   | 10  |
| 2 x 1                                 | 1/4                                      | 45491               | 45492 | 45493 | 7,000               | 23,000   | 10  |
| 3 x 1                                 | 1/4                                      | 45494               | 45495 | 45496 | 4,800               | 20,000   | 10  |



This flap wheel spins on and off without tools. Unique design prevents shaft from pulling out of core while maintaining perfect balance at operating speed. Each package contains 1 shank adapter with 1/4-20 thread.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Steel, non-ferrous metals, cast iron and plastics

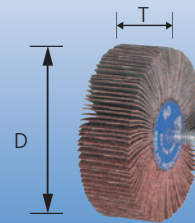
**PFERD specification number**


F A 4-20

**PFERDERGONOMICS®**



**Quick-change flap wheels  
Aluminum oxide A**



| Diameter (D) x length (T)<br>[Inches] | Thread | Grit and EDP number |       |       |       |       |       |       | Recom. speed<br>RPM | Max.<br>RPM |  |
|---------------------------------------|--------|---------------------|-------|-------|-------|-------|-------|-------|---------------------|-------------|---|
|                                       |        | 40                  | 60    | 80    | 120   | 180   | 240   | 320   |                     |             |   |
| 1 x 5/8                               | 1/4-20 | -                   | 45300 | 45301 | 45302 | -     | -     | -     | 15,000              | 25,000      | 10  |
| 1 x 1                                 | 1/4-20 | -                   | 45310 | 45311 | 45312 | 45313 | 45314 | 45315 | 15,000              | 25,000      | 10  |
| 1-1/2 x 1/2                           | 1/4-20 | -                   | 45330 | 45331 | 45332 | -     | -     | -     | 9,600               | 23,000      | 10  |
| 1-1/2 x 1                             | 1/4-20 | -                   | 45340 | 45341 | 45342 | -     | -     | -     | 9,600               | 23,000      | 10  |
| 2 x 1/2                               | 1/4-20 | -                   | 45350 | 45351 | 45352 | -     | -     | -     | 7,000               | 23,000      | 10  |
| 2 x 1                                 | 1/4-20 | 45369               | 45370 | 45371 | 45372 | 45373 | 45374 | 45375 | 7,000               | 23,000      | 10  |
| 2-1/2 x 1/2                           | 1/4-20 | -                   | 45410 | 45411 | 45412 | -     | -     | -     | 6,300               | 23,000      | 10  |
| 2-1/2 x 1                             | 1/4-20 | -                   | 45420 | 45421 | 45422 | 45423 | -     | -     | 6,300               | 23,000      | 10  |
| 3 x 1/2                               | 1/4-20 | -                   | 45430 | 45431 | 45432 | -     | -     | -     | 4,800               | 20,000      | 10  |
| 3 x 1                                 | 1/4-20 | 45449               | 45450 | 45451 | 45452 | 45453 | 45454 | -     | 4,800               | 20,000      | 10  |


1/4" shank with 1/4-20 female thread.

**PFERD specification number**

QC-1/4-20

**Threaded shank adapter  
for quick-change flap wheels**



| Shank dia.<br>[Inches] | Thread | EDP number |  |
|------------------------|--------|------------|---|
| 1/4                    | 1/4-20 | 45299      | 10  |



# Flap wheels

## General information

PFERD provides unmounted flap wheels with various

- grit sizes,
- abrasives and
- dimensions.

The coated abrasive flaps are arranged radially around the axis of the flap wheel in a fan-type configuration. Due to their flexibility, they adapt ideally to the contours of the workpiece. The abrasive grit is embedded in a resinoid bond on the strong, flexible backing cloth.

Unmounted flap wheels are designated "flap wheels" according to ISO 5429.

### Application examples

- Fine grinding work on large radii in container, kitchen and apparatus construction.
- Removal of coarse uneven spots, e.g. weld removal.
- Achievement of homogeneous finishes (grinding patterns) on larger surfaces and contours in manual applications.
- Very fine grinding as a precursor to high-gloss polishing.
- Also suitable for robotic and stationary use.

### Recommendations for use

- Unmounted flap wheels achieve their best performance at a recommended cutting speed of 3,000 - 6,000 SFPM. This provides an ideal compromise between stock removal, surface quality, thermal load on the workpiece and wear to the flap wheel.
- Flexible shafts, straight grinders and grinding blocks can be used as tool drives.
- The drive power output required for tool drives is 1,000 - 1,500 watts.

### Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the flap wheel diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] for the unmounted flap wheels and tool drive.

#### Example

6" x 2" A 80 (EDP 45623)

Peripheral speed: 3,000 - 6,000 SFPM

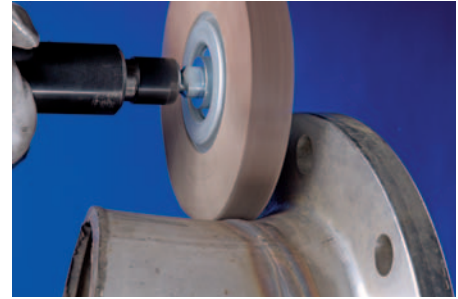
**Rotational speed: 1,800 - 3,800 RPM**

PFERDERGONOMICS® recommends unmounted flap wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.



### Advantages

- High flexibility.
- High stock removal due to the aggressive coated abrasive.
- Carrier material wears off uniformly and without residue on the workpiece surface, meaning that sharp abrasive grain is exposed at all times.
- Due to the special mounting system, the face of the unmounted flap wheels can be used to work very close to edges and in corners.



### Factors influencing the work result

#### ■ Flap wheel wear and thermal load

The reduction of the contact pressure and the peripheral speed, together with the addition of grinding oil, reduce wear and the thermal load on the workpiece.

#### ■ Stock removal

An increase in stock removal should be attained by using a coarser grit size rather than by increasing the contact pressure in order to prevent unnecessary wear and thermal load on the workpiece.

#### ■ Surface roughness

The increase in peripheral speed results in a slightly finer surface. By increasing the contact pressure, the surface becomes slightly rougher. The softer the material to be worked, the rougher the surface (if the same grit size is used).

### Safety notes

- As a rule, unmounted flap wheels should be used with the appropriate clamping flanges.
- The maximum permitted peripheral speed is determined as follows:
  - Unmounted flap wheels = 9,800 SFPM
  - Unmounted flap wheels for angle grinders = 15,800 SFPM
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.

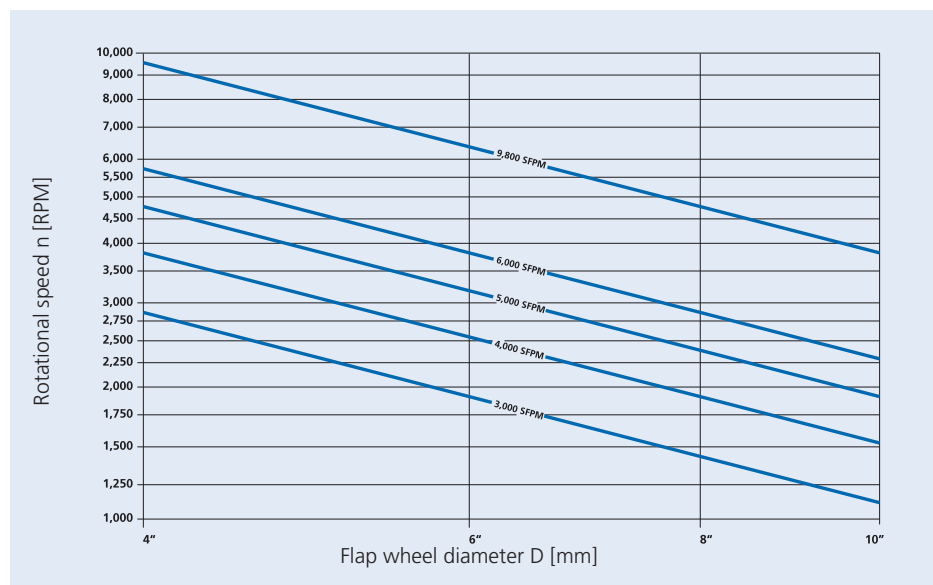


### Dust warning

Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.

### Ordering note

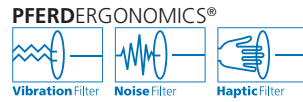
Unmounted flap wheels with diameters 4, 6 and 6-1/2" are supplied with the centre hole diameter of 1". 8" unmounted flap wheel is supplied with a centre hole diameter of 1-3/4".



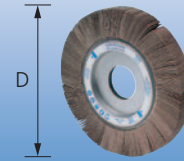
Flap wheels with aluminum oxide A grain are recommended for all materials.


**Abrasive: Aluminum oxide A**

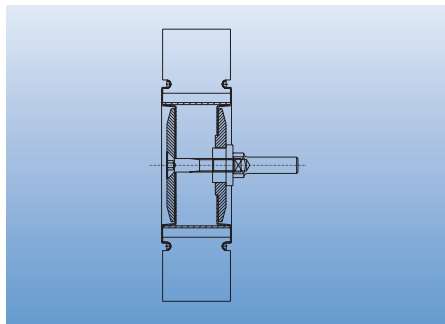
**PFERD specification number**  
FR A



**Unmounted flap wheels**  
**Aluminum oxide A**



| Diameter (D) x width<br>[Inches] | Bore  | Grit and EDP number |       |       |       |       |       | Recom. speed<br>RPM | Max. RPM |  |
|----------------------------------|-------|---------------------|-------|-------|-------|-------|-------|---------------------|----------|---|
|                                  |       | 40                  | 60    | 80    | 120   | 180   | 240   |                     |          |   |
| 4 x 1                            | 1     | 45530               | 45532 | 45533 | 45535 | 45536 | -     | 5,500               | 9,500    | 2   |
| 4 x 2                            | 1     | -                   | 45552 | 45553 | 45555 | -     | -     | 5,500               | 9,500    | 2   |
| 6 x 1                            | 1     | 45600               | 45602 | 45603 | 45605 | 45607 | -     | 3,500               | 6,300    | 2   |
| 6 x 1-1/2                        | 1     | 45610               | 45612 | 45613 | -     | -     | -     | 3,500               | 6,300    | 2   |
| 6 x 2                            | 1     | 45620               | 45622 | 45623 | 45625 | 45626 | 45627 | 3,500               | 6,300    | 2   |
| 8 x 1                            | 1-3/4 | -                   | 45642 | 45643 | 45645 | -     | -     | 2,600               | 4,700    | 2   |
| 8 x 2                            | 1-3/4 | -                   | 45652 | 45653 | 45655 | -     | -     | 2,600               | 4,700    | 2   |



These arbor and flange combinations are intended specially for mounting PFERD flap wheels and POLINOX® wheels. The clamping flanges fit into the recess around the flap wheel's centre hole. This design provides optimum face-down grinding, even near edges and corners.


**Contents**

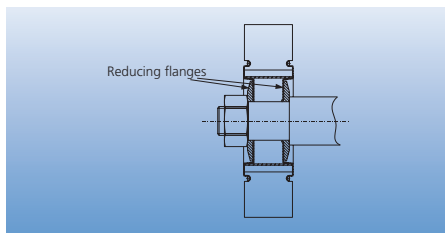
- 1 arbor 1/2" clamping dia.
- 2 flanges
- suitable clamping screws (for various flap wheel widths)

**PFERD specification number**  
FR/VR

**Arbors for flap wheels**



| Shank diameter<br>[Inches] | Clamping width<br>[Inches] | Fits flap wheel I.D.<br>[Inches] | For wheel diameter<br>[Inches] | EDP number |  |
|----------------------------|----------------------------|----------------------------------|--------------------------------|------------|---|
| 1/2                        | 1-2                        | 1                                | 4 - 6                          | 45714      | 1   |
| 1/2                        | 1-2                        | 1-3/4                            | 8 - 10                         | 45715      | 1   |



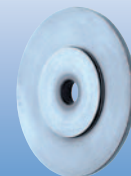
These reducing flanges can be used to mount PFERD flap wheels and POLINOX® wheels on a stationary machine (bench grinder).


**Ordering note**

- 1 pair per box

**PFERD specification number**  
RF/FR

**Flap wheel reducer flanges**



| Fits flap wheel I.D.<br>[Inches] | Bore<br>[Inches] | For wheel diameter<br>[Inches] | EDP number |  |
|----------------------------------|------------------|--------------------------------|------------|---|
| 1                                | 1/2              | 4-6                            | 45720      | 1   |
| 1                                | 5/8              | 4-6                            | 45721      | 1   |
| 1                                | 3/4              | 4-6                            | 45722      | 1   |
| 1-3/4                            | 1/2              | 8-10                           | 45725      | 1   |
| 1-3/4                            | 5/8              | 8-10                           | 45726      | 1   |
| 1-3/4                            | 3/4              | 8-10                           | 45727      | 1   |
| 1-3/4                            | 1                | 8-10                           | 45728      | 1   |

# Flap wheels

## Flap wheels, drums

### Flap wheels for angle grinders



Ideal for use on angle grinders in assembly shop operations.

**Abrasive: Aluminum oxide A**

#### Recommendation for use


Flap wheels for angle grinders perform best at the recommended cutting speed of 7,800 - 9,800 SFPM.

#### PFERD specification number

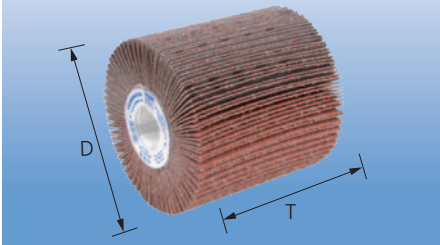
FR-WS

PFERDERGONOMICS®



| Diameter (D) x width [Inches] | Thread | Grit and EDP number |       |       |       | Recom. speed RPM | Max. speed RPM |  |
|-------------------------------|--------|---------------------|-------|-------|-------|------------------|----------------|---|
|                               |        | 40                  | 60    | 80    | 120   |                  |                |   |
| 4-1/2 x 3/4                   | 5/8-11 | 45751               | 45753 | 45754 | 45755 | 7,500            | 13,300         | 2   |
| 5 x 3/4                       | 5/8-11 | 45761               | 45763 | 45764 | 45765 | 6,850            | 12,200         | 2   |

### Flap drums



Flap drums with aluminum oxide coated materials can be universally used on all materials.

#### Application examples

- Fine grinding work on large radii in container, kitchen and apparatus construction.
- Removal of rough unevenness e.g. weld grinding.
- Achieving homogeneous grinding patterns on large surfaces and contours with hand-guided applications (patterns).
- Finest grinding as a preliminary stage to polishing.

**Abrasive: Aluminum oxide A**

#### Recommendation for use

Flap drums produce the best results at the recommended peripheral speed of 3,000 - 6,000 SFPM.

#### Ordering note


For non-woven drums, please refer to page 86 and 87 in this catalogue. Refer to our "Power tools" catalogue (section 209) for information on linear finishing tool, EDP 91217.

#### PFERD specification number

FR-W

PFERDERGONOMICS®



| Diameter (D) x width (T) [Inches] | Bore [Inches] | Grit and EDP number |       |       |       |       |       | Recom. speed RPM | Max. speed RPM |  |
|-----------------------------------|---------------|---------------------|-------|-------|-------|-------|-------|------------------|----------------|---|
|                                   |               | 40                  | 60    | 80    | 120   | 150   | 180   |                  |                |   |
| 4 x 4                             | 3/4           | 45780               | 45781 | 45782 | 45783 | 45784 | 45785 | 3,800            | 6,100          | 1   |





The POLIFLAP® wheel consists of a shank-mounted (3/8") hub carrying an array of rubber flaps. For use, appropriate abrasive flaps must be fitted between their rubber counterparts. The combination arrangement of abrasive and rubber flaps make the POLIFLAP® highly flexible.

### Application examples

- Redressing and restoration of surface textures.
- Fine-grinding of radii, contours, curved areas or large surfaces.
- Removal of fine secondary burr.
- Removal of heat discoloration.
- Surface cleaning.

### Recommendation for use

This product is used preferably on straight grinders and flexible shaft systems. On stainless steel, an optimum surface finish is obtained in the 1,400 - 1,700 RPM speed range.

### Ordering note

POLIFLAP® wheels are supplied with rubber flaps but without abrasive flaps. Please order abrasive flaps separately, specifying the desired grit size (refer to the table below).

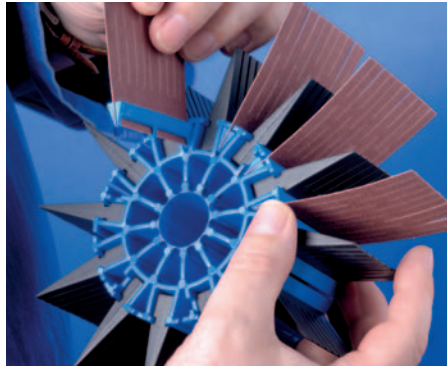
### PFERD specification number

PFL

### PFERDERGONOMICS®



| Diameter x width [Inches] | Shank diameter [Inches] | EDP number | Recom. speed RPM | Max. RPM |  |
|---------------------------|-------------------------|------------|------------------|----------|---|
| 7 x 2-3/8                 | 3/8                     | 45950      | 1,500            | 3,500    | 1   |

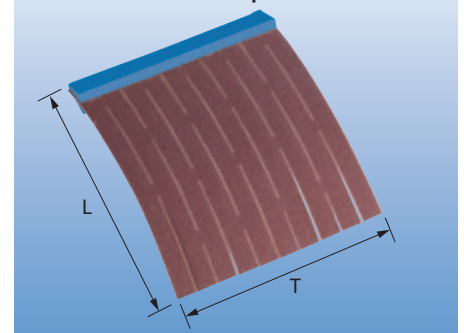



Abrasive flaps are available in eight different grit sizes (refer to the table below) for different visual effects. Worn abrasive flaps can be easily replaced on the POLIFLAP® wheel. A full set contains 12 abrasive flaps (1 pack). Please order a starter set and any additional sets of abrasive flaps separately.

### PFERD specification number

PFL-SL A

### POLIFLAP® abrasive flaps



| Flap width (L) x length (T) [Inches] | Grit and EDP number |       |       |       |       |       |       |       |  |
|--------------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|---|
|                                      | 60                  | 80    | 100   | 120   | 150   | 180   | 220   | 320   |   |
| 2-3/8 x 3                            | 45960               | 45961 | 45962 | 45963 | 45964 | 45965 | 45966 | 45968 | 12  |

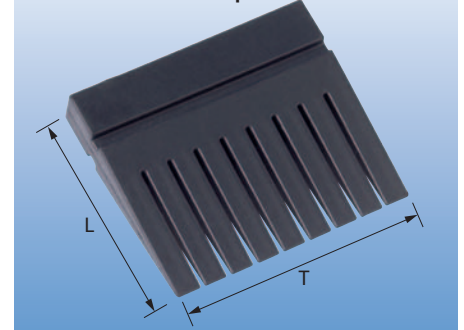


The rubber flaps placed between any two abrasive flaps support the grinding action and flexibility of this product. Worn rubber flaps can be easily replaced on the POLIFLAP® wheel. A full set contains 12 rubber flaps (1 pack).

### PFERD specification number

PFL-GL

### POLIFLAP® rubber flaps



| Width (L) x length (T) [Inches] | EDP number |  |
|---------------------------------|------------|---|
| 2 x 2                           | 45951      | 12  |

# POLISTAR

## Coated abrasive stars

POLISTAR flexible abrasive stars have been specially developed for work on the inner surfaces of bores and pipes.

### Advantages

- High flexibility.
- Well suited for working on bores or pipes of small diameters.
- Particularly suitable for the 1/4 - 1-1/2" diameter range due to the small size.

### Application examples

- Cleaning, fine grinding and very fine grinding of bores.
- Removal of heat discoloration in stainless steel (INOX) pipes after welding.
- Inlet and outlet radiusing of bores.
- Light deburring work on bores (removal of secondary burrs) in preparation for painting.
- Deburring in cross-bores.

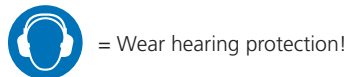
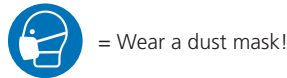
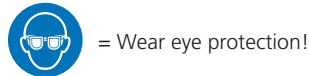
### Recommendations for use

- POLISTAR achieves its best performance at a recommended cutting speed of 3,000 - 4,000 SFPM.
- POLISTAR can be stacked in several layers. In doing this, ensure that they are aligned at an offset from one another, so that the abrasive has the optimal effect.
  - PST 3/4" for centre hole dia. 1/4 - 1/2"
  - PST 1-1/4" for centre hole dia. 3/8 - 3/4"
  - PST 1-1/2" for centre hole dia. 5/8 - 1"
  - PST 2" for centre hole dia. 3/4 - 1-1/2"



### Safety notes

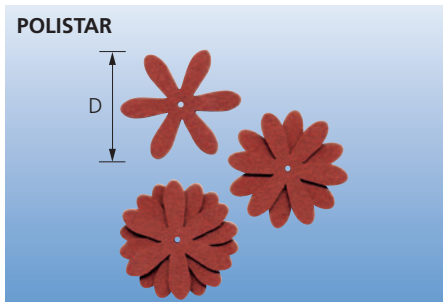
For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



### Ordering note

Please order arbor separately. POLISTAR are delivered in sheet form. Sheet contents:  
Dia. 3/4 and 1-1/4" = 25 pcs.  
Dia. 1-1/2 and 2" = 10 pcs.

PFERDERGONOMICS® recommends POLISTAR and POLISTAR-TUBE as innovative solutions to sustainably reduce vibration and noise levels during use and to improve working comfort.



**Abrasive: Aluminum oxide A**

**PFERD specification number**  
PST A



| Diameter (D)<br>[Inches] | Bore<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM | Suitable<br>arbor |     |
|--------------------------|------------------|---------------------|-------|-------|---------------------|----------|-------------------|-----|
|                          |                  | 60                  | 80    | 120   |                     |          |                   |     |
| 3/4                      | 1/16             | 44070               | 44071 | 44072 | 15,000              | 38,000   | EDP 44061         | 100 |
| 1-1/4                    | 1/16             | 44080               | 44081 | 44082 | 9,500               | 25,000   | EDP 44061         | 100 |
| 1-1/2                    | 1/8              | 44085               | 44086 | 44087 | 7,200               | 19,000   | EDP 44060         | 100 |
| 2                        | 1/8              | 44090               | 44091 | 44092 | 5,700               | 15,000   | EDP 44060         | 100 |



Reduce setup times significantly. Pads can be changed without removing the arbor from the collet mounted in the machine.

| Shank dia.<br>[Inches] | Mounting dia.<br>[Inches] | Overall length | Clamping width<br>[Inches] | EDP number |   |
|------------------------|---------------------------|----------------|----------------------------|------------|---|
| 1/4                    | 1/8                       | 1-1/2          | 1/32 - 1/4                 | 44060      | 1 |
| 1/8                    | 1/16                      | 1-1/2          | 1/32 - 3/16                | 44061      | 1 |

POLISTAR-TUBE is multi-layered and riveted together. In order to prevent corrosion on stainless steel (INOX) pipes, POLISTAR-TUBE is manufactured using stainless steel rivets exclusively. They are used specially for working on the inner surfaces of pipes and pipe bends. POLISTAR-TUBE abrasive stars are used with the appropriate flexible shaft drives from the range in our "Power tools" catalogue (section 209):

- For PST-T (2" to 3-1/4") – use flexible shaft EDP 94264 (4 PST-T DIN10/M4).
- For PST-T (3-1/2" to 4") – use flexible shaft EDP 94274 (7 PST-T DIN10/M5).

### Advantages

- Very high flexibility.
- Very fine surface finishes to  $R_a$  0.2  $\mu\text{m}$  (8  $\mu\text{m}$ ).

### Application examples

- For step-by-step cleaning and fine grinding on the inner surfaces of pipe bends.
- For rounding of pipe ends and deburring of bores.
- Ideal for use pipes and deep bores. Please use with appropriate arbor.



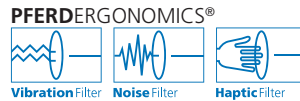
### Recommendations for use

| POLISTAR-TUBE diameter | For use on inner pipe diameters |
|------------------------|---------------------------------|
| 2"                     | 1-3/8" - 1-5/8"                 |
| 2-1/4"                 | 1-5/8" - 1-3/4"                 |
| 2-3/4"                 | 1-3/4" - 2"                     |
| 3-1/8"                 | 2" - 2-1/4"                     |
| 3-1/2"                 | 2-1/4" - 2-3/8"                 |
| 4"                     | 2-3/8" - 2-5/8"                 |

The different grit sizes can be used to achieve the following roughness values:

| Grit size | Roughness values                                       |
|-----------|--|
| 60        | 39 - 51 $\mu\text{m}$ (1.0 - 1.3 $\mu\text{m}$ ) $R_a$ |
| 120       | 24 - 39 $\mu\text{m}$ (0.6 - 1.0 $\mu\text{m}$ ) $R_a$ |
| 180       | 16 - 24 $\mu\text{m}$ (0.4 - 0.6 $\mu\text{m}$ ) $R_a$ |
| 240       | 12 - 16 $\mu\text{m}$ (0.3 - 0.4 $\mu\text{m}$ ) $R_a$ |
| 320       | 8 - 12 $\mu\text{m}$ (0.2 - 0.3 $\mu\text{m}$ ) $R_a$  |

### PFERD specification number PST-T



### Ordering note

Please order arbor separately.  
\* Grit size 60 delivered in 4-layers.

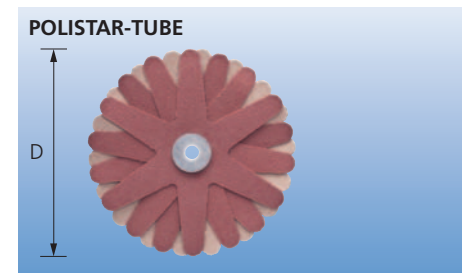
### Safety notes

For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



**PFERDMEDIA**

To see it in action, please visit [pferdusa.com/vpolistartube](http://pferdusa.com/vpolistartube)



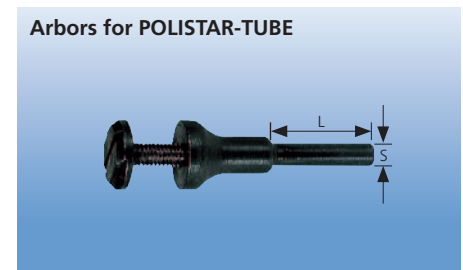
| Diameter (D) [Inches] | Bore [mm] | No. of Layers | Grit and EDP number |       |       |       |       | Recom. speed RPM | Max. RPM | Suitable arbor |    |
|-----------------------|-----------|---------------|---------------------|-------|-------|-------|-------|------------------|----------|----------------|----|
|                       |           |               | *60                 | 120   | 180   | 240   | 320   |                  |          |                |    |
| 2                     | 4         | 6             | 44015               | 44016 | 44017 | 44018 | 44019 | 3,000            | 7,650    | EDP 44062      | 10 |
| 2-1/4                 | 4         | 6             | 44020               | 44021 | 44022 | 44023 | 44024 | 2,500            | 6,350    | EDP 44062      | 10 |
| 2-3/4                 | 4         | 6             | 44025               | 44026 | 44027 | 44028 | 44029 | 2,200            | 5,450    | EDP 44062      | 10 |
| 3-1/8                 | 4         | 6             | 44030               | 44031 | 44032 | 44033 | 44034 | 1,900            | 4,750    | EDP 44062      | 10 |
| 3-1/2                 | 5         | 8             | 44035               | 44036 | 44037 | 44038 | 44039 | 1,700            | 4,250    | EDP 44063      | 10 |
| 4                     | 5         | 8             | 44040               | 44041 | 44042 | 44043 | 44044 | 1,500            | 3,820    | EDP 44063      | 10 |

\* Grit size 60 delivered in 4-layers.



### Reusable arbor for POLISTAR-TUBE.

These arbors reduce set-up times significantly. Discs can be changed without removing the arbor from the machine spindle.



| Shank dia. (S) x Length (L) [Inches] | Fits arbor hole size [mm] | Clamping width [Inches] | EDP number |   |
|--------------------------------------|---------------------------|-------------------------|------------|---|
| 1/4 x 1                              | 4                         | 0 - 3/8                 | 44062      | 1 |
| 1/4 x 1                              | 5                         | 0 - 3/8                 | 44063      | 1 |

# Non-woven abrasives

## General information



Grinding products for work on metal and non-metal workpieces are divided into three groups:

■ **Bonded abrasives**

(e.g. grinding discs)

■ **Flexible abrasives**

(e.g. belts, discs and foils)

These products are used for coarse, fine and very fine grinding and for stock removal.

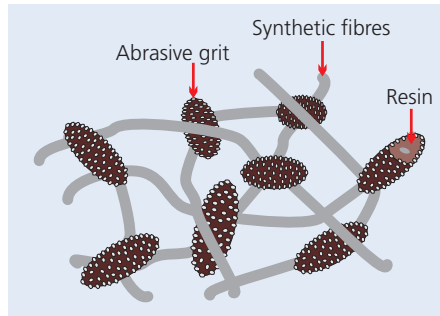
■ **Non-woven abrasives**

This group is designed to achieve specific surface structures.

Non-woven abrasives consist of polyamide fibres, synthetic resins and abrasive grit. The non-woven fibre structure is impregnated with resin and permeated with abrasive grit. The extremely loose connections between the individual fibres gives high flexibility and a strong spring-type effect to the non-woven material.

It is elastic and supple and leaves a very specific surface structure behind. The silk-matt grinding result is unique and cannot be produced with other abrasives.

Due to the uniform distribution of the abrasive grit in the non-woven material, a continuous supply of new, fresh and sharp abrasive grit is guaranteed throughout the entire grinding application.



Although the structure of non-woven abrasive material is completely different from that of flexible coated abrasives, the same abrasives are used for both groups of products:

- Aluminum oxide (Al<sub>2</sub>O<sub>3</sub>) is very durable, achieves maximum service life and is highly aggressive on hardened steel. The surface produced is characterized by its enhanced gloss. When working on aluminum, discolouration is prevented.
- Silicon carbide (SiC) is even sharper, harder and cuts more easily. Within a very short time, it can produce a finer, long-lasting and slightly matt grinding pattern on many material surfaces.

With conventional bonded abrasives or coated abrasives, the user selects a specific grit size. In the case of non-woven abrasives, the designation is made according to the following system:

**PFERD designation**

extra coarse  
coarse  
medium  
fine  
very fine

**Comparable to grit size (Mesh)**

50 - 80  
80 - 100  
100 - 180  
180 - 220  
220 - 400

**Application**

Non-woven abrasives are used when other grinding products have reached their limits or can no longer achieve the desired result.

Thanks to the elastic property of the polyamide fibres and the positive effect of the abrasive non-woven material, outstanding, gentle finishing products are produced.

Non-woven abrasives are waterproof, can be rinsed out and are very resistant. They do not clog up, leave no rust on surfaces and do not conduct electricity.

Abrasive non-woven material can be put to outstanding use in the deburring, cleaning and surface finishing of many metals, including aluminum, brass, copper, nickel, stainless steel (INOX) and titanium. It is also suitable for working on other materials that are difficult to grind, such as ceramic, glass and plastic. Abrasive non-woven material can be used in wet or dry grinding.



**PFERDMEDIA**

To see it in action, please visit [pferdusa.com/vnonwoven](http://pferdusa.com/vnonwoven)

## Non-woven products

Abrasive non-woven material is suitable for the manufacture of numerous different abrasive products, such as hand pads, grinding drums, discs, belts, and wheels.

The grinding properties of these products are tailored to different applications and make an outstanding contribution to providing a solution for many machining applications in the field of metal working and further processing.

The PFERD range includes:

- COMBICLICK®/COMBIDISC® non-woven discs VRW
- Non-woven shop rolls, hand pads
- POLINOX® mounted grinding wheels, grinding discs, grinding wheels and grinding drums (PNL, PNZ, PNR, PNG, PNST and PNER)

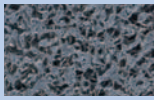

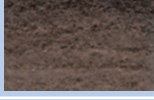
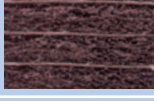



**Additional type**

Abrasive non-woven material can also be produced with fabric reinforcement. The non-woven abrasive gains a significantly higher level of aggressiveness and stability.

Abrasive non-woven material with fabric reinforcement is suitable for manufacturing discs and non-woven belts.

The PFERD range includes:

- COMBICLICK®/COMBIDISC® non-woven discs VRH
- POLIVLIES® flap discs and self-adhesive discs
- Belts, non-woven type

| Designation | Description   |
|-------------|---|
| <b>PNR</b>  |  Thanks to different combinations of compaction, fibres, grit and the appropriate bond, this product can be used for a wide range of applications in the field of surface finishing, from relatively coarse grinding to preparing the surface for polishing.                                   |
| <b>PNK</b>  |  The abrasive non-woven material is wound around a core and foamed. Thanks to different combinations of foaming, fibres, grit and bond, the products can be optimized for different applications. The range of applications stretches from fine deburring to preparing surfaces for polishing. |
| <b>PNL</b>  |  The abrasive non-woven material is arranged radially in a flap pattern. The flaps are packed together very tightly, resulting in a long service life. Mainly used in surface machining.   |
| <b>PNZ</b>  |  The abrasive non-woven material is arranged radially in a flap pattern, with an abrasive cloth between each of the flaps. Thanks to this flap combination, higher stock removal can be achieved and the surface receives a coarser finish.  |
| <b>PNG</b>  |  The abrasive non-woven material consists of multiple strongly crimped strips which are wound around a core. Thanks to the undulating arrangement of the abrasive non-woven material, seamless brush finishing of surfaces is possible.  |
| <b>PNR</b>  |  The abrasive non-woven material is arranged in discs (axially) one on top of the other. As the individual non-woven discs are not connected to one another, they adjust well to contours, for example when machining profiles and pipes.  |
| <b>PNST</b> |  The abrasive non-woven material is arranged in a star shape in several layers which are connected at the centre. This can be put to outstanding use, especially in narrow working areas such as bores and cavities, as well as in hard-to-reach areas.  |

POLINOX® unitized wheels PNER and unitized discs PNER consist of multiple layer, strongly compressed non-woven material, bonded with a special grit resin system.

This special bonding system produces non-woven products with very good surface finishes, high stock removal and long service life. These properties are particularly apparent when deburring, blending, finishing and polishing on soft metals, as well as on alloyed and high-alloyed steels and titanium alloys.

### Application examples

#### Cleaning

- General purpose cleaning, cleaning prior to painting.
- Removing rust, scratches and coating, heavy scale, oxidation from aluminum, and weld discoloration.

#### Deburring

- Deburring gears, aircraft wing spars and edge on turbine blades.
- Removing heavy flashing and medium-sized pits and scratches.
- Breaking edges and edge radiusing.

#### Blending

- Blending and refining surfaces of jet blade airfoils, turbine blades and vanes.
- Removing minor pits, scratches and parting lines from cast workpieces.

#### Polishing

- Polishing fillet areas on turbine blades and aircraft parts.
- Polishing soft metals prior to coating process and harden steel during restoration of molds and dies.
- Polishing and finishing of surgical instruments and implants.

#### Recommendations for use

- When working on materials with poor heat conductivity, e.g. titanium and stainless steel, significantly reduce the cutting speed.
- Flexible shafts, electric and air-powered straight grinders as well as angle grinders and fillet weld grinders can be used as tool drives.

#### Ordering note

For more unitized products see page 13 (COMBICLICK®) and 32 (COMBIDISC®).

#### Safety notes

For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



= Wear eye protection!







= Wear hearing protection!



= Wear a dust mask!



### Four different types are available

| Density     | Colour code   | Characteristics  |
|-------------|---|--|
| Soft        |  | Soft density with exceptional conformability while maintaining durability, grinding performance and very good finish. Very well suited for machining contours. |
| Medium-soft |  | Soft/medium density with increased edge durability and life for tough blending and polishing applications. Well suited for machining contours.                 |
| Medium-hard |  | Medium/hard density with increased edge durability and life for tough deburring and cleaning applications.   |
| Hard        |  | Hard density with increased very high stock removal, good edge strength and high service life for tough deburring and polishing applications.                  |

PFERDERGONOMICS® recommends POLINOX® unitized wheels and unitized discs PNER to sustainably reduce vibration, noise and dust levels during use and to improve working comfort.



Vibration Filter



Noise Filter



Emission Filter







Haptic Filter



PFERDMEDIA

For more information, please visit [pferdusa.com/unitized](http://pferdusa.com/unitized)

### Comparison chart

| Density     | PFERD PNER  |           |        | 3M®                                 | Standard Abrasives | Norton             | BIBIELLE |
|-------------|---|-----------|--------|-------------------------------------|--------------------|--------------------|----------|
|             | Colour code   | Abrasives | Grit   | Scotch-Brite                        | Non-Woven          | Bear-Tex           | BUH      |
| Soft        |  | SiC       | fine   | EXL 2S fine                         | 532                | UW1-2SF or Nex-2SF | BUH 2SF  |
|             |   | A/O       | coarse | EXL 2A medium                       | 521                | UW1-2AM or Nex-2AM | BUH 2AM  |
| Medium-soft |  | SiC       | fine   | EXL 4S fine or SST 3S fine          | 632                | UW1-4SF            | BUH 3SF  |
|             |   | A/O       | fine   | EXL 4A fine or SST 3A fine          | 631                | UW1-4AF            | -        |
| Medium-hard |  | A/O       | fine   | Cut & polish 5A fine or SST 5A fine | 731                | UW1-6AF or Nex-6AF | -        |
| Hard        |  | A/O       | fine   | Cut & polish 7A medium or 9A medium | 821                | UW1-8AM or Nex-8AM | BUH 6AM  |
|             |   | A/O       | coarse | Cut & polish 7A coarse or 9A coarse | 811                | UW1-8AC or Nex-8AC | BUH 8AC  |

# Non-woven abrasives

## POLINOX® PNER unitized wheels



POLINOX® PNER unitized wheels have been designed for straight grinders and flexible shaft drives.

They are recommended for work on small surfaces of stainless steel (INOX) and titanium alloy components. Unmounted grinding wheels with diameter 6" can also be used on grinding blocks, for reworking surgical instruments for example.

**Abrasive: Aluminum oxide A  
Silicon carbide SiC**

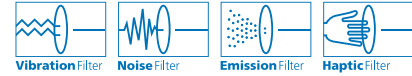
### Recommendation for use


POLINOX® PNER unitized wheels achieve their best performance at a cutting speed of about 6,000 SFPM.

### PFERD specification number

PNER

### PFERDERGONOMICS®



| Diameter (D) x width (T) [Inches] | Arbor hole | Abrasive        | Grit size | Density          | Spec. | EDP number | Suitable drive arbor | Recom. speed RPM | Max. speed RPM |  |
|-----------------------------------|------------|-----------------|-----------|------------------|-------|------------|----------------------|------------------|----------------|---|
| 2 x 1/8                           | 1/4        | Aluminum oxide  | fine      | hard (H)         | 8AM   | 48268      | EDP 69029            | 9,500            | 15,300         | 10  |
| 3 x 1/8                           | 1/4        | Aluminum oxide  | fine      | hard (H)         | 8AM   | 48288      | EDP 69029            | 6,400            | 10,200         | 10  |
| 3 x 1/4                           | 1/4        | Silicon carbide | fine      | soft (W)         | 2SF   | 48290      | EDP 69029            | 6,400            | 10,200         | 5   |
| 3 x 1/4                           | 1/4        | Aluminum oxide  | coarse    | soft (W)         | 2AM   | 48291      | EDP 69029            | 6,400            | 10,200         | 5   |
| 3 x 1/4                           | 1/4        | Silicon carbide | fine      | medium-soft (MW) | 3SF   | 48292      | EDP 69029            | 6,400            | 10,200         | 5   |
| 3 x 1/4                           | 1/4        | Aluminum oxide  | fine      | medium-soft (MW) | 3AF   | 48293      | EDP 69029            | 6,400            | 10,200         | 5   |
| 3 x 1/4                           | 1/4        | Aluminum oxide  | fine      | medium-hard (MH) | 6AF   | 48295      | EDP 69029            | 6,400            | 10,200         | 5   |
| 3 x 1/4                           | 1/4        | Aluminum oxide  | coarse    | hard (H)         | 8AC   | 48299      | EDP 69029            | 6,400            | 10,200         | 5   |
| 3 x 1/2                           | 1/4        | Silicon carbide | fine      | soft (W)         | 2SF   | 48310      | EDP 69029            | 6,400            | 10,200         | 5   |
| 3 x 1/2                           | 1/4        | Aluminum oxide  | coarse    | soft (W)         | 2AM   | 48311      | EDP 69029            | 6,400            | 10,200         | 5   |
| 3 x 1/2                           | 1/4        | Silicon carbide | fine      | medium-soft (MW) | 3SF   | 48312      | EDP 69029            | 6,400            | 10,200         | 5   |
| 3 x 1/2                           | 1/4        | Aluminum oxide  | fine      | medium-soft (MW) | 3AF   | 48313      | EDP 69029            | 6,400            | 10,200         | 5   |
| 3 x 1/2                           | 1/4        | Aluminum oxide  | fine      | medium-hard (MH) | 6AF   | 48315      | EDP 69029            | 6,400            | 10,200         | 5   |
| 3 x 1/2                           | 1/4        | Aluminum oxide  | coarse    | hard (H)         | 8AC   | 48319      | EDP 69029            | 6,400            | 10,200         | 5   |
| 6 x 1                             | 1          | Silicon carbide | fine      | soft (W)         | 2SF   | 48420      | EDP 45714            | 3,200            | 5,100          | 1   |
| 6 x 1                             | 1          | Silicon carbide | fine      | medium-soft (MW) | 3SF   | 48422      | EDP 45714            | 3,200            | 5,100          | 1   |
| 6 x 1                             | 1          | Aluminum oxide  | fine      | medium-soft (MW) | 3AF   | 48423      | EDP 45714            | 3,200            | 5,100          | 1   |
| 6 x 1                             | 1          | Aluminum oxide  | fine      | medium-hard (MH) | 6AF   | 48425      | EDP 45714            | 3,200            | 5,100          | 1   |
| 6 x 1                             | 1          | Aluminum oxide  | coarse    | hard (H)         | 8AC   | 48429      | EDP 45714            | 3,200            | 5,100          | 1   |

### Arbors for POLINOX® PNER unitized wheels




Re-usable arbor for POLINOX® PNER unitized wheels.

### PFERD specification number

BO



| Shank dia. [Inches] | Clamping width [Inches] | Fits arbor hole size [Inches] | EDP number |  |
|---------------------|-------------------------|-------------------------------|------------|---|
| 1/4                 | 1/8 - 1/4               | 1/2                           | 69029      | 1   |
| 1/2                 | 1 - 2                   | 1                             | 45714      | 1   |

POLINOX® PNER unitized wheels have been designed for variable-speed angle grinders and fillet weld grinders. They are recommended for working fillet welds and slots that are difficult to access or indentations in stainless steel (INOX) components.

**Abrasive: Aluminum oxide A  
Silicon carbide SiC**

### Ordering note

The different fleece thicknesses/hardnesses are colour-coded:

soft (W) = grey  
 medium-soft (MW) = light blue  
 medium-hard (MH) = dark blue  
 hard (H) = red

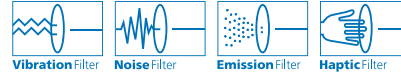
### Recommendation for use

POLINOX® unitized wheels achieve their best performance on special electronic fillet weld grinders.

### PFERD specification number


PNER-MW  
 PNER-MH  
 PNER-H

### PFERDERGONOMICS®



POLINOX® PNER unitized wheels

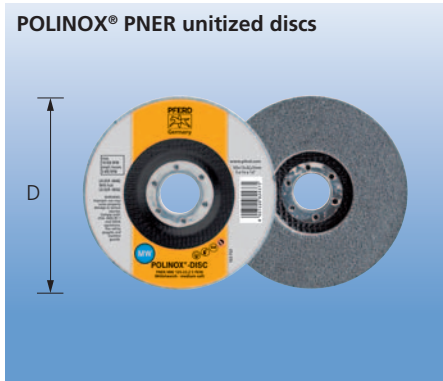


| Diameter (D) x width (T) [Inches] | Bore | Abrasive        | Grit size | Density          | Spec. | EDP number | Recom. speed RPM | Max. speed RPM |  |
|-----------------------------------|------|-----------------|-----------|------------------|-------|------------|------------------|----------------|---|
| 5 x 1/4                           | 7/8  | Silicon carbide | fine      | medium-soft (MW) | 3SF   | 48352      | 4,500            | 6,100          | 5   |
| 5 x 1/4                           | 7/8  | Aluminum oxide  | fine      | medium-soft (MW) | 3AF   | 48353      | 4,500            | 6,100          | 5   |
| 5 x 1/4                           | 7/8  | Aluminum oxide  | fine      | medium-hard (MH) | 6AF   | 48355      | 4,500            | 6,100          | 5   |
| 5 x 1/4                           | 7/8  | Aluminum oxide  | fine      | hard (H)         | 8AM   | 48358      | 4,500            | 6,100          | 5   |
| 5 x 1/4                           | 7/8  | Aluminum oxide  | coarse    | hard (H)         | 8AC   | 48359      | 4,500            | 6,100          | 5   |
| 6 x 1/8                           | 1    | Silicon carbide | fine      | medium-soft (MW) | 3SF   | 48360      | 3,800            | 5,100          | 5   |
| 6 x 1/8                           | 1    | Silicon carbide | fine      | medium-hard (MH) | 6SF   | 48361      | 3,800            | 5,100          | 5   |
| 6 x 1/8                           | 1    | Aluminum oxide  | fine      | hard (H)         | 8AM   | 48362      | 3,800            | 5,100          | 5   |
| 6 x 1/4                           | 1    | Silicon carbide | fine      | soft (W)         | 2SF   | 48363      | 3,800            | 5,100          | 5   |
| 6 x 1/4                           | 1    | Silicon carbide | fine      | medium-soft (MW) | 3SF   | 48364      | 3,800            | 5,100          | 5   |
| 6 x 1/4                           | 1    | Aluminum oxide  | fine      | hard (H)         | 8AM   | 48365      | 3,800            | 5,100          | 5   |



# Non-woven abrasives

## POLINOX® PNER unitized discs



POLINOX® PNER unitized discs are used for end grinding on angle grinders. The unitized fleece is bonded to a glass woven base. The PNER discs are recommended for working larger areas on stainless steel (INOX) components.

### Abrasive: Silicon carbide SiC

### Recommendation for use

POLINOX® PNER unitized discs achieve their best performance on variable-speed angle grinders at a cutting speed of about 6,900 SFPM.

### Ordering note

The different fleece thicknesses/hardnesses are colour-coded:

- soft (W) = grey
- medium-soft (MW) = light blue
- medium-hard (MH) = dark blue


You will find more unitized discs on page 13 and 32.

### PFERD specification number

DISC PNER

### PFERDERGONOMICS®



| Diameter (D) x width [Inches] | Arbor hole/thread size | Abrasive | Grit size | Density | Spec. | EDP number | Recom. speed RPM | Max. speed RPM |  |
|-------------------------------|------------------------|----------|-----------|---------|-------|------------|------------------|----------------|---|
|-------------------------------|------------------------|----------|-----------|---------|-------|------------|------------------|----------------|---|

#### Plain arbor hole

|             |     |                 |      |                  |     |       |       |        |   |
|-------------|-----|-----------------|------|------------------|-----|-------|-------|--------|---|
| 4-1/2 x 1/2 | 7/8 | Silicon carbide | fine | soft (W)         | 2SF | 48470 | 6,000 | 10,000 | 5 |
| 4-1/2 x 1/2 | 7/8 | Silicon carbide | fine | medium-soft (MW) | 3SF | 48472 | 6,000 | 10,000 | 5 |
| 4-1/2 x 1/2 | 7/8 | Silicon carbide | fine | medium-hard (MH) | 6SF | 48474 | 6,000 | 10,000 | 5 |
| 5 x 1/2     | 7/8 | Silicon carbide | fine | soft (W)         | 2SF | 48480 | 5,400 | 10,000 | 5 |
| 5 x 1/2     | 7/8 | Silicon carbide | fine | medium-soft (MW) | 3SF | 48482 | 5,400 | 10,000 | 5 |
| 5 x 1/2     | 7/8 | Silicon carbide | fine | medium-hard (MH) | 6SF | 48484 | 5,400 | 10,000 | 5 |

#### Threaded hub

|             |        |                 |      |                  |     |       |       |        |   |
|-------------|--------|-----------------|------|------------------|-----|-------|-------|--------|---|
| 4-1/2 x 1/2 | 5/8-11 | Silicon carbide | fine | soft (W)         | 2SF | 48490 | 6,000 | 10,000 | 5 |
| 4-1/2 x 1/2 | 5/8-11 | Silicon carbide | fine | medium-soft (MW) | 3SF | 48492 | 6,000 | 10,000 | 5 |
| 4-1/2 x 1/2 | 5/8-11 | Silicon carbide | fine | medium-hard (MH) | 6SF | 48494 | 6,000 | 10,000 | 5 |
| 5 x 1/2     | 5/8-11 | Silicon carbide | fine | soft (W)         | 2SF | 48500 | 5,400 | 10,000 | 5 |
| 5 x 1/2     | 5/8-11 | Silicon carbide | fine | medium-soft (MW) | 3SF | 48502 | 5,400 | 10,000 | 5 |
| 5 x 1/2     | 5/8-11 | Silicon carbide | fine | medium-hard (MH) | 6SF | 48504 | 5,400 | 10,000 | 5 |





The non-woven abrasive material is wrapped around a core and enclosed in foam. The foam packing supports the non-woven fleece and controls its service life and grinding behaviour.

This special bonding system produces non-woven wheels with very good surface finishes, high stock removal and long service life. These properties are particularly apparent when deburring, blending, finishing and polishing on soft metals, as well as on alloyed and high-alloyed steels and titanium alloys. The wheels can be used on automated equipment, on bench grinders and also with portable tool drives like straight grinders. The wheels can be dressed to fit a specific part geometry.

### Application examples

- Rounding of edges.
- Fine grinding of implants.
- Matte finishing of planar surfaces.
- Remove parting lines from castings and forgings.
- Grinding of junctions on turbine blades.
- Polishing molds and dies.
- Removal of processing traces on surgical instruments.

### Dust warning

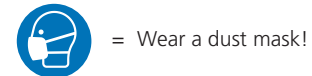
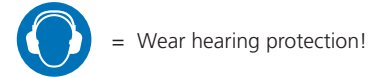
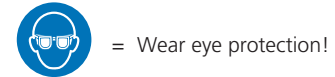
Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.

PFERDERGONOMICS® recommends POLINOX® convolute wheels PNK to sustainably reduce vibration and noise levels during use and to improve working comfort.



### Safety notes

For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



### Three different types are available

| Density     | Colour code | Characteristics   |
|-------------|-------------|---|
| Medium-soft | <b>MW</b>   | Soft/medium density with increased greater flexibility and life for tough blending, light deburring and polishing applications. Well Suited for machining contours. |
| Medium-hard | <b>MH</b>   | Medium/hard density with increased edge durability and life for tough deburring, for deburring, blending and cleaning applications.                                 |
| Hard        | <b>H</b>    | Hard density with increased very high stock removal, good edge strength and high service life for medium to heavy deburring and polishing applications.             |

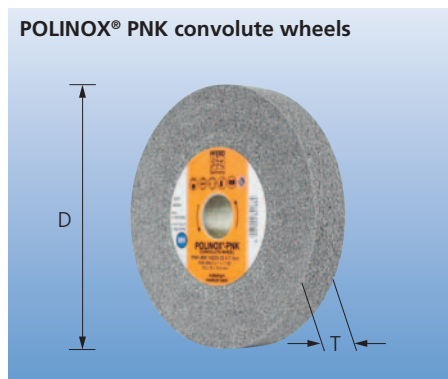


### Comparison chart

| PFERD PNK   |             |           |        | 3M®               | Standard Abrasives | Norton          | BIBIELLE   |
|-------------|-------------|-----------|--------|-------------------|--------------------|-----------------|------------|
| Density     | Colour code | Abrasives | Grit   | Scotch-Brite      | Non-Woven          | Bear-Tex        | BCW-DB     |
| Medium-soft | <b>MW</b>   | SiC       | fine   | LDW 7SF           | LDW 7SF            | Series 2000 7SF | BCW-DB 7SF |
| Medium-hard | <b>MH</b>   | SiC       | fine   | EXL Deburring 8SF | Deburring 8SF      | Series 1000 8SF | BCW-DB 8SF |
|             |             | A/O       | coarse | EXL Deburring 8AM | GP Plus 8AM        | Series 1000 8AM | BCW-DB 8AM |
| Hard        | <b>H</b>    | SiC       | fine   | Deburring 9SF     | EXL Deburring 9SF  | Series 1000 9SF | BCW-DB 9SF |

# Non-woven abrasives

## POLINOX® PNK convolute wheels



The non-woven abrasive material is wrapped around a core and enclosed in foam. The foam packing supports the non-woven fleece and controls its service life and grinding behaviour.

**Abrasive: Aluminum oxide A  
Silicon carbide SiC**

### Ordering note

The different fleece grades are colour-coded:  
 medium-soft (MW) = light blue  
 medium-hard (MH) = dark blue  
 hard (H) = red

### Recommendation for use


Due to the wrapped structure, foamed ring wheels must be used only in the indicated direction. Running in the wrong rotational direction will destroy the wheel and create an increased accident risk!

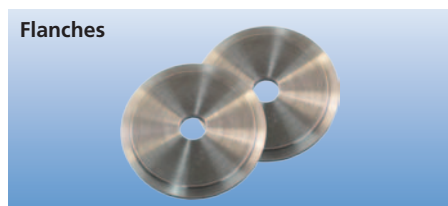
### PFERD specification number

PNK

### PFERDERGONOMICS®



| Diameter (D)<br>x width (T)<br>[Inches] | Arbor<br>hole<br>[Inches] | Abrasive        | Grit size | Density          | Spec. | EDP<br>number | Recom. speed<br>RPM | Max. speed<br>RPM |  |
|---|---------------------------|-----------------|-----------|------------------|-------|---------------|---------------------|-------------------|---|
| 6 x 1/2                                 | 1                         | Silicon carbide | fine      | medium-soft (MW) | 7SF   | 48200         | 2,500               | 5,100             | 1   |
| 6 x 1/2                                 | 1                         | Aluminum oxide  | coarse    | medium-hard (MH) | 8AM   | 48201         | 2,500               | 5,100             | 1   |
| 6 x 1/2                                 | 1                         | Silicon carbide | fine      | medium-hard (MH) | 8SF   | 48202         | 2,500               | 5,100             | 1   |
| 6 x 1/2                                 | 1                         | Silicon carbide | fine      | hard (H)         | 9SF   | 48203         | 2,500               | 5,100             | 1   |
| 6 x 1                                   | 1                         | Silicon carbide | fine      | medium-soft (MW) | 7SF   | 48204         | 2,500               | 5,100             | 1   |
| 6 x 1                                   | 1                         | Aluminum oxide  | coarse    | medium-hard (MH) | 8AM   | 48205         | 2,500               | 5,100             | 1   |
| 6 x 1                                   | 1                         | Silicon carbide | fine      | medium-hard (MH) | 8SF   | 48206         | 2,500               | 5,100             | 1   |
| 6 x 1                                   | 1                         | Silicon carbide | fine      | hard (H)         | 9SF   | 48207         | 2,500               | 5,100             | 1   |
| 8 x 1/2                                 | 3                         | Silicon carbide | fine      | medium-soft (MW) | 7SF   | 48208         | 1,900               | 3,850             | 1   |
| 8 x 1/2                                 | 3                         | Aluminum oxide  | coarse    | medium-hard (MH) | 8AM   | 48209         | 1,900               | 3,850             | 1   |
| 8 x 1/2                                 | 3                         | Silicon carbide | fine      | medium-hard (MH) | 8SF   | 48210         | 1,900               | 3,850             | 1   |
| 8 x 1/2                                 | 3                         | Silicon carbide | fine      | hard (H)         | 9SF   | 48211         | 1,900               | 3,850             | 1   |
| 8 x 1                                   | 3                         | Silicon carbide | fine      | medium-soft (MW) | 7SF   | 48212         | 1,900               | 3,850             | 1   |
| 8 x 1                                   | 3                         | Aluminum oxide  | coarse    | medium-hard (MH) | 8AM   | 48213         | 1,900               | 3,850             | 1   |
| 8 x 1                                   | 3                         | Silicon carbide | fine      | medium-hard (MH) | 8SF   | 48214         | 1,900               | 3,850             | 1   |
| 8 x 1                                   | 3                         | Silicon carbide | fine      | hard (H)         | 9SF   | 48215         | 1,900               | 3,850             | 1   |
| 8 x 2                                   | 3                         | Silicon carbide | fine      | medium-soft (MW) | 7SF   | 48216         | 1,900               | 3,850             | 1   |
| 8 x 2                                   | 3                         | Aluminum oxide  | coarse    | medium-hard (MH) | 8AM   | 48217         | 1,900               | 3,850             | 1   |
| 8 x 2                                   | 3                         | Silicon carbide | fine      | medium-hard (MH) | 8SF   | 48218         | 1,900               | 3,850             | 1   |
| 8 x 2                                   | 3                         | Silicon carbide | fine      | hard (H)         | 9SF   | 48219         | 1,900               | 3,850             | 1   |



These reducing flanges can be used to mount the convolute wheel  $\varnothing 8''$  on a stationary machine (bench grinder).



| EDP number | Fits arbor hole size | Adapter I.D. |  |
|------------|----------------------|--------------|---|
| 45720      | 1                    | 1/2          | 1   |
| 45721      | 1                    | 5/8          | 1   |
| 45722      | 1                    | 3/4          | 1   |
| 45690      | 3                    | 5/8          | 1   |
| 45692      | 3                    | 1            | 1   |
| 45693      | 3                    | 1-1/4        | 1   |

PFERD provides a comprehensive range of POLINOX® mounted and unmounted grinding wheels with various

- dimensions,
- grit sizes,
- abrasives and
- types.

POLINOX® mounted and unmounted flap wheels are made out of non-woven nylon in which abrasive grit is embedded. The flexible open-cell structure of the non-woven material makes the product very elastic and ensures cool grinding.

Due to the high flexibility of the non-woven material, the wheel will not alter the surface geometry of the workpiece in any way. Different surface textures and roughness levels can be obtained by selecting from a range of grit sizes and product designs.

### Advantages

- Cool grinding and low thermal load on the workpiece.
- No clogging of the wheel.

### Application examples

- Producing matt and satin finishes on metals.
- Cleaning of oxidized non-ferrous metals.
- Seamless brush finishing of stainless steel (INOX).
- Surface roughening of plastics in preparation for adhesive bonding.
- Surface adaptation of weld seams.

### Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the wheel diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the POLINOX® mounted and unmounted grinding wheels and tool drive.

#### Example

PNL, 2-3/8" Dia. A 100 (EDP 46207)

Peripheral speed: 3,000 SFPM

**Rotational speed: 4,750 RPM**

### Recommendations for use

- POLINOX® mounted and unmounted grinding wheels achieve their best performance at a recommended cutting speed of 2,000 - 4,000 SFPM. This provides an ideal compromise between stock removal, surface quality, thermal load on the workpiece and flap wheel wear.
- Flexible shaft drives, electric and air-powered straight grinders can be used as tool drives. For detailed information and ordering data for tool drives, please refer to our "Power tools" catalogue (section 209).

### Safety notes

- The maximum permitted peripheral speed is 6,300 SFPM.
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



= Wear eye protection!



= Wear a dust mask!



= Wear hearing protection!



= Please read the safety instructions!



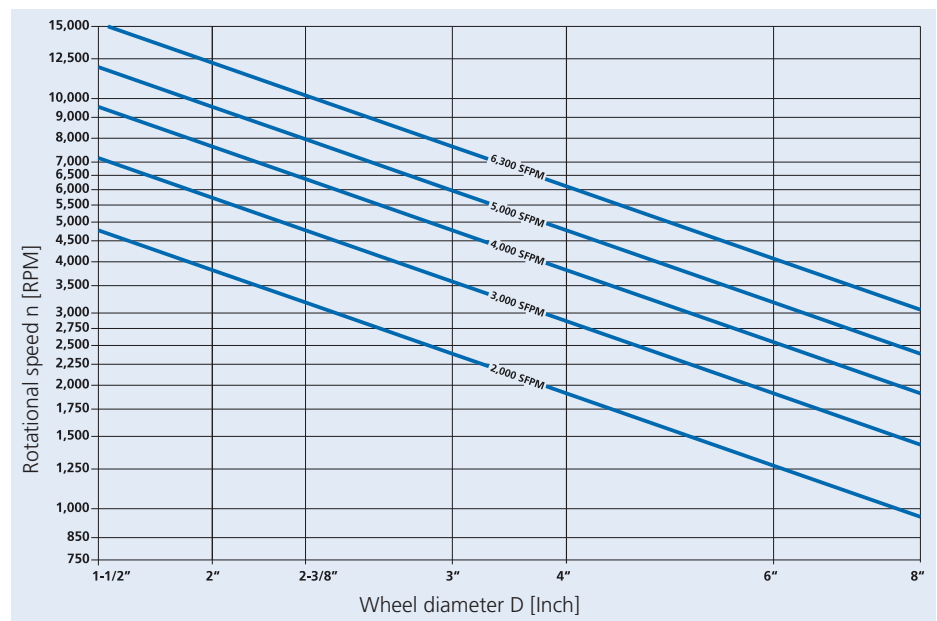
= Read the Safety Data Sheets (SDS) before using any materials!



### Dust warning

Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.

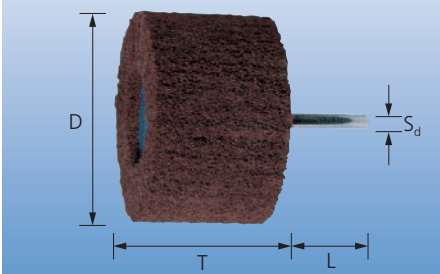
PFERDERGONOMICS® recommends POLINOX® mounted and unmounted grinding wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.



# Non-woven abrasives

## POLINOX® mounted flap wheels

**POLINOX® mounted flap wheels PNL**  
Aluminum oxide A




Made of multiple elements of non-woven abrasive material, arranged radially. Dense packing of the layers ensures a long service life. Used mainly for surface conditioning.

**Abrasive: Aluminum oxide A**

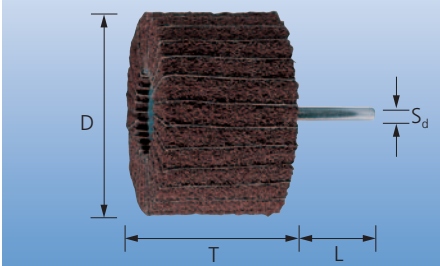
**PFERD specification number**  
PNL A

**PFERDERGONOMICS®**



| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S <sub>d</sub> )<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|--|---------------------|-------|-------|---------------------|----------|---|
|                                       |  | 100                 | 180   | 280   |                     |          |   |
| 1-1/2 x 3/4                           | 1/4                                      | 46201               | 46202 | 46203 | 7,500               | 15,000   | 10  |
| 2 x 1                                 | 1/4                                      | 46204               | 46205 | 46206 | 6,000               | 12,000   | 10  |
| 2-3/8 x 2                             | 1/4                                      | 46207               | 46208 | 46209 | 5,000               | 10,000   | 10  |
| 3 x 1                                 | 1/4                                      | 46251               | 46252 | 46253 | 4,000               | 7,500    | 10  |
| 3 x 2                                 | 1/4                                      | 46210               | 46211 | 46212 | 4,000               | 7,500    | 10  |

**POLINOX® mounted flap wheels PNZ**  
Aluminum oxide A




The non-woven abrasive is arranged in multiple radial elements with abrasive cloth interlayers. This structure permits an improved stock removal and produces a coarser finish.

**Abrasive: Aluminum oxide A**

**PFERD specification number**  
PNZ A

**PFERDERGONOMICS®**



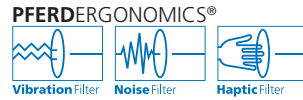
| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S <sub>d</sub> )<br>[Inches] | Grit and EDP number |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|--|---------------------|-------|---------------------|----------|---|
|                                       |  | 100                 | 180   |                     |          |   |
| 1-1/2 x 3/4                           | 1/4                                      | 46219               | 46225 | 7,500               | 15,000   | 10  |
| 2 x 1                                 | 1/4                                      | 46220               | 46226 | 6,000               | 12,000   | 10  |
| 2-3/8 x 2                             | 1/4                                      | 46221               | 46227 | 5,000               | 10,000   | 10  |
| 3 x 1                                 | 1/4                                      | 46269               | 46270 | 4,000               | 7,500    | 10  |
| 3 x 2                                 | 1/4                                      | 46222               | 46228 | 4,000               | 7,500    | 10  |
| 4 x 2                                 | 1/4                                      | 46223               | 46229 | 3,000               | 6,000    | 5   |



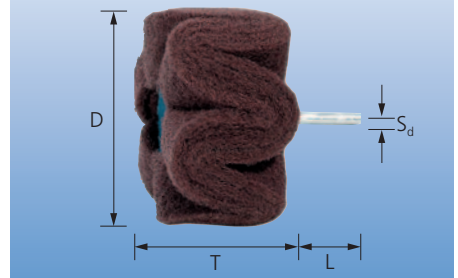
Made of several strips of corrugated non-woven material, wrapped around a common core. The wavy structure of the non-woven fabric permits depolishing and matt finishing of surfaces without visible transitions.


**Abrasive: Aluminum oxide A**

**PFERD specification number**  
PNG A



**POLINOX® mounted flap wheels PNG**  
Aluminum oxide A



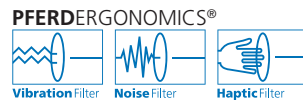
| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S <sub>d</sub> )<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|--|---------------------|-------|-------|---------------------|----------|---|
|                                       |  | 100                 | 180   | 280   |                     |          |   |
| 3 x 2                                 | 1/4                                      | 46236               | 46237 | 46238 | 4,000               | 7,500    | 10  |
| 4 x 2                                 | 1/4                                      | 46232               | 46230 | 46231 | 3,000               | 6,000    | 5   |

Consists of several strips of corrugated non-woven material wrapped around a common core.

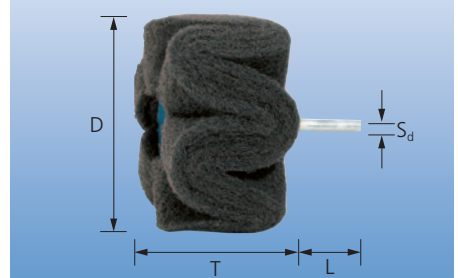
The wavy structure of the abrasive material permits depolishing and matt finishing of surfaces without visible transitions.


**Abrasive: Silicon carbide (SiC)**

**PFERD specification number**  
PNG SiC



**POLINOX® mounted flap wheels PNG**  
Silicon carbide SiC



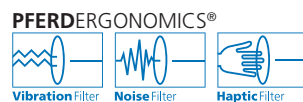
| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S <sub>d</sub> )<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|--|---------------------|-------|-------|---------------------|----------|---|
|                                       |  | 100                 | 180   | 280   |                     |          |   |
| 3 x 2                                 | 1/4                                      | 46239               | 46240 | 46241 | 4,000               | 7,500    | 10  |
| 4 x 2                                 | 1/4                                      | 46233               | 46234 | 46235 | 3,000               | 6,000    | 5   |

The non-woven abrasive is arranged in multiple axial layers.

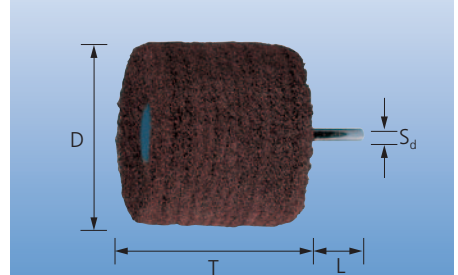
Since the individual layers are not interconnected, the abrasive surface adapts easily to different workpiece contours (e.g. in grinding sections or pipes).


**Abrasive: Aluminum oxide A**

**PFERD specification number**  
PNR A



**POLINOX® mounted flap wheels PNR**  
Aluminum oxide A

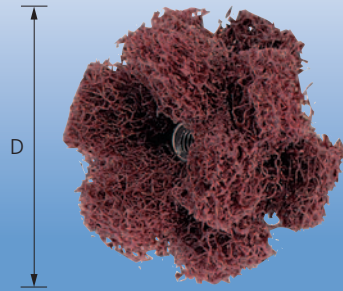


| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S <sub>d</sub> )<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|--|---------------------|-------|-------|---------------------|----------|---|
|                                       |  | 100                 | 180   | 280   |                     |          |   |
| 2-3/8 x 2                             | 1/4                                      | 46213               | 46214 | 46215 | 5,000               | 10,000   | 10  |
| 3 x 2                                 | 1/4                                      | 46216               | 46217 | 46218 | 4,000               | 7,500    | 10  |

# Non-woven abrasives

## POLINOX® cross buffs and accessories

### POLINOX® cross buffs



For cleaning, deburring and fine grinding of inner surfaces and contours. Ideal for narrow places such as bores and cavities and hard-to-reach places. Available in four different dimensions and three grit sizes.

#### Application examples

- Deburring of bores on non-ferrous metals.
- Fine grinding on the inner surfaces of pipes made of stainless steel (INOX).
- Cleaning thread pitches.

#### Recommendation for use

Recommended cutting speed: 2,000 - 4,000 SFPM.

#### Ordering note


Please order arbor separately.

#### PFERD specification number

PNST

#### PFERDERGONOMICS®



| Diameter (D)<br>[Inches] | No. of layers | Thread | Grit size and EDP number |       |       | Recom. speed<br>RPM | Max. RPM | Suitable arbor |  |
|--------------------------|---------------|--------|--------------------------|-------|-------|---------------------|----------|----------------|---|
|                          |               |        | 80                       | 100   | 280   |                     |          |                |   |
| 3/4                      | 2             | 8-32   | -                        | 44198 | 44199 | 15,000              | 25,100   | EDP 44830      | 20  |
| 1                        | 2             | 8-32   | 44202                    | 44200 | 44201 | 10,000              | 19,100   | EDP 44830      | 20  |
| 1-1/2                    | 3             | 8-32   | 44210                    | 44208 | 44209 | 7,500               | 12,600   | EDP 44830      | 20  |
| 2                        | 2             | 8-32   | 44212                    | 44213 | 44214 | 5,500               | 9,500    | EDP 44830      | 20  |

### Arbors for POLINOX® cross buffs




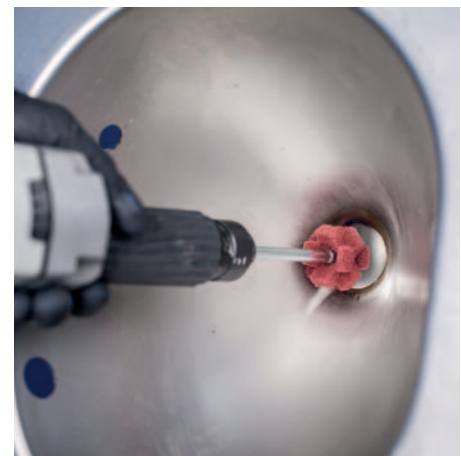
Arbor for POLINOX® cross buffs.

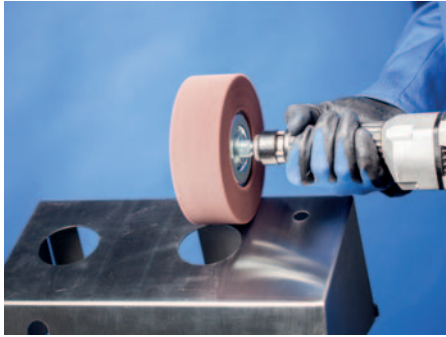
#### PFERD specification number

BO PNST



| Shank dia. (S)<br>[Inches] | Shank length (L)<br>[Inches] | Thread | EDP number | For use with         | Max. RPM |  |
|----------------------------|------------------------------|--------|------------|----------------------|----------|---|
| 1/4                        | 3                            | 8-32   | 44830      | POLINOX® cross buffs | 25,000   | 1   |





Made of radially arranged elements of non-woven abrasive material. Used mainly for work on large surfaces.

**Abrasive: Aluminum oxide A**

**Ordering note**

Please order drive arbors separately.

**PFERD specification number**


PNL A

**PFERDERGONOMICS®**



**POLINOX® unmounted flap wheels PNL  
Aluminum oxide A**



| Diameter (D) x length (T)<br>[Inches] | Bore<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|------------------|---------------------|-------|-------|---------------------|----------|---|
|                                       |                  | 100                 | 180   | 280   |                     |          |   |
| 6 x 2                                 | 1                | 43128               | 43129 | 43130 | 2,000               | 4,000    | 1   |
| 8 x 2                                 | 1-3/4            | 43137               | 43138 | 43139 | 1,500               | 3,000    | 1   |



The non-woven abrasive is arranged in multiple radial elements with abrasive cloth interlayers. This structure permits an improved stock removal and produces a coarser finish.

**Abrasive: Aluminum oxide A**

**Ordering note**

Please order drive arbors separately.

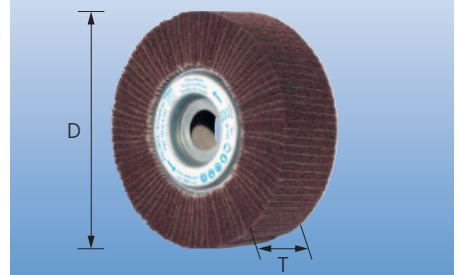
**PFERD specification number**


PNZ A

**PFERDERGONOMICS®**



**POLINOX® unmounted flap wheels PNZ  
Aluminum oxide A**



| Diameter (D) x length (T)<br>[Inches] | Bore<br>[Inches] | Grit and EDP number |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|------------------|---------------------|-------|---------------------|----------|---|
|                                       |                  | 100                 | 180   |                     |          |   |
| 6 x 2                                 | 1                | 43045               | 43046 | 2,000               | 4,000    | 1   |
| 8 x 2                                 | 1-3/4            | 43048               | 43049 | 1,500               | 3,000    | 1   |



Made of several strips of corrugated non-woven material, wrapped around a common core. The wavy structure of the non-woven fabric permits depolishing and matt finishing of surfaces without visible transitions.

**Abrasive: Aluminum oxide A**

**Ordering note**

Please order drive arbors separately.

**PFERD specification number**


PNG A

**PFERDERGONOMICS®**



**POLINOX® unmounted flap wheels PNG  
Aluminum oxide A**



| Diameter (D) x length (T)<br>[Inches] | Bore<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|------------------|---------------------|-------|-------|---------------------|----------|---|
|                                       |                  | 100                 | 180   | 280   |                     |          |   |
| 6 x 2                                 | 1                | 43030               | 43031 | 43032 | 2,000               | 4,000    | 1   |
| 8 x 2                                 | 1-3/4            | 43036               | 43037 | 43038 | 1,500               | 3,000    | 1   |

# Non-woven abrasives

## POLINOX® unmounted flap wheel accessories

### Arbors for flap wheels



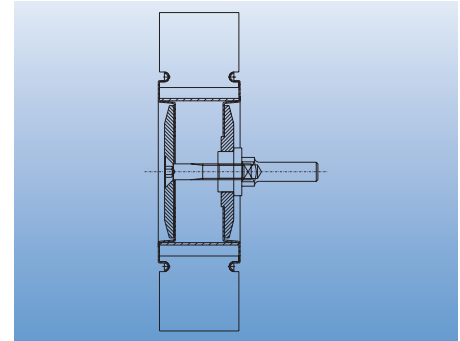
These arbor and flange combinations are intended specially for mounting PFERD flap wheels and POLINOX® wheels. The clamping flanges fit into the recess around the flap wheel's centre hole. This design provides optimum face-down grinding, even near edges and corners.


#### Contents

1 arbor 1/2" clamping dia.  
2 flanges  
suitable clamping screws (for various flap wheel widths)

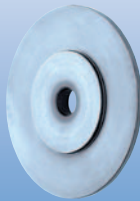
#### PFERD specification number

FR/V/R



| Shank diameter [Inches] | Clamping width [Inches] | Fits flap wheel I.D. [Inches] | For wheel diameter [Inches] | EDP number |  |
|-------------------------|-------------------------|-------------------------------|-----------------------------|------------|---|
| 1/2                     | 1-2                     | 1                             | 4 - 6                       | 45714      | 1   |
| 1/2                     | 1-2                     | 1-3/4                         | 8 - 10                      | 45715      | 1   |

### Flap wheel reducer flanges



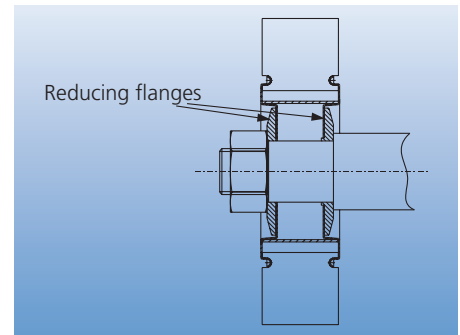
These reducing flanges can be used to mount PFERD flap wheels and POLINOX® wheels on a stationary machine (bench grinder).


#### Ordering note

1 pair per box.

#### PFERD specification number

RF/FR



| Fits flap wheel I.D. [Inches] | Bore [Inches] | For wheel diameter [Inches] | EDP number |  |
|-------------------------------|---------------|-----------------------------|------------|---|
| 1                             | 1/2           | 4-6                         | 45720      | 1   |
| 1                             | 5/8           | 4-6                         | 45721      | 1   |
| 1                             | 3/4           | 4-6                         | 45722      | 1   |
| 1-3/4                         | 1/2           | 8-10                        | 45725      | 1   |
| 1-3/4                         | 5/8           | 8-10                        | 45726      | 1   |
| 1-3/4                         | 3/4           | 8-10                        | 45727      | 1   |
| 1-3/4                         | 1             | 8-10                        | 45728      | 1   |





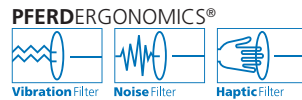


Made of radially arranged elements of non-woven abrasive material. Used mainly for work on small and medium sized surfaces.

These wheels have been designed for variable speed angle grinders, linear finishing tool and also for fillet weld grinders. For more details about the power tools see "Power tools" catalogue (section 209).


**Abrasive: Aluminum oxide A**

**PFERD specification number**  
PNL A



**POLINOX® unmounted flap wheels** **NEW**  
**PNL with thread**  
**Aluminum oxide A**



| Diameter (D) x length (T)<br>[Inches] | Bore<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|------------------|---------------------|-------|-------|---------------------|----------|---|
|                                       |                  | 100                 | 180   | 280   |                     |          |   |
| 4 x 2                                 | 5/8-11           | 43188               | 43189 | 43190 | 3,000               | 6,000    | 5   |

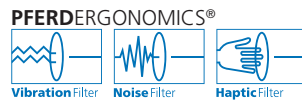
The non-woven abrasive is arranged in multiple radial elements with abrasive cloth interlayers. This structure permits an improved stock removal and produces a coarser finish.

Used mainly for work on small and medium sized surfaces.

These wheels have been designed for variable speed angle grinders, linear finishing tool and also for fillet weld grinders. For more details about the power tools see "Power tools" catalogue (section 209).


**Abrasive: Aluminum oxide A**

**PFERD specification number**  
PNZ A



**POLINOX® unmounted flap wheels** **NEW**  
**PNZ with thread**  
**Aluminum oxide A**



| Diameter (D) x length (T)<br>[Inches] | Bore<br>[Inches] | Grit and EDP number |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|------------------|---------------------|-------|---------------------|----------|---|
|                                       |                  | 100                 | 180   |                     |          |   |
| 4 x 2                                 | 5/8-11           | 43013               | 43014 | 3,000               | 6,000    | 5   |

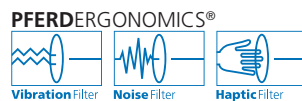
Made of several strips of corrugated non-woven material, wrapped around a common core. The wavy structure of the non-woven fabric permits depolishing and matt finishing of surfaces without visible transitions.

Used mainly for work on small and medium sized surfaces.

These wheels have been designed for variable speed angle grinders, linear finishing tool and also for fillet weld grinders. For more details about the power tools see "Power tools" catalogue (section 209).


**Abrasive: Aluminum oxide A**

**PFERD specification number**  
PNG A



**POLINOX® unmounted flap wheels** **NEW**  
**PNG with thread**  
**Aluminum oxide A**



| Diameter (D) x length (T)<br>[Inches] | Bore<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|------------------|---------------------|-------|-------|---------------------|----------|---|
|                                       |                  | 100                 | 180   | 280   |                     |          |   |
| 4 x 2                                 | 5/8-11           | 43024               | 43025 | 43026 | 3,000               | 6,000    | 5   |
| 5 x 2                                 | 5/8-11           | 43107               | 43108 | 43109 | 2,300               | 4,900    | 1   |

# Non-woven abrasives

## POLINOX® finishing drums

The non-woven abrasive material is arranged in radial flaps. The tightly-packed flaps ensure a long service life.

In the case of PNZ-W finishing drums, additional abrasive cloth is located between the flaps. The flap arrangement results in a higher stock removal rate and produces a coarser finish.

Finishing drums are particularly recommended for working on large surfaces.

### Advantages

- Cool grinding and low thermal load on the workpiece.
- No clogging of the drum.

### Ordering note

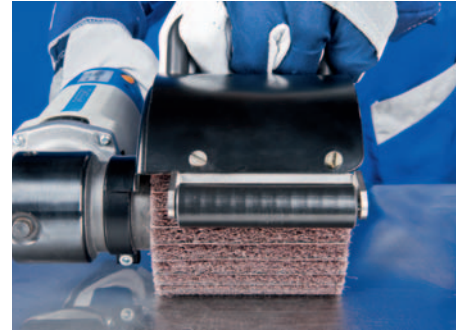
The centre hole diameter of 3/4" with 4 wedge keyways fits on all conventional drum drives.

For further drum products, please refer to page 68.

Suitable tool drives can be found in our "Power tools" catalogue (section 209).

### Safety notes

For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all time.



PFERDERGONOMICS® recommends POLINOX® grinding drums to sustainably reduce vibration and noise levels during use and to improve working comfort.



**POLINOX® finishing drums PNL Aluminum oxide A**



Made of radially arranged elements of non-woven abrasive material. Especially for work on large surfaces.

**Abrasive: Aluminum oxide A**


### Ordering note

Centre hole with 4 keyways.

**PFERD specification number**  
PNL-W A

PFERDERGONOMICS®



| Diameter (D) x width (T)<br>[Inches] | Bore/thread<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|--------------------------------------|-------------------------|---------------------|-------|-------|---------------------|----------|---|
|                                      |                         | 100                 | 180   | 280   |                     |          |   |
| 4 x 4                                | 3/4                     | 43103               | 43104 | 43105 | 2,000 - 3,700       | 4,800    | 1   |
| 5 x 4                                | 5/8-11                  | 46786               | 46787 | 46788 | 1,500 - 3,000       | 3,100    | 1   |



The non-woven abrasive is arranged in multiple radial elements with abrasive cloth interlayers. This structure permits an improved stock removal and produces a coarser finish.

**Abrasive: Aluminum oxide A**

**Ordering note**

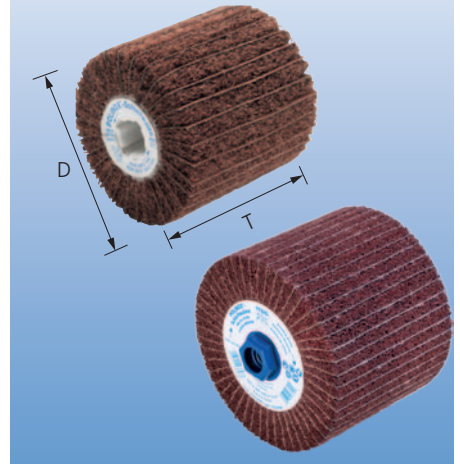
Centre hole with 4 keyways.


**PFERD specification number**  
PNZ-W A

**PFERDERGONOMICS®**



**POLINOX® finishing drums PNZ – interleaved Aluminum oxide A**



| Diameter (D) x width (T)<br>[Inches] | Bore/thread<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|--------------------------------------|-------------------------|---------------------|-------|-------|---------------------|----------|---|
|                                      |                         | 60                  | 80    | 120   |                     |          |   |
| 4 x 4                                | 3/4                     | 43113               | 43114 | 43115 | 2,000 - 3,700       | 4,800    | 1   |
| 5 x 4                                | 5/8-11                  | 46789               | 46790 | 46791 | 1,500 - 3,000       | 3,100    | 1   |

Made of several strips of corrugated non-woven material, wrapped around a common core.

The wavy structure of the non-woven fabric permits depolishing and matt finishing of surfaces without visible transitions.

**Abrasive: Aluminum oxide A**


**PFERD specification number**  
PNG-W A

**PFERDERGONOMICS®**



**POLINOX® finishing drums PNG Aluminum oxide A** NEW



| Diameter (D) x width (T)<br>[Inches] | Bore/thread<br>[Inches] | Grit and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|--------------------------------------|-------------------------|---------------------|-------|-------|---------------------|----------|---|
|                                      |                         | 100                 | 180   | 280   |                     |          |   |
| 4 x 4                                | 5/8-11                  | 43003               | 43004 | 43005 | 2,000 - 3,700       | 4,800    | 1   |

Complete linear finishing set for rough grinding to surface finishing.

Set features new linear finishing tool, as well as a selection of coated grinding belts, POLIVLIES® non-woven surface conditioning belts, and POLINOX® non-woven grinding drums. Pneumatic drum holder for belts also included.

**Content of the linear finishing set**

1 pc. each of:

■ EDP 91217 – linear finishing tool, UWER 15/35 SI D19 120V

■ EDP 49985 – 3-1/2" x 15-1/2" pneumatic drum 5/8-11 thread

■ EDP 49986 – threaded spindle extension for pneumatic drum

■ EDP 46790 5 x 4" POLINOX® PNZ grinding drum, 80 grit

2 pcs. each of:

■ EDP 43613 – 3-1/2" x 15-1/2" POLIVLIES® non-woven belt, coarse grit

■ EDP 43614 – 3-1/2" x 15-1/2" POLIVLIES® non-woven belt, medium grit


■ EDP 43615 – 3-1/2" x 15-1/2" POLIVLIES® non-woven belt, fine grit

10 pcs. of:

■ EDP 49314 – 3-1/2" x 15-1/2" coated belt A/O 60 grit

**Linear finishing set** NEW

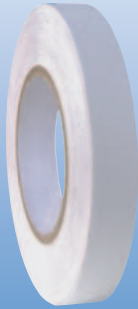


| Case dimensions<br>[Inches] | EDP number |  |
|-----------------------------|------------|---|
| 6-1/3 x 10 x 22-4/5         | 49999      | 1   |

# Non-woven abrasives

## High-strength masking tape

### High-strength masking tape



This self-adhesive masking tape is designed to preserve the clear separation between differently stroke-finished surfaces in transition areas, e.g., near mitred joints. Masking tape is applied to protect areas not to be machined.

#### Advantages

- High elasticity and tear strength.
- Pulls off cleanly.
- Exceptional edge stability.
- Leaves no undesirable oily stains on workpieces.

#### Application examples

- Clear-cut separation of surface areas requiring different abrasive finish patterns.
- Protection of previously finished surfaces.


#### Recommendations for use

- Use masking tape for surface protection only when finishing with soft, flexible abrasives (e.g. non-woven products).
- To avoid inadvertent removal, take care to apply load to masking tape only in the direction of tool rotation when grinding.

#### PFERD specification number

ADB 20



| Width [Inches] | Length [Feet] | EDP number |  |
|----------------|---------------|------------|---|
| 3/4            | 82            | 43000      | 1   |

## POLIVLIES® flap discs

### POLIVLIES® flap discs



Recommended for surface grinding on stainless steel components.

#### Application examples

- Fine-grinding of large surfaces.
- Removal of heat discoloration.
- Weld cleaning and light removal work on stainless steel assemblies.
- Post-assembly finishing work in process equipment and tank fabrication.

#### Abrasive: Aluminum oxide A

#### Available grit sizes


- 100 G = yellowish-brown
- 180 M = red-brown
- 240 F = blue

#### Recommendation for use

On variable-speed angle grinders, POLIVLIES® flap discs produce the best results at the recommended peripheral speed of 6,000 - 6,900 SFPM.

#### PFERD specification number

PVL A

| Diameter (D) x thickness [Inches] | Arbor hole/thread size [Inches] | Grit size and EDP number |       |       | Recom. speed RPM | Max. speed RPM |  |
|-----------------------------------|---------------------------------|--------------------------|-------|-------|------------------|----------------|---|
|                                   |                                 | 100 G                    | 180 M | 240 F |                  |                |   |
| <b>Plain arbor hole</b>           |                                 |                          |       |       |                  |                |   |
| 4-1/2 x 3/4                       | 7/8                             | 43273                    | 43274 | 43275 | 5,000 - 5,800    | 13,300         | 5   |
| 5 x 3/4                           | 7/8                             | 43276                    | 43277 | 43278 | 4,600 - 5,300    | 12,200         | 5   |
| <b>Threaded hub</b>               |                                 |                          |       |       |                  |                |   |
| 4-1/2 x 3/4                       | 5/8-11                          | 43285                    | 43286 | 43287 | 5,000 - 5,800    | 13,300         | 5   |
| 5 x 3/4                           | 5/8-11                          | 43288                    | 43289 | 43290 | 4,600 - 5,300    | 12,200         | 5   |

POLIVLIES® surface conditioning hook & loop discs for surface conditioning attach to the holder by a series of hooks and loops that permits easy-on, easy-off disc changes. Strong non-woven material will make quick work of heavy oxidation removal, cleaning, and conditioning.

### Application examples

- Removal of discolouration from stainless steel surfaces.
- Fine grinding of large components in process equipment and tank construction.

### Recommendation for use

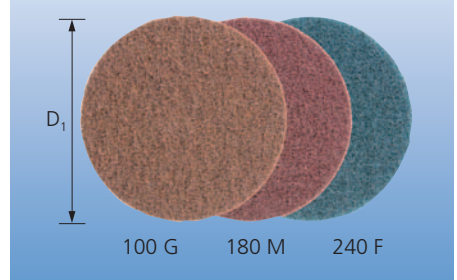
POLIVLIES® hook & loop discs perform best at the recommended peripheral speed of 3,000 - 4,000 SFPM. An optimum balance of stock removal, surface quality, workpiece thermal load, and disc wear is achieved at this speed.


### Ordering note

Please order disc holder separately. For more surface conditioning discs see page 14 (COMBICLICK®) and 31 (COMBIDISC®).

**PFERD specification number**  
PVKR

### POLIVLIES® surface conditioning hook & loop discs



| Diameter (D)<br>[Inches] | Grit size and EDP number |       |       | Recom. speed<br>RPM | Max. RPM |  |
|--------------------------|--------------------------|-------|-------|---------------------|----------|---|
|                          | 100 G                    | 180 M | 240 F |                     |          |   |
| 4                        | 43442                    | 43443 | 43445 | 3,850               | 6,100    | 10  |
| 4-1/2                    | 43446                    | 43447 | 43449 | 3,300               | 5,300    | 10  |
| 5                        | 43450                    | 43451 | 43453 | 3,000               | 4,850    | 10  |
| 7                        | 43458                    | 43459 | 43461 | 2,200               | 3,500    | 10  |
| 8                        | 43462                    | 43463 | 43465 | 1,600               | 3,050    | 10  |

The elastic interlayer of the POLIVLIES® hook & loop disc holder permits surface finishing without visible transitions, in addition to rapid disc changes. Available in threaded and shank-mounted versions.

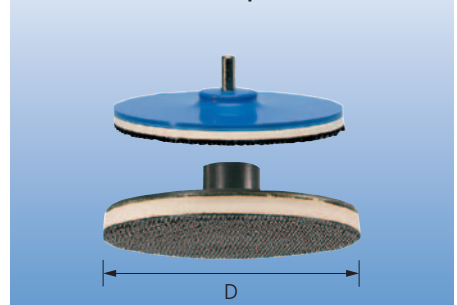
### Safety note


For safety reasons, the stated max. RPM level must not be exceeded.

### PFERD specification number

PVKRH 4 (shank mounted)  
PVKRH 16 (threaded)

### POLIVLIES® hook & loop disc holders



| Diameter (D)<br>[Inches] | Shank diameter/<br>thread size | EDP number | Max. RPM |  |
|--------------------------|--------------------------------|------------|----------|---|
| <b>Shank mounted</b>     |                                |            |          |   |
| 4                        | 1/4                            | 43406      | 16,000   | 1   |
| <b>Threaded</b>          |                                |            |          |   |
| 4-1/2                    | 5/8-11                         | 43410      | 10,000   | 1   |
| 5                        | 5/8-11                         | 43412      | 10,000   | 1   |
| 7                        | 5/8-11                         | 43420      | 6,000    | 1   |
| 8                        | 5/8-11                         | 43422      | 4,000    | 1   |

PFERD provides a comprehensive range of POLICLEAN® products:

- POLICLEAN® wheels
- POLICLEAN® mounted wheels
- COMBIDISC®-POLICLEAN® discs  
(refer to COMBIDISC® products, page 30)
- POLICLEAN® discs

POLICLEAN® is a coarse-structured, non-woven abrasive cleaning material made of a special combination of synthetic fibres and abrasive grit.

### Advantages

- The flexible structure adapts to the surface contours and shape of the workpiece.
- Open-cell material prevents clogging and allows cool grinding.
- No corrosive residues on the workpiece surface.

### Application examples

- Removal of rust, corrosion residues, scale, dirt, stubborn paint or adhesive residues, old coatings or residues of seals or gaskets.
- Cleaning of weld seams, removal of slight drawing marks and heat discolourations, especially on stainless steel (INOX).
- Surface roughening in preparation for adhesive bonding or application of fillers.
- Cleaning of surfaces of diverse characteristics.

### Recommendation for use

POLICLEAN® products achieve their best performance at a recommended cutting speed of 3,000 - 4,000 SFPM.

This provides an ideal compromise between stock removal, surface quality, thermal load on the workpiece and product wear.

### Cutting speeds


In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the product diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the POLICLEAN® products and tool drive.


#### Example


POLICLEAN® wheel  
3" x 1", 1/4" shank  
EDP 44813  
Peripheral speed: 3,000 - 4,000 SFPM  
**Rotational speed: 3,800 - 5,000 RPM**


### Safety notes


For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.

 = Wear eye protection!

 = Wear a dust mask!

 = Wear hearing protection!

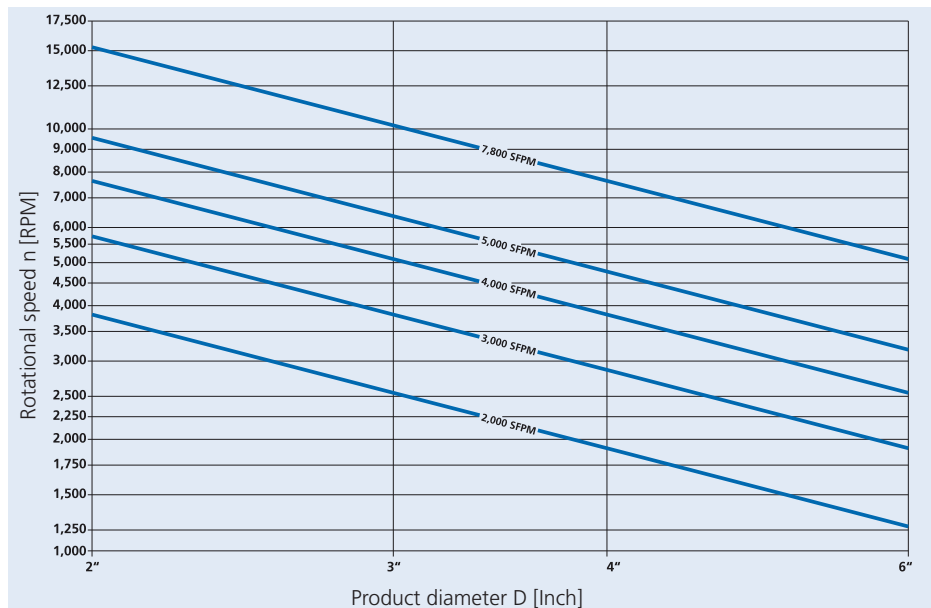
 = Please read the safety instructions!

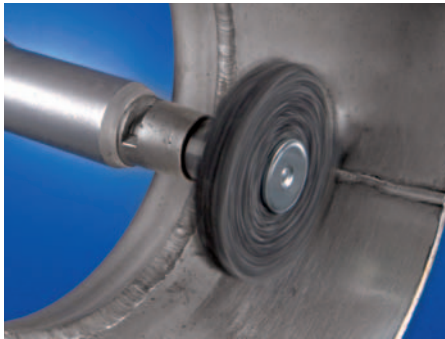
 = Read the Safety Data Sheets (SDS) before using any materials!



### Dust warning

Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.





For general-purpose peripheral grinding applications.

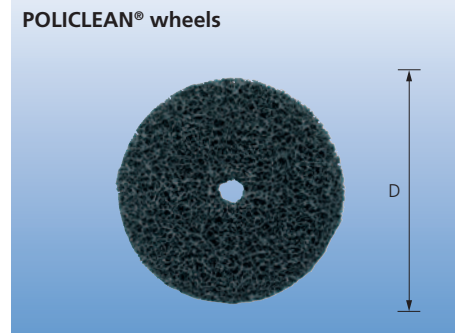
**Recommendation for use**


These wheels can be used on flexible shaft drives or straight grinders (electrical or air-powered).

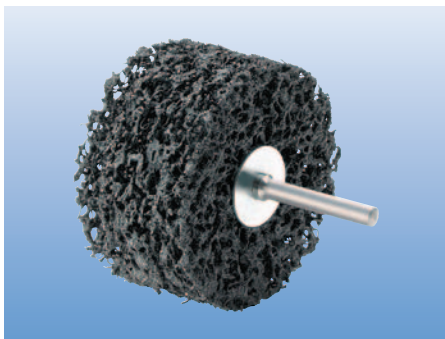
**Ordering note**

Please order arbors separately.

**PFERD specification number**  
PCLS



| Diameter (D) x Length [Inches] | Bore [Inches] | EDP number | Recom. speed RPM | Max. RPM |  |
|--------------------------------|---------------|------------|------------------|----------|---|
| 4 x 1/2                        | 1/2           | 44804      | 3,000 - 3,800    | 6,000    | 4   |
| 6 x 1/2                        | 1/2           | 44806      | 2,000 - 2,500    | 4,000    | 4   |




Mounting system for POLICLEAN® wheels, with wheel stacking capability.

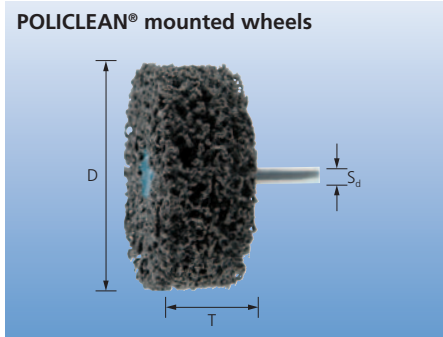
The use of this arbor reduces set-up times significantly. Wheels can be changed without removing the shank from the machine collet. PFERD offers arbors for clamping one or two wheels, respectively.

**PFERD specification number**  
PCLB



| Shank dia. [Inches] | Wheel arbor hole [Inches] | No. of discs | EDP number | Suitable POLICLEAN® wheels |  |
|---------------------|---------------------------|--------------|------------|----------------------------|---|
| 1/4                 | 1/2                       | 1            | 44835      | EDP 44804, EDP 44806       | 1   |
| 1/4                 | 1/2                       | 2            | 44836      | EDP 44804, EDP 44806       | 1   |
| 3/8                 | 1/2                       | 1            | 44838      | EDP 44804, EDP 44806       | 1   |
| 3/8                 | 1/2                       | 2            | 44839      | EDP 44804, EDP 44806       | 1   |






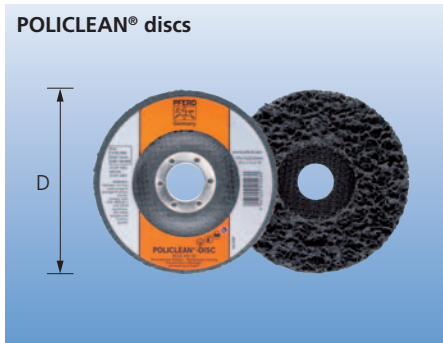
For general-purpose peripheral grinding.

**Recommendation for use**

These products can be used on flexible shaft drives or straight grinders (electrical or air-powered).

**PFERD specification number**  
PCLZY

| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S <sub>d</sub> )<br>[Inches] | EDP number | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|--|------------|---------------------|----------|---|
| 2 x 1/2                               | 1/4                                      | 44810      | 6,000 - 7,000       | 15,000   | 5   |
| 2 x 1                                 | 1/4                                      | 44811      | 6,000 - 7,000       | 15,000   | 5   |
| 3 x 1/2                               | 1/4                                      | 44812      | 4,000 - 5,100       | 10,000   | 5   |
| 3 x 1                                 | 1/4                                      | 44813      | 4,000 - 5,100       | 10,000   | 5   |
| 4 x 1/2                               | 1/4                                      | 44814      | 3,000 - 3,800       | 7,500    | 5   |




The non-woven cleaning fabric is supported by a backing pad. This design allows POLICLEAN® discs to be used very effectively in face grinding.

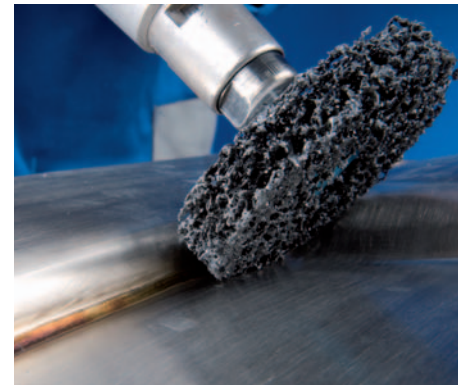
**Recommendations for use**

- Preferably for use on slow-running angle grinders.
- Recommended peripheral speed: 6,000 - 8,000 SFPM.

**PFERD specification number**  
PCLD



| Diameter (D) x thickness<br>[Inches] | Arbor hole/<br>thread size<br>[Inches] | EDP number | Recom. speed<br>RPM | Max. RPM |  |
|--------------------------------------|--|------------|---------------------|----------|---|
| <b>Plain arbor hole</b>              |  |            |                     |          |   |
| 4-1/2 x 1/2                          | 7/8                                    | 44862      | 5,000 - 7,000       | 10,000   | 5   |
| 5 x 1/2                              | 7/8                                    | 44863      | 5,000 - 7,000       | 10,000   | 5   |
| <b>Threaded hub</b>                  |  |            |                     |          |   |
| 4-1/2 x 1/2                          | 5/8-11                                 | 44867      | 5,000 - 7,000       | 10,000   | 5   |
| 5 x 1/2                              | 5/8-11                                 | 44868      | 5,000 - 7,000       | 10,000   | 5   |





PFERD offers a very extensive range of Poliflex® finishing products. Starting from a large selection of

- shapes,
- abrasives,
- grit sizes and
- bonds,

finishing products adapted for the specific application are produced.

PFERD manufactures Poliflex® finishing products to high standards of dimensional accuracy, with outstandingly consistent quality and tight dimensional tolerances. They are ideally suited for fine grinding, texturing and making preparations for polishing work.

### Advantages

- High surface quality.
- The exact concentricity of the Poliflex® finishing points
  - considers the user's health,
  - protects the tool drive,
  - enables quiet working,
  - prevents chatter marks and
  - reduces wear.
- Depending on the intended application, Poliflex® finishing products can easily be shaped with a diamond dresser or with ceramic dressing stones at low rotational speed. For detailed information and ordering data for dressing stones, please refer to our "Mounted points" catalogue (section 203).



### Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the product diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the Poliflex® product and tool drive.

#### Example

W220 GR 120 (EDP 36311)

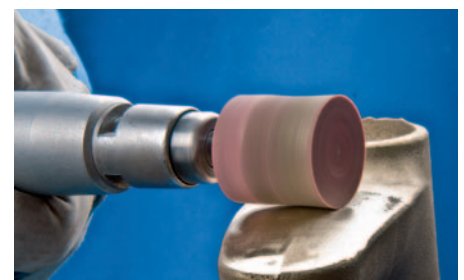
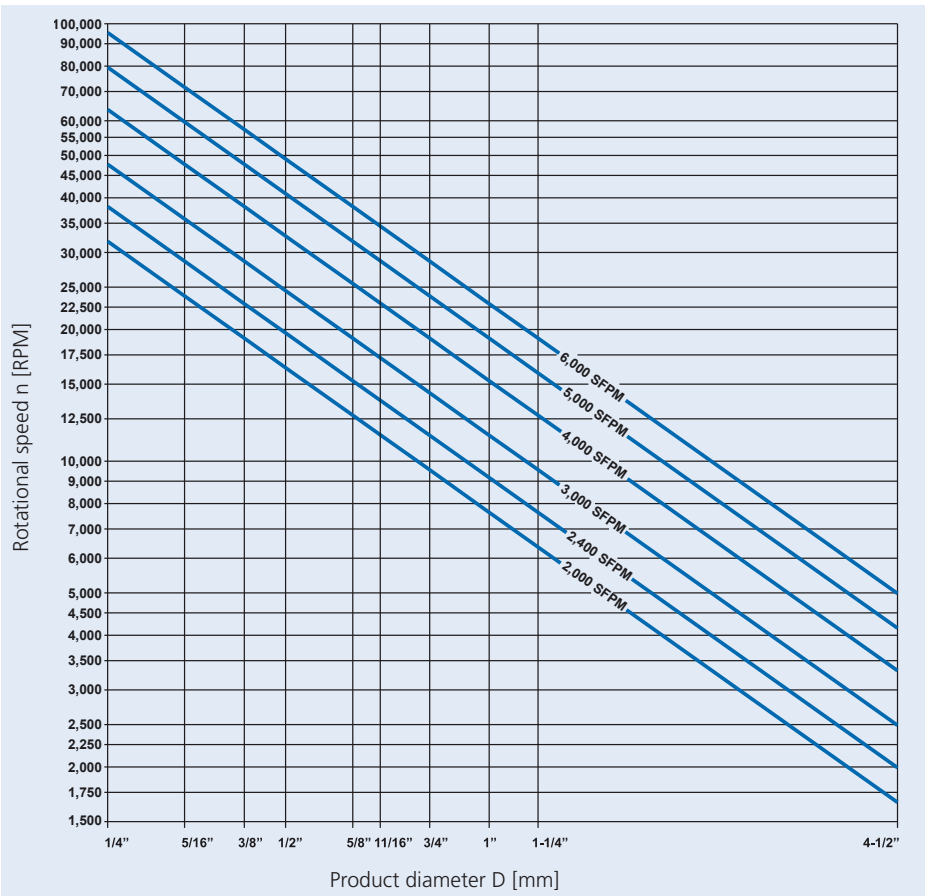
Peripheral speed: 1,900 - 2,900 SFPM

**Rotational speed: 7,500 - 17,200 RPM**



PFERDMEDIA

For more information, please visit [pferdusa.com/poliflex](http://pferdusa.com/poliflex)



### Safety recommendations

For safety reasons, it is imperative to remain within the stated RPM limit at all times.



= Wear eye protection!



= Wear a respirator!



= Use ear protection!



= Wear gloves!



= Read the instructions!



= Read the Safety Data Sheets (SDS) before using any materials!

Poliflex® finishing products are designed for the following maximum peripheral speeds:

|                        |                         |
|------------------------|-------------------------|
| <b>GR = 3,000 SFPM</b> | <b>GHR = 6,000 SFPM</b> |
| <b>LR = 5,000 SFPM</b> | <b>LHR = 9,800 SFPM</b> |

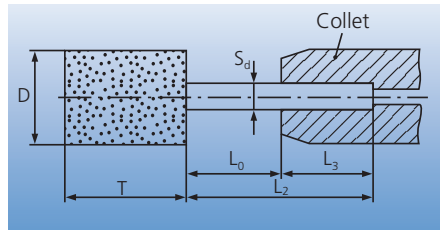
Maximum RPM levels for the various shank lengths and shank diameters must be strictly observed to prevent shank buckling during use.

Regardless of the shank length, the clamping depth ( $L_3$ ) in the machine collet must be at least 1/2".



The buckling speed depends on the following factors:

- Shape and dimensions of the mounted point,
- diameter of the steel shank and
- free shank length  $L_0$ .



- D = Outer dia. of the mounted point
- T = Mounted point width
- $S_d$  = Shank diameter
- $L_0$  = Open shank length
- $L_2$  = Shank length
- $L_3$  = Clamping length of the shank

Each pack of PFERD mounted points comes with RPM recommendations for a given unsupported shank length ( $L_0$ ) of that product. Check each finishing point for proper concentricity and correct clamping in the power unit before commencing work.

### Special products made to order

If our extensive stock range does not present the ideal solution for your particular application, we can produce Poliflex® products specifically to meet your requirements.

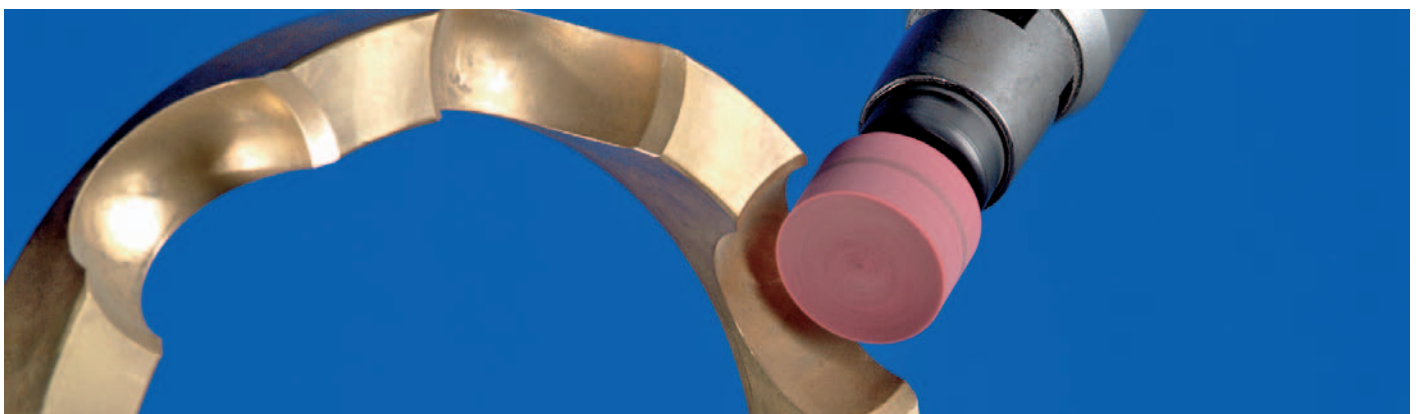


We will take into account your machining tasks and requirements, drawings relating to cuts, shank diameters, special lengths, special shapes and coatings. Please contact us.

We take account of your requirements and wishes, drawings, information on dimensions and shapes, grit sizes and grain types, grain mixes and shank diameters and lengths. Please contact our sales representatives! We will be happy to advise you.

### Dust warning

Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.



Poliflex® finishing products in GR bond are made of pink aluminum oxide, a soft, elastomer-based bond type. Soft elastic bond ensures a soft, fine grinding action. Available in a variety of standard shapes.

### Safety note


For safety reasons, the stated max. RPM level must not be exceeded.

### PFERD specification number

PF SP GR (tapered cone)  
 PF KE GR (tapered cylinder, pointed end)  
 PF KU GR (ball shape)  
 PF WR GR (cylinder with radius end)

### Poliflex® finishing points GR bond, A and B shapes



| Shape                  | Grit | EDP number | Diameter x length [Inches] | Shank dia. [Inches] | Shank length [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|------------------------|------|------------|----------------------------|---------------------|-----------------------|--------------------------|------------------------|----------------------|---|
| <b>Shank dia. 1/8"</b> |      |            |                            |                     |                       |                          |                        |                      |   |
| B122                   | 120  | 36361      | 3/8 x 3/8                  | 1/8                 | 1-1/4                 | 24,000                   | 68,740                 | 37,790               | 10  |
| B125                   | 120  | 36401      | 1/4 x 1/4                  | 1/8                 | 1-1/4                 | 36,000                   | 75,330                 | 50,640               | 10  |
| <b>Shank dia. 1/4"</b> |      |            |                            |                     |                       |                          |                        |                      |   |
| A5                     | 120  | 36461      | 3/4 x 1-1/8                | 1/4                 | 1-1/2                 | 12,000                   | 38,550                 | 31,270               | 10  |
| A11                    | 120  | 36471      | 7/8 x 2                    | 1/4                 | 1-1/2                 | 10,000                   | 25,420                 | 20,100               | 10  |
| A12                    | 120  | 36481      | 11/16 x 1-1/4              | 1/4                 | 1-1/2                 | 13,000                   | 38,050                 | 30,790               | 10  |
| A21                    | 120  | 36491      | 1 x 1                      | 1/4                 | 1-1/2                 | 9,000                    | 35,510                 | 28,840               | 10  |
| A25                    | 120  | 36451      | 1 x 1                      | 1/4                 | 1-1/2                 | 9,000                    | 35,510                 | 28,840               | 10  |
| A26                    | 120  | 36431      | 5/8 x 5/8                  | 1/4                 | 1-1/2                 | 14,000                   | 48,980                 | 40,410               | 10  |
| A40                    | 120  | 36441      | 3/4 x 3/4                  | 1/4                 | 1-1/2                 | 12,000                   | 50,930                 | 50,930               | 10  |
| B52                    | 120  | 36501      | 3/8 x 3/4                  | 1/4                 | 1-1/2                 | 24,000                   | 78,340                 | 54,390               | 10  |
| B121                   | 120  | 36421      | 1/2 x 1/2                  | 1/4                 | 1-1/2                 | 18,000                   | 69,310                 | 45,850               | 10  |



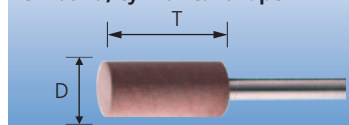
### Safety note


For safety reasons, the stated max. RPM level must not be exceeded.

### PFERD specification number

PF ZY GR

### Poliflex® finishing points GR bond, cylindrical shape W



| Shape                  | Grit | EDP number | Diameter (D) x length (T) [Inches] | Shank dia. [Inches] | Shank length [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|------------------------|------|------------|------------------------------------|---------------------|-----------------------|--------------------------|------------------------|----------------------|---|
| <b>Shank dia. 1/8"</b> |      |            |                                    |                     |                       |                          |                        |                      |   |
| W162                   | 120  | 36101      | 1/4 x 3/8                          | 1/8                 | 1-1/4                 | 36,000                   | 67,210                 | 44,040               | 10  |
| W168                   | 120  | 36111      | 5/16 x 5/16                        | 1/8                 | 1-1/4                 | 29,000                   | 65,900                 | 42,790               | 10  |
| W170                   | 120  | 36121      | 5/16 x 1/2                         | 1/8                 | 1-1/4                 | 29,000                   | 54,860                 | 34,040               | 10  |
| W174                   | 120  | 36131      | 3/8 x 1/4                          | 1/8                 | 1-1/4                 | 24,000                   | 65,510                 | 42,440               | 10  |
| W175                   | 120  | 36141      | 3/8 x 3/8                          | 1/8                 | 1-1/4                 | 24,000                   | 57,530                 | 35,990               | 10  |
| W176                   | 120  | 36151      | 3/8 x 5/8                          | 1/8                 | 1-1/4                 | 24,000                   | 50,460                 | 30,450               | 10  |
| W185                   | 120  | 36171      | 1/2 x 1/2                          | 1/8                 | 1-1/4                 | 18,000                   | 42,750                 | 24,370               | 10  |
| <b>Shank dia. 1/4"</b> |      |            |                                    |                     |                       |                          |                        |                      |   |
| W178                   | 120  | 36191      | 3/8 x 1                            | 1/4                 | 1-1/2                 | 24,000                   | 40,360                 | 30,780               | 10  |
| W193                   | 120  | 36231      | 5/8 x 3/8                          | 1/4                 | 1-1/2                 | 14,500                   | 44,330                 | 34,340               | 10  |
| W196                   | 120  | 36251      | 5/8 x 1                            | 1/4                 | 1-1/2                 | 14,500                   | 34,670                 | 25,340               | 10  |
| W204                   | 120  | 36281      | 3/4 x 3/4                          | 1/4                 | 1-1/2                 | 12,000                   | 36,510                 | 27,040               | 10  |
| W220                   | 120  | 36311      | 1 x 1                              | 1/4                 | 1-1/2                 | 9,000                    | 30,370                 | 21,410               | 10  |
| W230                   | 120  | 36331      | 1-1/4 x 1-1/4                      | 1/4                 | 1-1/2                 | 7,200                    | 25,200                 | 16,760               | 5   |

# Poliflex® finishing products

## Finishing points, leather bond




Poliflex® finishing points in LR (leather bond) bond are made of white aluminum oxide. LR is a harder bond providing enhanced durability. Smooth, cool, fine grinding with good edge-holding qualities. Provides long service life and very fine pre-polish finish. Recommended for fine grinding of all metals. Available in a variety of standard shapes.

**PFERD specification number**  
 PF SP LR (tapered cone)  
 PF KE LR (tapered cylinder, pointed end)  
 PF KU LR (ball shape)  
 PF WR LR (cylinder with radius end)

**Safety note**  
 For safety reasons, the stated max. RPM level must not be exceeded.

### Poliflex® finishing points LR Bond, A and B shapes



| Shape                  | Grit | EDP number | Diameter x length [Inches] | Shank dia. [Inches] | Shank length [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|------------------------|------|------------|----------------------------|---------------------|-----------------------|--------------------------|------------------------|----------------------|---|
| <b>Shank dia. 1/8"</b> |      |            |                            |                     |                       |                          |                        |                      |   |
| B122                   | 120  | 36365      | 3/8 x 3/8                  | 1/8                 | 1-1/4                 | 40,000                   | 68,740                 | 37,790               | 10  |
| B125                   | 120  | 36405      | 5/16 x 5/16                | 1/8                 | 1-1/4                 | 60,000                   | 75,330                 | 50,640               | 10  |
| <b>Shank dia. 1/4"</b> |      |            |                            |                     |                       |                          |                        |                      |   |
| A5                     | 120  | 36465      | 3/4 x 1-1/8                | 1/4                 | 1-1/2                 | 20,000                   | 38,550                 | 31,270               | 10  |
| A11                    | 120  | 36475      | 7/8 x 2                    | 1/4                 | 1-1/2                 | 17,000                   | 25,420                 | 20,100               | 10  |
| A12                    | 120  | 36485      | 11/16 x 1-1/4              | 1/4                 | 1-1/2                 | 22,000                   | 38,050                 | 30,790               | 10  |
| A21                    | 120  | 36495      | 1 x 1                      | 1/4                 | 1-1/2                 | 15,000                   | 35,510                 | 28,840               | 10  |
| A25                    | 120  | 36455      | 1 x 1                      | 1/4                 | 1-1/2                 | 15,000                   | 35,510                 | 28,840               | 10  |
| A26                    | 120  | 36435      | 5/8 x 5/8                  | 1/4                 | 1-1/2                 | 24,000                   | 48,980                 | 40,410               | 10  |
| A40                    | 120  | 36445      | 3/4 x 3/4                  | 1/4                 | 1-1/2                 | 20,000                   | 50,930                 | 50,930               | 10  |
| B52                    | 120  | 36505      | 3/8 x 3/4                  | 1/4                 | 1-1/2                 | 40,000                   | 78,340                 | 54,390               | 10  |
| B121                   | 120  | 36425      | 1/2 x 1/2                  | 1/4                 | 1-1/2                 | 30,000                   | 69,310                 | 45,850               | 10  |



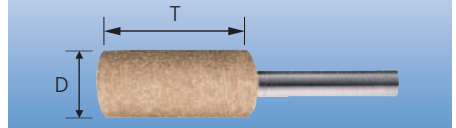
### Safety note


For safety reasons, the stated max. RPM level must not be exceeded.

### PFERD specification number

PF ZY LR

### Poliflex® finishing points LR bond, cylindrical shape W



| Shape                  | Grit | EDP number | Diameter (D) x length (T) [Inches] | Shank dia. [Inches] | Shank length [Inches] | Recom. RPM 1/2" overhang | Max. RPM 1/2" overhang | Max. RPM 1" overhang |  |
|------------------------|------|------------|------------------------------------|---------------------|-----------------------|--------------------------|------------------------|----------------------|---|
| <b>Shank dia. 1/8"</b> |      |            |                                    |                     |                       |                          |                        |                      |   |
| W162                   | 120  | 36105      | 1/4 x 3/8                          | 1/8                 | 1-1/4                 | 60,000                   | 67,210                 | 44,040               | 10  |
| W168                   | 120  | 36115      | 5/16 x 5/16                        | 1/8                 | 1-1/4                 | 48,000                   | 65,900                 | 42,790               | 10  |
| W170                   | 120  | 36125      | 5/16 x 1/2                         | 1/8                 | 1-1/4                 | 48,000                   | 54,860                 | 34,040               | 10  |
| W174                   | 120  | 36135      | 3/8 x 1/4                          | 1/8                 | 1-1/4                 | 40,000                   | 65,510                 | 42,440               | 10  |
| W175                   | 120  | 36145      | 3/8 x 3/8                          | 1/8                 | 1-1/4                 | 40,000                   | 57,530                 | 35,990               | 10  |
| W176                   | 120  | 36155      | 3/8 x 5/8                          | 1/8                 | 1-1/4                 | 40,000                   | 50,460                 | 30,450               | 10  |
| W185                   | 120  | 36175      | 1/2 x 1/2                          | 1/8                 | 1-1/4                 | 30,000                   | 42,750                 | 24,370               | 10  |
| W186                   | 120  | 36185      | 1/2 x 3/4                          | 1/8                 | 1-1/4                 | 30,000                   | 31,220                 | 15,900               | 10  |
| <b>Shank dia. 1/4"</b> |      |            |                                    |                     |                       |                          |                        |                      |   |
| W178                   | 120  | 36195      | 3/8 x 1                            | 1/4                 | 1-1/2                 | 40,000                   | 40,360                 | 30,780               | 10  |
| W193                   | 120  | 36235      | 5/8 x 3/8                          | 1/4                 | 1-1/2                 | 24,000                   | 44,330                 | 34,340               | 10  |
| W196                   | 120  | 36255      | 5/8 x 1                            | 1/4                 | 1-1/2                 | 24,000                   | 34,670                 | 25,340               | 10  |
| W204                   | 120  | 36285      | 3/4 x 3/4                          | 1/4                 | 1-1/2                 | 24,000                   | 36,510                 | 27,040               | 10  |
| W206                   | 120  | 36295      | 3/4 x 1-1/4                        | 1/4                 | 1-1/2                 | 20,000                   | 29,810                 | 20,870               | 10  |
| W220                   | 120  | 36315      | 1 x 1                              | 1/4                 | 1-1/2                 | 15,000                   | 30,370                 | 21,410               | 10  |
| W230                   | 120  | 36335      | 1-1/4 x 1-1/4                      | 1/4                 | 1-1/2                 | 13,000                   | 25,200                 | 16,760               | 10  |



# Polishing products

## General information



The comprehensive PFERD range includes polishing products in various diameters and shapes:

- Felt points
- Mounted felt flap wheels
- Felt wheels
- Felt flap wheels
- Cloth rings

Felt points and wheels are available in two types:

- Felt points/wheels without metal insert:  
They are predominantly used for high-gloss polishing.
- Felt points/wheels with metal insert (MS):  
They are used for increased stock removal when pre-polishing with diamond grinding pastes.

Felt points and wheels are significantly harder and less flexible than cloth rings or felt flap wheels and are therefore used where geometric shapes must be preserved exactly. To achieve this, diamond polishing pastes and polishing paste bars are generally used.

Cloth rings and felt flap wheels, in turn, are recommended for polishing highly contoured workpieces due to their flexibility. They are used in conjunction with polishing and grinding pastes.

### Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the polishing product's diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the felt product or cloth ring and the tool drive.

#### Example

FK ZYA 1 x 1-1/4 (EDP 48526)  
Peripheral speed: 1,000 - 2,000 SFPM  
**Rotational speed: 3,800 - 7,600 RPM**

#### Example

TR 4 x 3/8 (EDP 48711)  
Peripheral speed: 2,000 - 3,000 SFPM  
**Rotational speed: 1,900 - 2,850 RPM**

### Advantages

- Even workpieces with complex geometry can be polished.
- PFERD felt products can be shaped as required.

### Application examples

- Pre-polishing and high-gloss polishing of injection moulding tools for plastic parts.
- High-gloss polishing of stainless steel (INOX) components.
- Pre-polishing of fittings.
- Polishing of tungsten carbide cutting blades.

### Recommendations for use

- Felt polishing products achieve their best performance at a recommended cutting speed of 1,000 - 2,000 SFPM. This provides an ideal compromise between polishing performance, thermal load on the workpiece and wear of the felt product.
- When changing the polishing paste, the felt product must also be changed.

### Safety notes

For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



= Wear eye protection!



= Wear a dust mask!



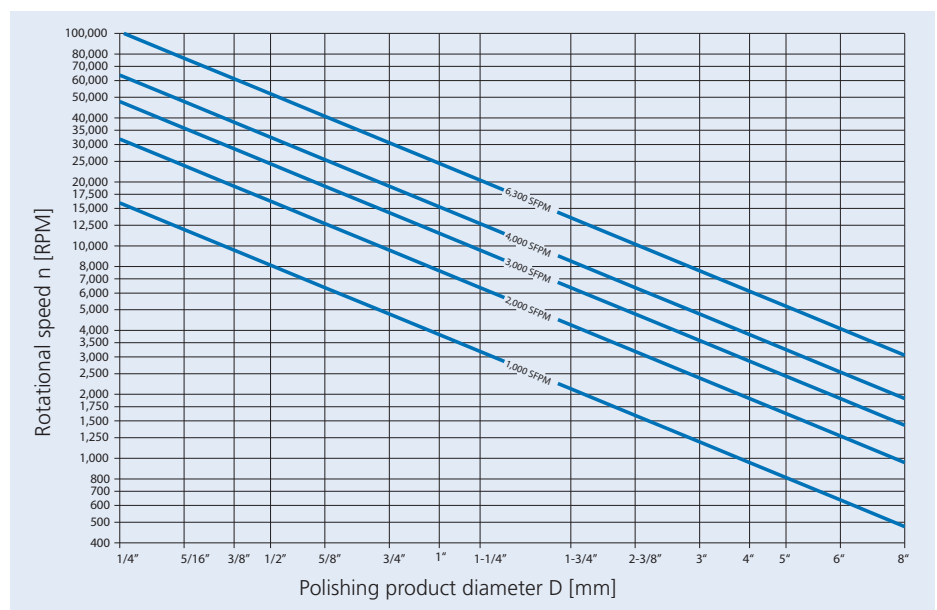
= Wear hearing protection!



= Please read the safety instructions!

### Dust warning

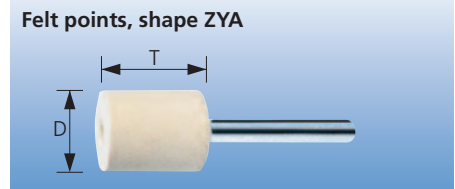
Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.




Cylindrical shape mounted felt points (ZYA) are mainly used peripherally. These also feature a centre hole, which is optimal for face-down polishing.

Brass impregnated felt points provide increased stock removal in pre-polishing with diamond polishing pastes.

**PFERD specification number**  
FK ZYA  
FK ZYA MS (Brass Impregnated)



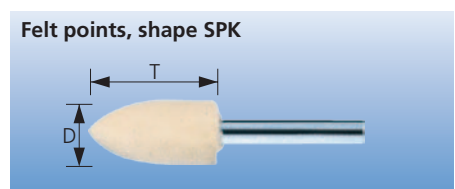
| Diameter (D) x length (T)<br>[Inches] | Shank dia. x shank length<br>[Inches] | EDP number | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|---------------------------------------|------------|---------------------|----------|---|
| <b>Cylindrical felt points</b>        |                                       |            |                     |          |   |
| 1/4 x 3/8                             | 1/8 x 1-5/8                           | 48520      | 16,000 - 32,000     | 79,500   | 10  |
| 5/16 x 3/8                            | 1/8 x 1-5/8                           | 48521      | 12,000 - 24,000     | 59,500   | 10  |
| 3/8 x 9/16                            | 1/8 x 1-5/8                           | 48222      | 10,000 - 20,000     | 47,500   | 10  |
| 3/8 x 9/16                            | 1/4 x 1-5/8                           | 48523      | 10,000 - 20,000     | 47,500   | 10  |
| 9/16 x 3/4                            | 1/4 x 1-5/8                           | 48524      | 6,000 - 12,000      | 31,500   | 10  |
| 3/4 x 1                               | 1/4 x 1-5/8                           | 48525      | 5,000 - 10,000      | 23,500   | 10  |
| 1 x 1-1/4                             | 1/4 x 1-5/8                           | 48526      | 4,000 - 8,000       | 19,000   | 10  |


**Cylindrical felt points – brass impregnated**

|            |             |       |                 |        |    |
|------------|-------------|-------|-----------------|--------|----|
| 3/8 x 9/16 | 1/8 x 1-5/8 | 48527 | 10,000 - 20,000 | 47,500 | 10 |
| 9/16 x 3/4 | 1/4 x 1-5/8 | 48528 | 6,000 - 12,000  | 31,500 | 10 |
| 3/4 x 1    | 1/4 x 1-5/8 | 48529 | 5,000 - 10,000  | 23,500 | 10 |
| 1 x 1-1/4  | 1/4 x 1-5/8 | 48530 | 4,000 - 8,000   | 19,000 | 10 |

Conical pointed felt points (shape SPK) are designed for work on radii and contours.

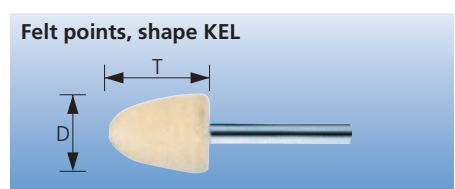
**PFERD specification number**  
FK SPK




| Diameter (D) x length (T)<br>[Inches] | Shank dia. x shank length<br>[Inches] | EDP number | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|---------------------------------------|------------|---------------------|----------|---|
| 5/16 x 1/2                            | 1/8 x 1-5/8                           | 48570      | 12,000 - 24,000     | 59,500   | 10  |
| 3/8 x 3/4                             | 1/8 x 1-5/8                           | 48571      | 10,000 - 20,000     | 47,500   | 10  |
| 3/8 x 3/4                             | 1/4 x 1-5/8                           | 48572      | 10,000 - 20,000     | 47,500   | 10  |
| 1/2 x 3/4                             | 1/8 x 1-5/8                           | 48573      | 8,000 - 16,000      | 39,500   | 10  |
| 9/16 x 3/4                            | 1/4 x 1-5/8                           | 48574      | 6,000 - 12,000      | 31,500   | 10  |
| 9/16 x 1-1/4                          | 1/4 x 1-5/8                           | 48575      | 6,000 - 12,000      | 31,500   | 10  |
| 3/4 x 1                               | 1/4 x 1-5/8                           | 48576      | 5,000 - 10,000      | 23,500   | 10  |

Conical shape felt points with radius end (shape KEL) are used primarily for work in radius areas.

**PFERD specification number**  
FK KEL

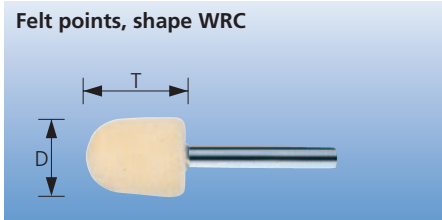


| Diameter (D) x length (T)<br>[Inches] | Shank dia. x shank length<br>[Inches] | EDP number | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|---------------------------------------|------------|---------------------|----------|---|
| 9/16 x 3/4                            | 1/4 x 1-5/8                           | 48600      | 6,000 - 12,000      | 31,500   | 10  |
| 3/4 x 1                               | 1/4 x 1-5/8                           | 48601      | 5,000 - 10,000      | 23,500   | 10  |
| 1 x 1-1/4                             | 1/4 x 1-5/8                           | 48602      | 4,000 - 8,000       | 19,000   | 10  |
| 1-1/4 x 1-3/8                         | 1/4 x 1-5/8                           | 48603      | 3,000 - 6,000       | 15,500   | 10  |

# Polishing products


## Felt points, mounted felt flap wheels

### Felt points, shape WRC



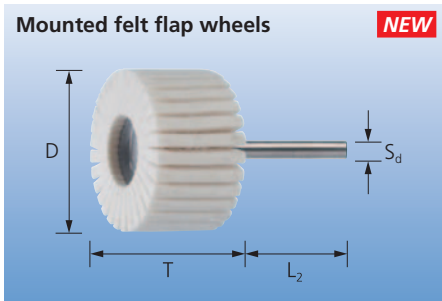
Cylindrical felt points with radius end (shape WRC) are the points of choice for minor concave and convex contours.

**PFERD specification number**  
FK WRC

| Diameter (D) x length (T)<br>[Inches] | Shank dia. x shank length<br>[Inches] | EDP number | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|---------------------------------------|------------|---------------------|----------|---|
| 5/16 x 1/2                            | 1/8 x 1-5/8                           | 48630      | 12,000 - 24,000     | 59,500   | 10  |
| 3/8 x 9/16                            | 1/8 x 1-5/8                           | 48631      | 10,000 - 20,000     | 47,500   | 10  |
| 9/16 x 3/4                            | 1/4 x 1-5/8                           | 48632      | 6,000 - 12,000      | 31,500   | 10  |
| 3/4 x 1                               | 1/4 x 1-5/8                           | 48633      | 5,000 - 10,000      | 23,500   | 10  |
| 1 x 1-1/4                             | 1/4 x 1-5/8                           | 48634      | 4,000 - 8,000       | 19,000   | 10  |

### Mounted felt flap wheels

**NEW**




Mounted felt flap wheels are used with polishing pastes for pre-polishing and high-gloss polishing of small to medium-sized components.

With its flap design, this polishing product adapts ideally to the workpiece contours. The thermal load of the workpiece is significantly reduced.

### Recommendations for use

- The hard type is ideal for pre-polishing flat surfaces.
- The soft type is optimal for high-gloss polishing and processing workpieces with lots of contours.
- If very fine finishes need to be achieved, the two types can be used successively. This requires the use of suitable polishing pastes.

**PFERD specification number**  
FLS

| Diameter (D) x length (T)<br>[Inches] | Shank dia. (S <sub>d</sub> )<br>[Inches] | Type and EDP number |          | Recom. speed<br>RPM | Max. RPM |  |
|---------------------------------------|--|---------------------|----------|---------------------|----------|---|
|                                       |  | W (soft)            | H (hard) |                     |          |   |
| 1 x 3/8                               | 1/4                                      | 48540               | 48541    | 7,500               | 24,500   | 5   |
| 1 x 1                                 | 1/4                                      | 48542               | 48543    | 7,500               | 24,500   | 5   |
| 2 x 1                                 | 1/4                                      | 48546               | 48547    | 3,800               | 12,000   | 5   |
| 3 x 1                                 | 1/4                                      | 48550               | 48551    | 2,400               | 7,500    | 5   |
| 3 x 2                                 | 1/4                                      | 48552               | 48553    | 2,400               | 7,500    | 5   |





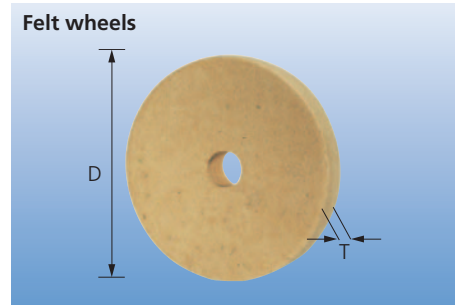
Felt wheels are normally used for polishing with the peripheral surface. Brass impregnated felt wheels provide increased stock removal in pre-polishing with diamond abrasive pastes.


### Ordering note

Please order arbor separately.

### PFERD specification number

FK SC  
FK SC MS (Brass Impregnated)



| Diameter (D) x width (T)<br>[Inches]   | Centre hole dia.<br>[Inches] | EDP number | Recom. speed<br>RPM | Max. RPM | Suitable arbors |  |
|--|------------------------------|------------|---------------------|----------|-----------------|---|
| <b>Felt wheels</b>                     |                              |            |                     |          |                 |   |
| 1-1/4 x 1/4                            | 1/4                          | 48690      | 3,000 - 6,000       | 20,000   | EDP 69029       | 5   |
| 1-3/4 x 3/8                            | 1/4                          | 48691      | 2,000 - 4,000       | 13,500   | EDP 69029       | 5   |
| 2-1/4 x 3/8                            | 1/4                          | 48692      | 1,500 - 3,000       | 10,000   | EDP 69029       | 5   |
| 3 x 3/8                                | 3/8                          | 48693      | 1,000 - 2,000       | 7,500    | EDP 69027       | 5   |
| 4 x 3/4                                | 3/8                          | 48695      | 900 - 1,800         | 6,100    | EDP 69031       | 1   |
| 5 x 3/4                                | 3/4                          | 48697      | 750 - 1,500         | 4,900    | EDP 69032       | 1   |
| 6 x 1                                  | 3/4                          | 48699      | 600 - 1,200         | 4,000    | EDP 69032       | 1   |
| 8 x 1-1/4                              | 3/4                          | 48700      | 500 - 1,000         | 3,000    | EDP 69032       | 1   |
| <b>Felt wheels – brass impregnated</b> |                              |            |                     |          |                 |   |
| 3 x 3/8                                | 3/8                          | 48694      | 1,000 - 2,000       | 8,100    | EDP 69027       | 5   |
| 4 x 3/4                                | 3/8                          | 48696      | 900 - 1,800         | 6,100    | EDP 69031       | 1   |
| 5 x 3/4                                | 3/4                          | 48698      | 750 - 1,500         | 4,800    | EDP 69032       | 1   |

Felt flap discs are used with polishing pastes for pre-polishing and high-gloss polishing of medium to large-sized components.

With its flap design, this polishing disc adapts ideally to the workpiece contours. The thermal load of the workpiece is significantly reduced.


### Recommendations for use

- The hard type is ideal for pre-polishing flat surfaces.
- The soft type is optimal for buffing and work on workpieces with lots of contours.
- If very fine finishes need to be achieved, the two types can be used successively. This requires the use of suitable polishing pastes.

### PFERD specification number

FFS



| Diameter (D)<br>[Inches] | Centre hole dia.<br>[Inches] | Type and EDP number |          | Recom. speed<br>RPM | Max. RPM |  |
|--------------------------|------------------------------|---------------------|----------|---------------------|----------|---|
|                          |                              | W (soft)            | H (hard) |                     |          |   |
| 4-1/2                    | 7/8                          | 48802               | 48803    | 1,650               | 8,350    | 5   |
| 5                        | 7/8                          | 48804               | 48805    | 1,500               | 7,650    | 5   |



# Polishing products

## Cloth rings and arbors

### Cloth rings



ST sisal fabric      TW soft cloth  
TH hard cloth      FL flannel

These cloth rings are available in four types:

- ST sisal fabric = pre-polishing
- TH hard cloth = pre-polishing
- TW soft cloth = high-gloss polishing
- FL flannel = high-gloss polishing

Cloth rings used with polishing pastes for pre-polishing and high-gloss polishing tasks.

For very smooth finishes it may be recommended to use several, or even all, types in succession.

#### Recommended peripheral speeds

TW and FL 1,000 - 3,000 SFPM

ST and TH 2,000 - 3,000 SFPM

#### Recommendations for use

- Pre-polishing of steel or stainless steel, cloth ring sisal fabric or hard cloth with green polishing paste (EDP 48760).

- Pre-polishing of aluminum or brass, cloth ring sisal fabric or hard cloth with grey polishing paste (EDP 48761).

- Pre-polishing of non-ferrous metals, cloth ring sisal fabric or hard cloth with brown polishing paste (EDP 48762).

- High-gloss polishing of all metals, cloth rings soft cloth or flannel with pink polishing paste (EDP 48763).






- High-gloss polishing of plastics, cloth rings soft cloth or flannel with beige polishing paste (EDP 48764).

#### PFERD specification number

TR

| Diameter [Inches] | Centre hole dia. [Inches] | Face width [Inches] |                        | Type and EDP number |               |               |            | Recom. speed RPM | Max. RPM | Suitable arbors |                        | 📦 |
|-------------------|---------------------------|---------------------|------------------------|---------------------|---------------|---------------|------------|------------------|----------|-----------------|------------------------|---|
|                   |                           | Sisal               | Hard, soft and flannel | ST sisal fabric     | TH hard cloth | TW soft cloth | FL flannel |                  |          | Sisal           | Hard, soft and flannel |   |
| 3                 | 3/8                       | 3/4                 | 3/8                    | 48710               | 48720         | 48730         | 48740      | 2,500            | 7,500    | EDP 69027       | EDP 69027              | 5 |
| 4                 | 3/8                       | 3/4                 | 3/8                    | 48711               | 48721         | 48731         | 48741      | 1,900            | 6,100    | EDP 69027       | EDP 69027              | 5 |
| 5                 | 3/4                       | 3/4                 | 3/8                    | 48712               | 48722         | 48732         | 48742      | 1,300            | 4,900    | EDP 69027       | EDP 69032              | 5 |
| 6                 | 3/4                       | 1                   | 3/8                    | 48713               | 48723         | 48733         | 48743      | 1,250            | 4,000    | EDP 69032       | EDP 69032              | 5 |
| 8                 | 3/4                       | 1                   | 3/8                    | 48714               | 48724         | 48734         | 48744      | 950              | 3,000    | EDP 69032       | N/A                    | 5 |

These arbors can be used to mount PFERD felt wheels and cloth rings.

| Arbor   | Shank diameter (D) [Inches] | Clamping width (L) [Inches] | Fits arbor hole size [Inches] | EDP number | 📦 |
|---|-----------------------------|-----------------------------|-------------------------------|------------|---|
|  | 1/4                         | 3/16 - 3/4                  | 1/4                           | 69029      | 1 |
|  | 1/4                         | 0 - 5/16                    | 3/8                           | 69027      | 1 |
|  | 1/4                         | 3/8 - 1-1/4                 | 3/8                           | 69031      | 1 |
|  | 1/4                         | 1/8 - 1/2                   | 1/2, 5/8                      | 84656      | 1 |
|  | 3/8                         | 1/4 - 1                     | 1/2, 3/4                      | 69032      | 1 |



These pastes are designed for work on very hard materials, e.g. tungsten carbide and heat-treated steels. They are used with felt points or felt wheels.

The high concentration of abrasive grain guarantees fast and efficient results.

### Available grit sizes

- 30 = coarse
- 15 = medium
- 7 = fine
- 3 = very fine

### Recommendation for use

The selection of the appropriate grit size will essentially depend on the required surface finish.

When working with diamond polishing paste, it is recommended to start with the coarsest grit. Where major surface improvements have to be achieved, use several grits of increasing fineness in successive steps and clean the workpiece thoroughly after each passed step. Always use a new, clean polishing product (e.g., felt point, felt wheel) before switching to finer grit.

### Ordering note


Grit sizes are indicated in  $\mu\text{m}$ .

### PFERD specification number

DPP

### Diamond polishing pastes



| Grit size<br>[ $\mu\text{m}$ ] | EDP number | Content |         | Cap colour |  |
|--------------------------------|------------|---------|---------|------------|---|
|                                |            | [oz]    | [grams] |            |   |
| 30                             | 48751      | 0.18    | 5       | brown      | 1   |
| 30                             | 48750      | 0.70    | 20      | brown      | 1   |
| 15                             | 48753      | 0.18    | 5       | blue       | 1   |
| 15                             | 48752      | 0.70    | 20      | blue       | 1   |
| 7                              | 48755      | 0.18    | 5       | red        | 1   |
| 7                              | 48754      | 0.70    | 20      | red        | 1   |
| 3                              | 48757      | 0.18    | 5       | green      | 1   |
| 3                              | 48756      | 0.70    | 20      | green      | 1   |



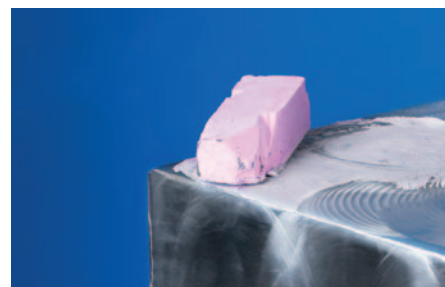
# Grinding and polishing pastes

## Grinding and polishing pastes

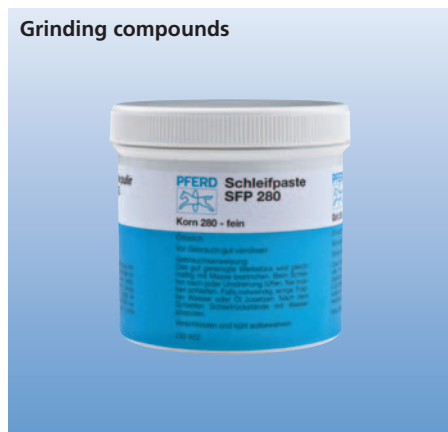


The PFERD range comprises five different pastes, colour-coded by application purpose.

**PFERD specification number**  
PP




| Type                  | EDP number | Colour | Use for                 | Content |         | Width x depth x height<br>[Inches] |  |
|-----------------------|------------|--------|-------------------------|---------|---------|------------------------------------|---|
|                       |            |        |                         | [oz]    | [grams] |                                    |   |
| <b>Large bars</b>     |            |        |                         |         |         |                                    |   |
| 1-pre-polish          | 48760      | green  | Steel + stainless steel | 38.80   | 1,100   | 2-3/4 x 2 x 5-1/2                  | 1   |
| 2-pre-polish          | 48761      | grey   | Aluminum + brass        | 45.86   | 1,300   | 2-3/4 x 2 x 5-1/2                  | 1   |
| 3-pre-polish          | 48762      | brown  | Non-ferrous metals      | 40.57   | 1,150   | 2-3/4 x 2 x 5-1/2                  | 1   |
| 4-high-gloss polish   | 48763      | pink   | All metals              | 40.57   | 1,150   | 2-3/4 x 2 x 5-1/2                  | 1   |
| 5-high-gloss polish   | 48764      | beige  | Plastics                | 38.80   | 1,100   | 2-3/4 x 2 x 5-1/2                  | 1   |
| <b>NEW Small bars</b> |            |        |                         |         |         |                                    |   |
| 1-pre-polish          | 48765      | green  | Steel + stainless steel | 3.81    | 108     | 1 x 1-1/4 x 3-1/2                  | 1   |
| 2-pre-polish          | 48766      | grey   | Aluminum + brass        | 5.01    | 142     | 1 x 1-1/4 x 3-1/2                  | 1   |
| 3-pre-polish          | 48767      | brown  | Non-ferrous metals      | 3.92    | 111     | 1 x 1-1/4 x 3-1/2                  | 1   |
| 4-high-gloss polish   | 48768      | pink   | All metals              | 4.66    | 132     | 1 x 1-1/4 x 3-1/2                  | 1   |
| 5-high-gloss polish   | 48769      | beige  | Plastics                | 3.67    | 104     | 1 x 1-1/4 x 3-1/2                  | 1   |



Oil-soluble grinding compounds with sharp-edged SiC grain are ideal for fine-polishing operations, e.g., regrinding of valves or shaft bearings, and in preparation of polishing steps with felt polishing products and cloth rings.

**PFERD specification number**  
SFP



| Grit size | EDP number | Content |         |  |
|-----------|------------|---------|---------|---|
|           |            | [oz]    | [grams] |   |
| 90        | 48770      | 8.82    | 250     | 1   |
| 150       | 48771      | 8.82    | 250     | 1   |
| 280       | 48772      | 8.82    | 250     | 1   |
| 360       | 48773      | 8.82    | 250     | 1   |
| 600       | 48774      | 8.82    | 250     | 1   |
| 800       | 48775      | 8.82    | 250     | 1   |

# Grinding wheels, flap discs and cut-off wheels



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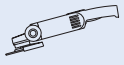


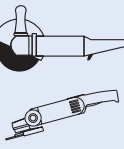

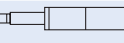

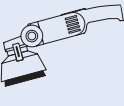

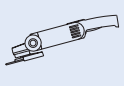

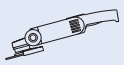
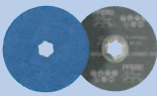



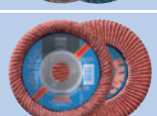


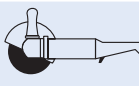

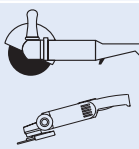

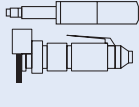



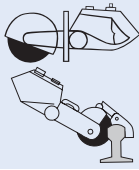

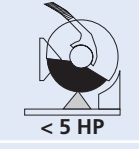

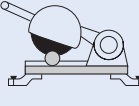

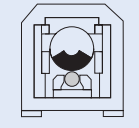


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# Grinding wheels, flap discs and cut-off wheels

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**NEW**



### PFERD quality

PFERD abrasive products are developed, manufactured and tested to the highest quality standards. The standard-compliant dimensional stability indicates the comprehensive PFERD quality.

In addition to the high quality standards, health and safety as well as ergonomics play a prominent role.

PFERD quality management is certified according to ISO 9001.



### PFERD qualified support

PFERD sales agents and distributor personnel regularly attend product and safety training sessions at our training centre in Milwaukee, WI to build their knowledge and experience, and to stay current with changes in standards and trends. This hands-on experience enables PFERD team members to solve your cutting, grinding and finishing challenges to maximize your productivity.



### PFERD factory experts on call

Should your local sales team need additional reinforcement, a second level of support is readily available. PFERD application specialists are factory trained and highly experienced, with direct access to all local and international PFERD resources. Deployed throughout Canada and the U.S. to solve your toughest challenges. Selected regions are fortified with the PFERD TOOL VAN. Please contact us:

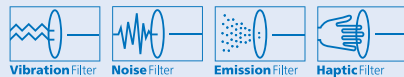
**Canada Phone: (905) 501-1555**  
**Toll-Free: (866) 245-1555**  
**USA Phone: (262) 255-3200**  
**Toll-Free: (800) 342-9015**

### PFERDVALUE® – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD products offer measurable added value.

Discover **PFERDERGONOMICS®** and **PFERDEFFICIENCY®**

As part of **PFERDERGONOMICS®**, PFERD offers ergonomically optimized products and power tools that contribute to greater safety and working comfort, and thus to health protection.



As part of **PFERDEFFICIENCY®**, PFERD offers innovative, high-performance solutions and power tools with outstanding added value.



#### PFERDMEDIA

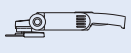



For more information, a complete brochure is available. Please visit [pferdusa.com/pferdvalue](http://pferdusa.com/pferdvalue) to request a free copy or to download a pdf version.

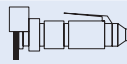


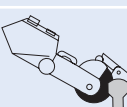



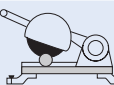
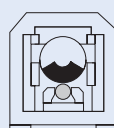
### PFERD PRAXIS

PFERD PRAXIS brochures contain valuable information on material properties, and technical tips on the use of PFERD products. Visit [pferdusa.com/info](http://pferdusa.com/info) to request a free copy or to download a pdf version.

- Steel
- Stainless Steel (INOX)
- Aluminium
- Plastics & Composites

|   |   |
|---|---|
|  | Angle grinders grinding                     |
|  | Angle grinders cutting                      |
|  | Angle grinders with cup wheel covering hood |
|  | Straight/horizontal grinders                |

|   |   |
|---|---|
|  | Die grinders                                      |
|  | Circular saws                                     |
|  | Gas-powered hand-held cut-off machines (gas saws) |
|  | RAIL cut-off machines                             |

|   |  |
|---|--|
|  | CHOPSAW<br>max. power output of 5 horsepower       |
|  | CHOPSAW-HD   |
|  | HEAVY DUTY<br>for high-powered stationary machines |

# Grinding wheels, flap discs and cut-off wheels

## Your quick product selection guide







A prerequisite for the efficient use of abrasive wheels is choosing the right wheel for the specific application, the workpiece material and the available power tools.

Starting with your **application**, the table below will guide you to one of the four main categories of this catalogue section. The sub-category navigation takes you to the right product, and finally a specific EDP number.

PFERD adheres to a consistent colour coding for **workpiece materials**. The material table below shows an overview.

Generally, PFERD abrasive products work on every angle grinder. However, some are optimized for high- or low-powered power tools. When special power requirements are recommended, you will see notes in the product descriptions. The **power tool** table below shows our classification.

| Category  | Application   | Grinding                  |                          |                    |                      | Cutting |
|---|---|---------------------------|--------------------------|--------------------|----------------------|---------|
|   |   | Surface and weld grinding | Chamfering and deburring | Root pass grinding | Fillet weld grinding |         |
| Grinding wheels and other bonded abrasives                              |    | p. 11                     | p. 11                    | p. 11              | p. 11                |         |
| POLIFAN® flap discs, CC-GRIND®-SOLID and other coated abrasive products |    | p. 24                     | p. 24                    |                    | p. 38-39             |         |
| Cut-off wheels for portable power tools                                 |   |                           |                          |                    |                      | p. 44   |
| Large diameter cut-off wheels for chopsaws and stationary saws          |  |                           |                          |                    |                      | p. 68   |

| Colour code for workpiece materials |   |  |
|-------------------------------------|---|--|
| Steel, cast steel                   | Steels up to 38 HRC (1,200 N/mm <sup>2</sup> )                            | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steels |
|                                     | Hardened, heat-treated steels exceeding 38 HRC (1,200 N/mm <sup>2</sup> ) | Tool steels, tempering steels, alloyed steels, cast steels   |
| Stainless steel (INOX)              | Rust and acid-resistant steels  | Austenitic and ferritic stainless steels   |
| Non-ferrous metals                  | Soft non-ferrous metals   | Aluminum alloys, brass, copper, zinc   |
|                                     | Hard non-ferrous metals   | Bronze   |
| Cast iron                           | Grey, white, ductile/nodular types  |  |
| Plastics and other materials        | Fibre-reinforced plastics (GRP/CRP), thermoplastics                       |  |
| Stone, masonry                      | Natural and synthetic   |  |

| Power tool classification | Machine type                        | Diameter               |                        |                           |                            |                           |
|---------------------------|-------------------------------------|------------------------|------------------------|---------------------------|----------------------------|---------------------------|
|                           |                                     | 4"                     | 4-1/2"                 | 5"                        | 6"                         | 7", 9"                    |
| High power                | Air powered tools (HP = Horsepower) | –                      | ≥ 1.0 HP               | ≥ 1.3 HP                  | ≥ 2 HP                     | ≥ 2.4 HP                  |
|                           | Electric tools (Based on 120 Volts) | ≥ 5 Amps (≥ 600 Watts) | ≥ 8 Amps (≥ 960 Watts) | ≥ 10 Amps (≥ 1,200 Watts) | ≥ 12 Amps (≥ 1,440 Watts)  | 15 Amps (1,800 Watts)     |
| Low power                 | Air powered tools (HP = Horsepower) | < 0.8 HP               | < 1.0 HP               | < 1.3 HP                  | < 2 HP                     | < 2.4 HP                  |
|                           | Electric tools (Based on 120 Volts) | < 5 Amps (< 600 Watts) | < 8 Amps (< 960 Watts) | < 10 Amps (< 1,200 Watts) | < 12 Amps (< 1,440+ Watts) | < 15 Amps (< 1,800 Watts) |
|                           | Cordless tools                      | –                      | all                    | all                       | all                        | –                         |

Should the machine power output be in doubt, we recommend that you focus on output level "Low power".





### Product line colour coding

|  |   |
|--|---|
|  | <b>Performance line SG</b><br>Widest range of products for use in industry and professional trades.     |
|  | <b>Special line SG-PLUS</b><br>For highest possible performance, and for industrial niche applications. |
|  | <b>Universal line PSF</b><br>For general use in industry and professional trades.                       |

### Workpiece materials colour coding

|  |                                 |
|--|---------------------------------|
|  | Steel                           |
|  | Stainless steel (INOX)          |
|  | Non-ferrous metals/<br>aluminum |
|  | Cast iron                       |
|  | Masonry                         |

### Maximum operating speed

The maximum operating speed [m/s] is shown on the product labels and packaging by a colour bar.

| Maximum operating speed | Colour bars |
|-------------------------|-------------|
| 50 m/s                  | blue        |
| 63 m/s                  | yellow      |
| 80 m/s                  | red         |
| 100 m/s                 | green       |

### Safety, restrictions and additional icons

|  |                                    |
|--|------------------------------------|
|  | Wear protective goggles!           |
|  | Use ear protection!                |
|  | Wear protective gloves!            |
|  | Wear dust respirators!             |
|  | Only approved with a backing pad!  |
|  | Observe the minimum contact angle! |

|  |   |
|--|---|
|  | Observe safety recommendations!                               |
|  | Read the Safety Data Sheets (SDS) before using any materials! |
|  | Do not use damaged wheels!                                    |
|  | Not approved for wet grinding!                                |
|  | Not permitted for face grinding!                              |
|  | Not approved for free-hand and hand-held operation!           |

|  |  |
|--|--|
|  | Manufactured without addition of ferrous, chlorinated or sulphurous fillers (rated for stainless steel (INOX)) |
|  | Mounting advices   |
|  | Wheel for portable gas saws  |
|  | Wheel for rail cut-off machines  |
|  | Wheel for chopsaws with max. power output of 5 horsepower  |
|  | Wheel for high-powered chopsaws  |
|  | Wheel for high-powered stationary machines   |

# Grinding wheels, flap discs and cut-off wheels

Solutions for stainless steel (INOX) and aluminum



### Working on stainless steel (INOX)

Stainless steel (INOX) has many strengths and advantages over steel, especially its resistance against corrosion. However, it also imposes special demands on abrasive products.

The widespread growth trend of stainless steel products in the North American started more than 10 years earlier in the European market. As a Germany-based manufacturer, PFERD has developed and perfected a robust selection of products specifically designed for use on stainless steel. All PFERD products designed for use on stainless steel are identified as shown below, to the right. They will not contaminate the workpiece. They generate less heat than conventional products. And select products are engineered from start to finish to work on stainless steel. These products, such as POLIFAN®-STRONG-FREEZE and POLIFAN®-

CURVE CO-COOL will provide the highest level of performance available.



#### PFERDMEDIA

PFERD's INOX PRAXIS brochure contains valuable information for working with stainless steel.



Visit [pferdusa.com/info](http://pferdusa.com/info) to request a free copy or to download a pdf version.



One of PFERD's unique, proprietary products for stainless steel (INOX): **POLIFAN®-STRONG-FREEZE**. The world's coolest grinding flap disc.

### 7 quick tips to avoid corrosion when rough grinding or cutting

#### Use a proper abrasive product!

1. Only use abrasive products that do not contain ferrous (Fe), chlorinated (Cl) or sulphurous (S) fillers which might leave undesirable residue or cause workpiece corrosion.
2. Choose products that minimize the heat input to the workpiece/thermal load: Use specially designed abrasive products and use the coarsest grit size possible.
3. Work with minimum grinding pressure and use oscillating movements to avoid heat discoloration and distortion, especially on sheet metal.

4. Always use dedicated products for stainless steel applications. If a product is used on both carbon steel and stainless steel, it will cause cross contamination.
5. During abrasive work, keep sparks from falling onto the workpiece and penetrating into the surface.

#### Important: Proceed directly to finishing steps

6. Immediately proceed to finishing operations to achieve the target surface finish. Most of these products can be found in the PFERD catalogue "Fine grinding and finishing products" (section 204).
7. Clean each workpiece thoroughly upon completion of all work.

### How to identify a proper abrasive product for stainless steel (INOX)?



Each abrasive wheel that has at least one blue area in the middle, or shows the icon above, is rated for use on stainless steel (INOX).

In this catalogue, the following icon reinforces that a product is suitable for use on stainless steel (INOX).



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**



### Working on aluminum

The term "aluminum" refers to a group of alloys which share aluminum as the predominant metal. However, their characteristics reach from soft over tough to hard aluminum grades. Regular abrasive products often cannot be used successfully on aluminum. Loading (clogging), especially on soft lubricating alloys, is a big problem. Therefore, PFERD has developed a range of special grinding wheels, flap discs, and cut-off wheels for this increasingly predominant material. These products contain no fillers which might leave undesirable residue on the workpiece. The surfaces can be welded immediately following cutting and grinding applications.



### PFERD professional solutions for working on aluminum

- Grinding wheels in hardness grade N (page 13)
- POLIFAN® flap discs SG A-COOL (with a specially designed top-size layer that prevents loading) (page 34)
- POLIFAN®-CURVE-ALU flap discs for fillet welds (the only flap disc with flaps wrapped around the rim) (page 39)
- Cut-off wheels in hardness grade N (pages 50-51)

### How to identify products for use on aluminum (ALU)?



Each abrasive product with a label that features at least one grey area in the middle is rated for use on aluminum (ALU).



The PFERD Aluminum PRAXIS brochure contains valuable information on properties of aluminum, and technical tips on the use of PFERD products.



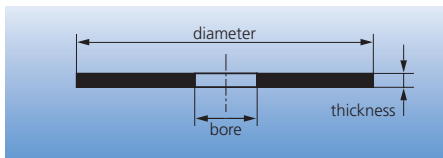
Visit [pferdusa.com/info](http://pferdusa.com/info) to request a free copy or to download a pdf version.

# Grinding wheels, flap discs and cut-off wheels

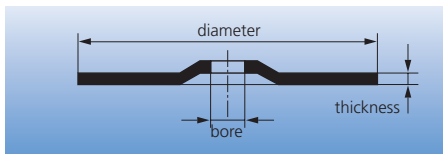
## General and safety information



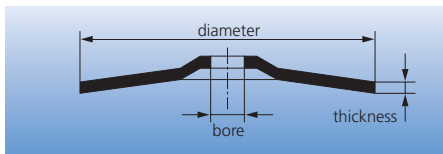
### Shapes and dimensions



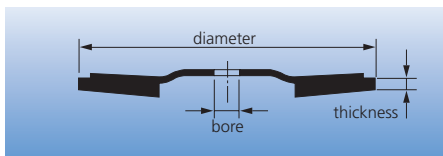
Flat (type 1)



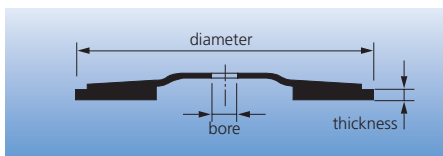
Depressed centre (type 27)



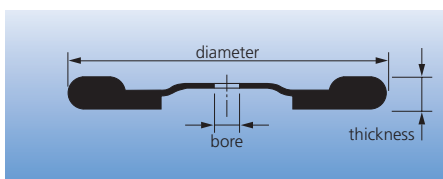
Depressed centre – saucer (type 28)



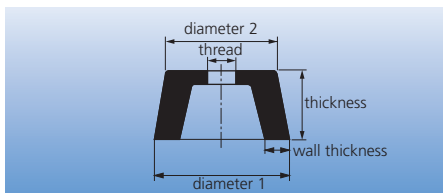
Conical (PFC – type 29)



Flat (PFF – type 27)



CURVE (PFR – radial type)



Flaring cup wheel (type 11)

### PFERD – Your partner for safe abrasive wheels!

As a leading manufacturer of abrasive tools, PFERD meets all requirements of national and international laws, standards, codes and guidelines.

Abrasive manufacturers, machine producers and users all contribute to grinding safety. PFERD products are built to meet all safety requirements. The user, however, has the final responsibility for correct handling and safe operation of power tools and abrasive products.

### ANSI EN ISO

The PFERD quality management system is ISO 9001 certified and guarantees compliance with all regulations. Do you have any questions on grinding safety? PFERD will be glad to provide advice and support, whether through seminars at our training centres or via our local field service representatives.

### Safety standards

Abrasive wheels made by PFERD conform to the most exacting quality and safety requirements and are marked according to the latest version of the following key North American and international safety standards:

- ANSI safety code B7.1
- OSHA regulations
- EN 12413 for bonded abrasive products
- EN 13743 for coated abrasives
- AS 1788.2

### OSHA's mission

OSHA's mission is to assure the safety and health of workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health.

### PFERD is a long-standing member of oSa

Together with other manufacturers, PFERD has undertaken voluntarily to produce quality products conforming to the most exacting safety standards.

oSa member companies manufacture to the most stringent specifications worldwide and are committed to continuous product safety and quality monitoring.

PFERD abrasives carry the oSa mark (Organization for the Safety of Abrasives).



### Grinding wheel safety

#### DO

- Always handle and store wheels in a careful manner.
- Always visually inspect all wheels before mounting for possible damage.
- Always check maximum operating speed established for wheel against machine speed.
- Always check flanges for equal and correct diameter.
- Always use a machine guard covering at least 180° of the wheel.
- Always allow newly mounted wheels to run at operating speed, with guard in place, for at least one minute before grinding.
- Always wear safety goggles or other protective eyewear when grinding.

#### DON'T

- Don't use a wheel that has been dropped or appears to have been abused.
- Don't force a wheel onto the machine or alter the size of the arbor hole. Don't use a wheel that fits the arbor too loosely. If the wheel doesn't fit the machine, get one that fits correctly.
- Don't exceed maximum operating speed established for the wheel.
- Don't use mounting flanges which are warped, nicked, sprung, or which are not clean.
- Don't tighten the mounting nut excessively.
- Don't grind on the edge of the wheel unless the wheel is specifically designed for that purpose.
- Don't start the machine unless all guards are in place.
- Don't stand directly in front or right of a grinding wheel when a grinder is started.
- Don't grind material for which the wheel is not designed.
- Don't use relieved or recessed flanges with threaded hole cup wheels.

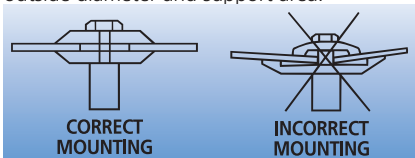


### Storage

- Abrasive products should be stored in such a way as to prevent any adverse effects caused by moisture, frost or large temperature variations to avoid damage.
- Do not use products that have been exposed to severe humidity, dampness, or high temperatures.

### Mounting

- Only use power tools that are intended for use with the relevant abrasive wheel.
- An abrasive wheel that cannot be clearly identified should never be used.
- Never use a power tool that is not in good condition.
- Only use abrasive wheels whose outer diameter and bore and/or thread match the specifications of the power tool.
- Never use damaged abrasive wheels. They must be visually inspected and checked for any possible damage before each use.
- Keep mounting components clean and in good condition. Replace them if they become damaged or worn. If the manufacturer of the power tool provides special wrenches or similar for mounting of the abrasive wheel (e.g. a key), then these are to be used. Tighten the flange nut finger tight.
- Never use flanges of different diameter for type 1 cut-off wheels. Two flanges clamping an abrasive wheel must always have the same outside diameter and support area.



- In principle, only flanges having a contact surface with the same outer diameter and which are identically shaped on the contact side are to be used. According to US-American standards, for wheels of type 27 and 28 equal to or greater than 7" the locking nut shall seat within the depressed portion of the wheel. The flange adjacent to the wheel shall be equal to or greater than one-third of the wheel diameter and the outer part of the flange shall be free and clear from the wheel. For details see ANSI B7.1.
- If required, use blotters between abrasive wheel and flanges.
- Prevent the power tool from accidentally turning on, by disconnecting the power supply before mounting or changing the abrasive wheel.
- Never exceed the maximum operating speed of an abrasive wheel. Make sure that the speed of the power tool [RPM] does not exceed the maximum permissible speed given on the abrasive wheel, the accompanying label or packaging.
- Do not make any unauthorized changes to abrasive wheels.

- Each time that an abrasive wheel is mounted, perform a trial run at operating speed with the guard properly installed, for at least 1 minute. During the trial run, hold the power tool in such a way that in the event of any failure of the abrasive wheel you are not hurt by any fragments.

### Use

- Always be aware of the potential dangers during use of abrasive wheels.
- Always use protective equipment and guards in compliance with the operating instructions for the grinder and make sure they are properly mounted and in good condition, before you switch on the grinder. Comply with the ANSI B7.1 regulations on safety guards depending on the mounted wheel:
  - Type 1 wheels must be used with a guard covering at least 180° of the lateral wheel surface and face.
  - Type 6 and 11 cup wheels must be used with a guard covering 180° of the wheel's lateral surface towards the operator and the wheel's face towards the driving flange. Additionally, the guard must have a height-adjustable skirt.
  - Type 27, 28, and 29 wheels must be used with a guard covering 180° of the wheel's lateral surface towards the operator and the wheel's face towards the driving flange. Additionally, the outer edge of the guard has to provide a lip curling inward at the whole 180° coverage in order to protect the user in case of wheel breakage.
- The workpiece must be fixed without tension by appropriate clamping devices or by its own weight.
- The power tool must always be turned on before the abrasive wheel comes into contact with the workpiece.
- Always bring abrasive wheels carefully into contact with the workpiece surface.
- Always guide cut-off wheels in a straight line. No lateral load should be applied to the cut-off wheel and it should not be used for side grinding or deburring.
- Power tools may only be put down once they have been turned off and have come to a complete stop.

### Hazards

- The use of appropriate personal protective equipment is required for all grinding and cutting operations to provide protection against mechanical impacts, abrasive particles, sparks, dust and fumes, noise and vibration. This includes eye protection, ear protection, respiratory protection and hand protection. Long-sleeved, flame-resistant clothing and appropriate safety footwear must be worn.
- Tie back long hair and do not wear loose clothing, ties or jewelry. These rules apply not only to the operator of the power tool but also to any other persons in the working environment.

- Inhalation of the dust created when using the products in this catalogue may be harmful. Make sure that sufficient extraction or other appropriate measures are provided during grinding work.
- Do not use abrasive wheels near flammable materials. Flammable and explosive substances must be removed from the working environment before starting work. This includes, for example, dust deposits, cardboard, packaging material, textiles, wood and wood chips, as well as flammable liquids and gases.
- In the event of excessive vibrations, stop and investigate the vibrations source. Take immediate action if, when using an abrasive wheel, you begin to experience tingling, stinging or numbness in the hand or arms.

### Disposal

- Worn or defective abrasive wheels must be disposed of according to the applicable guidelines.
- Note that abrasive wheels may become contaminated by work on certain materials.
- Abrasive wheels for disposal should be destroyed in a clearly visible manner in order to prevent re-use.

### In addition to the information above, always observe

- the user information from the power tool manufacturer,
- ANSI B7.1 and ANSI B7.7 safety codes,
- OSHA regulations and
- any use restrictions, warnings and safety instructions on the product label (please see page 5), safety leaflet or packaging.











### Dust warning

Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after tool operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. **PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES.** Always use our products in a well-ventilated workspace.

### WARNING!

Improper use may cause property damage or serious injuries. Comply with ANSI safety code B7.1 and OSHA regulations. Use safety goggles and machine guards.



| Workpiece material / Application   | Product lines | Steel, cast steel  | Stainless steel (INOX)   | Aluminum, non-ferrous metals   | Scale, cast iron  | Masonry  |
|--|---------------|--|--|--|---|--|
| <ul style="list-style-type: none"> <li>Surface grinding</li> <li>Weld grinding</li> <li>Chamfering</li> <li>Deburring</li> <li>Fillet weld grinding</li> </ul> | SG            |  <b>A 24 R</b><br>p. 12  <b>CO 24 Q</b><br>p. 14  <b>ZA 30 S</b><br>p. 14 |  <b>A 30 N INOX</b><br>p. 13  <b>CO 24 Q</b><br>p. 14 |  <b>A 24 N ALU</b><br>p. 13 |  <b>ZA 30 S</b><br>p. 14 |  <b>C 24 Q</b><br>p. 15 |
|  | SG-PLUS       |  <b>ZA 24 R</b><br>p. 15  <b>WHISPER</b><br>p. 16  |  <b>WHISPER</b><br>p. 16  |  |   |  |
|  | PSF           |  <b>A 24 R</b><br>p. 17  <b>A 24 L</b><br>p. 17  |  <b>A 24 L</b><br>p. 17   |  |   |  |
| <ul style="list-style-type: none"> <li>Pipeline work (combined weld, edge and root pass grinding as well as notching)</li> </ul>                               | SG            |  <b>A 24 R-PIPE</b><br>p. 18  <b>ZA 30 S-PIPE</b><br>p. 19   |  <b>A 46 R INOX-NOTCHING</b><br>p. 19   |  |   |  |
|  | PSF           |  <b>A 46 M INOX-PIPE</b><br>p. 20  |  <b>A 46 M INOX-PIPE</b><br>p. 20  |  |   |  |

### Performance line SG

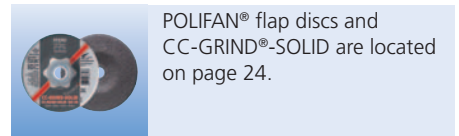
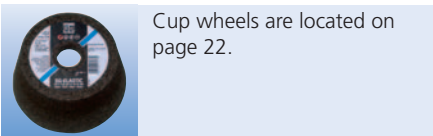
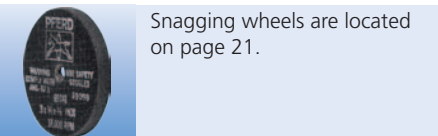
|   |   |
|---|---|
|  | Widest range of products for use in industry and professional trades. |
|  | <b>Steel</b><br>black centre  |
|  | <b>Steel/cast iron</b><br>black/red centre                            |
|  | <b>Stone/cast iron</b><br>green/red centre                            |
|  | <b>Non-ferrous metals/aluminum</b><br>silver centre                   |

### Special line SG-PLUS

|   |  |
|---|--|
|  | For highest possible performance, and for industrial niche applications. |
|  | <b>Steel</b><br>black centre   |
|  | <b>Steel/stainless steel (INOX)</b><br>black/blue centre                 |

### Universal line PSF

|   |  |
|---|--|
|  | For general use in industry and professional trades.     |
|  | <b>Steel/cast iron</b><br>black centre                   |
|  | <b>Steel/stainless steel (INOX)</b><br>black/blue centre |



# Grinding wheels

## Depressed centre (type 27), saucer (type 28) – Performance line SG



**Steel**  
**Hardness grade R**



Designed for all grinding applications on steel. Maintains a high stock removal rate throughout its extended service life.

**Abrasive: Aluminum oxide A**

**Workpiece material**  
Steel

**Applications**




Weld grinding, chamfering, deburring, surface grinding, fillet weld grinding

**Recommendations for use**

- Achieves optimal grinding results on high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps).
- 5/16" wheel thickness provides additional strength and service life for heavy-duty applications.

**PFERD specification number**

A 24 R SG

| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|   |                       | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                       |                       |            |                     |            |          |   |
| 3 x 1/4   | 6.3                   | 3/8                   | 61020      | -                   | -          | 20,200   | 10  |
| 4 x 1/4   | 6.3                   | 3/8                   | 61022      | -                   | -          | 15,300   | 10  |
| 4 x 1/4   | 6.3                   | 5/8                   | 61024      | -                   | -          | 15,300   | 10  |
| 4-1/2 x 1/8   | 4.1                   | 7/8                   | 61025      | 5/8-11              | 61037      | 13,300   | 10  |
| 4-1/2 x 1/4   | 7.2                   | 7/8                   | 61026      | 5/8-11              | 61038      | 13,300   | 10  |
| 5 x 1/4   | 7.2                   | 7/8                   | 61028      | 5/8-11              | 61040      | 12,200   | 10  |
| 6 x 1/4   | 7.2                   | 7/8                   | 61030      | 5/8-11              | 61042      | 10,200   | 10  |
| 7 x 1/4   | 7.2                   | 7/8                   | 61032      | 5/8-11              | 61044      | 8,600    | 10  |
| 7 x 5/16  | 8.3                   | 7/8                   | 61033      | 5/8-11              | 61045      | 8,600    | 10  |
| 9 x 1/4   | 7.2                   | 7/8                   | 61035      | 5/8-11              | 61047      | 6,600    | 10  |
| 9 x 5/16  | 8.3                   | 7/8                   | 61036      | 5/8-11              | 61048      | 6,600    | 10  |
| <b>Saucer (type 28)</b>          |                       |                       |            |                     |            |          |   |
| 7 x 1/4   | 6.3                   | 7/8                   | 61701      | 5/8-11              | 61703      | 8,600    | 10  |
| 9 x 1/4   | 6.3                   | 7/8                   | 61702      | 5/8-11              | 61704      | 6,600    | 10  |





Achieves fast removal rates and a smooth, aggressive grinding action with minimal contact pressure on stainless steel (INOX) and high temperature alloys. Premium grains provide extended service life.

**Abrasive: Premium aluminum oxide A**

**Workpiece material**  
Stainless steel (INOX)



**CONTAMINATION FREE**  
**RATED FOR STAINLESS STEEL (INOX)**

### Applications

Weld grinding, chamfering, deburring, surface grinding, fillet weld grinding



### Recommendation for use

Achieves optimal grinding results on high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps).

**PFERD specification number**  
A 30 N SG-INOX

**Stainless steel (INOX)**  
**Hardness grade N**



| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|   |                       | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                       |                       |            |                     |            |          |   |
| 4 x 1/4   | 6.3                   | 3/8                   | 61100      | -                   | -          | 15,300   | 10  |
| 4 x 1/4   | 6.3                   | 5/8                   | 61103      | -                   | -          | 15,300   | 10  |
| 4-1/2 x 1/8   | 4.1                   | 7/8                   | 61104      | 5/8-11              | 61113      | 13,300   | 10  |
| 4-1/2 x 1/4   | 7.2                   | 7/8                   | 61105      | 5/8-11              | 61114      | 13,300   | 10  |
| 5 x 1/4   | 7.2                   | 7/8                   | 61106      | 5/8-11              | 61111      | 12,200   | 10  |
| 6 x 1/4   | 7.2                   | 7/8                   | 61107      | 5/8-11              | 61116      | 10,200   | 10  |
| 7 x 1/4   | 7.2                   | 7/8                   | 61108      | 5/8-11              | 61110      | 8,600    | 10  |
| 9 x 1/4   | 7.2                   | 7/8                   | 61109      | 5/8-11              | 61112      | 6,600    | 10  |

Aggressive, non-loading grinding performance on aluminum and all soft metals. Paraffin-free design leaves residue-free surface for immediate welding without secondary surface cleaning operation.

**Abrasive: Premium aluminum oxide A**

**Workpiece materials**  
Aluminum, copper, brass, bronze

### Applications

Weld grinding, chamfering, deburring, surface grinding, fillet weld grinding



### Recommendation for use

Achieves outstanding stock removal rates even at low contact pressure.

**PFERD specification number**  
A 24 N SG-ALU

**Aluminum/non-ferrous metals**  
**Hardness grade N**



| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|   |                       | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                       |                       |            |                     |            |          |   |
| 4-1/2 x 1/4   | 7.2                   | 7/8                   | 61301      | 5/8-11              | 61303      | 13,300   | 10  |
| 5 x 1/4   | 7.2                   | 7/8                   | 61302      | 5/8-11              | 61308      | 12,200   | 10  |
| 6 x 1/4   | 7.2                   | 7/8                   | 61309      | 5/8-11              | 61310      | 10,200   | 10  |
| 7 x 1/4   | 7.2                   | 7/8                   | 61304      | 5/8-11              | 61306      | 8,600    | 10  |
| 9 x 1/4   | 7.2                   | 7/8                   | 61305      | 5/8-11              | 61307      | 6,600    | 10  |

# Grinding wheels

## Depressed centre (type 27) – Performance line SG

Steel/stainless steel (INOX)  
Hardness grade Q

**NEW**



Advanced ceramic oxide grain delivers unparalleled stock removal rates, long service life and cool cutting action.

**Abrasive: Ceramic oxide CO**

**Workpiece materials**

Steel, stainless steel (INOX)



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**



Weld grinding, chamfering, deburring, surface grinding

**Recommendation for use**

Achieves optimal grinding results on high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps).

**PFERD specification number**

CO 24 Q SG

| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|   |                       | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                       |                       |            |                     |            |          |   |
| 4-1/2 x 1/4   | 7.2                   | 7/8                   | 60055      | 5/8-11              | 60063      | 13,300   | 10  |
| 5 x 1/4   | 7.2                   | 7/8                   | 60056      | 5/8-11              | 60064      | 12,200   | 10  |
| 7 x 1/4   | 7.2                   | 7/8                   | 60058      | 5/8-11              | 60066      | 8,600    | 10  |
| 9 x 1/4   | 7.2                   | 7/8                   | 60059      | 5/8-11              | 60067      | 6,600    | 10  |

Steel/cast iron  
Hardness grade S



Constructed with premium zirconia grain for unsurpassed durability on tough/severe applications.

**Abrasives: Zirconia alumina Z**

**Workpiece materials**

Steel, cast iron (grey and nodular types)

**Applications**



Weld grinding, chamfering, deburring, surface grinding

**Recommendation for use**

Achieves optimal grinding results on high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps).

**PFERD specification number**

ZA 30 S SG

| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|   |                       | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                       |                       |            |                     |            |          |   |
| 4-1/2 x 1/4   | 7.2                   | 7/8                   | 61602      | 5/8-11              | 61603      | 13,300   | 10  |
| 5 x 1/4   | 7.2                   | 7/8                   | 61604      | 5/8-11              | 61614      | 12,200   | 10  |
| 6 x 1/4   | 7.2                   | 7/8                   | 61613      | 5/8-11              | 61616      | 10,200   | 10  |
| 7 x 1/4   | 7.2                   | 7/8                   | 61605      | 5/8-11              | 61607      | 8,600    | 10  |
| 9 x 1/4   | 7.2                   | 7/8                   | 61606      | 5/8-11              | 61608      | 6,600    | 10  |

## Depressed centre (type 27), saucer (type 28) – Performance line SG

Produced with sharp silicon carbide grain for aggressive grinding of masonry and natural materials as well as select metals.

**Abrasive: Silicon carbide C**

**Workpiece materials**

Masonry, concrete, stone, cast iron, tough/hard aluminum

**Applications**




Chamfering, deburring, surface grinding

**PFERD specification number**

C 24 Q SG

**Cast iron/casting scale/masonry**  
**Hardness grade Q**



| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|   |                       | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                       |                       |            |                     |            |          |   |
| 4-1/2 x 1/4   | 7.2                   | 7/8                   | 61501      | 5/8-11              | 61508      | 13,300   | 10  |
| 5 x 1/4   | 7.2                   | 7/8                   | 61502      | 5/8-11              | 61509      | 12,200   | 10  |
| 6 x 1/4   | 7.2                   | 7/8                   | 61503      | 5/8-11              | 61510      | 10,200   | 10  |
| 7 x 1/4   | 7.2                   | 7/8                   | 61504      | 5/8-11              | 61506      | 8,600    | 10  |
| 9 x 1/4   | 7.2                   | 7/8                   | 61505      | 5/8-11              | 61507      | 6,600    | 10  |
| <b>Saucer (type 28)</b>           |                       |                       |            |                     |            |          |   |
| 7 x 1/4   | 6.3                   | 7/8                   | 61705      | 5/8-11              | 61707      | 8,600    | 10  |
| 9 x 1/4   | 6.3                   | 7/8                   | 61706      | 5/8-11              | 61708      | 6,600    | 10  |

## Depressed centre (type 27) – Special line SG-PLUS

A blend of zirconia for extended service life and aluminum oxide for aggressive removal rates delivers an excellent price/performance value on all angle grinders.

**Abrasives: Zirconia alumina Z and aluminum oxide A**

**Workpiece material**

Steel

**Applications**

Weld grinding, edge grinding

**Recommendation for use**



Achieves optimal grinding results on high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps).

**PFERD specification number**

ZA 24 R SG-PLUS

**Steel**  
**Hardness grade R**



| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|   |                       | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                       |                       |            |                     |            |          |   |
| 4 x 1/4   | 6.3                   | 3/8                   | 61551      | -                   | -          | 15,300   | 10  |
| 4 x 1/4   | 6.3                   | 5/8                   | 61552      | -                   | -          | 15,300   | 10  |
| 4-1/2 x 1/4   | 7.2                   | 7/8                   | 61553      | 5/8-11              | 61560      | 13,300   | 10  |
| 5 x 1/4   | 7.2                   | 7/8                   | 61554      | 5/8-11              | 61561      | 12,200   | 10  |
| 6 x 1/4   | 7.2                   | 7/8                   | 61555      | 5/8-11              | 61562      | 10,200   | 10  |
| 7 x 1/4   | 7.2                   | 7/8                   | 61556      | 5/8-11              | 61563      | 8,600    | 10  |
| 9 x 1/4   | 7.2                   | 7/8                   | 61557      | 5/8-11              | 61564      | 6,600    | 10  |

# WHISPER grinding wheels

## Depressed centre (type 27) – Special line SG-PLUS

PFERD is focused on the long-term reduction of noise and vibration levels produced by grinding wheels, and on developing products which will provide more comfort for the operator and others in his environment.

Through its patented design, the **WHISPER** grinding wheel creates noticeably less vibration and significantly less noise than conventional grinding wheels. The noise exposure is reduced by up to 12 dB(A), representing a reduction of more than 90%.

In addition, the wheel structure allows for soft and comfortable grinding with excellent surface quality.

The WHISPER is a high-performance grinding wheel with an impressive machining capacity for exceptionally high stock removal. The increased productivity of the grinding process results in substantial savings in labour costs.

**PFERDERGONOMICS®** recommends the grinding wheel WHISPER to substantially reduce vibration and noise levels generated during use and to improve the grinding comfort.

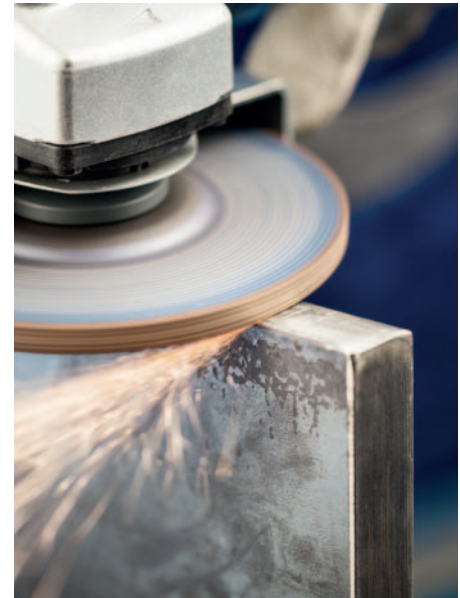


**PFEREFFICIENCY®** recommends the grinding wheel WHISPER for long, fatigue-free work, with perfect results in the shortest possible time.



### PFERDMEDIA

For more information, please visit [pferdusa.com/whisper](http://pferdusa.com/whisper)



### Stainless steel (INOX)/steel WHISPER – Hardness grade H



Unique, layered construction wheel provides very fast stock removal rates and excellent service life with less vibration and noise than conventional grinding wheels.

**Abrasive: Aluminum oxide A**

#### Workpiece materials

Stainless steel (INOX), steel




**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

#### Applications

Weld grinding, surface grinding, fillet weld grinding

#### PFERD specification number

A 46 H SG-PLUS-WHISPER

| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---------------------------------------|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|                                       |                       | Bore [Inches]         | EDP number | Thread Size         | EDP number |          |   |
| <b>Depressed centre (type 27)</b>     |                       |                       |            |                     |            |          |   |
| 4-1/2 x 1/4                           | 7.4                   | 7/8                   | 61582      | 5/8-11              | 61588      | 13,300   | 10  |
| 5 x 1/4                               | 7.4                   | 7/8                   | 61583      | 5/8-11              | 61589      | 12,200   | 10  |



General purpose, long-life grinding wheels for universal grinding applications on steel.

**Abrasive: Aluminum oxide A**

**Workpiece materials**  
Steel, cast iron



**Applications**

Weld grinding, chamfering, deburring, surface grinding, fillet weld grinding

**PFERD specification number**

A 24 R PSF



| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|   |                       | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                       |                       |            |                     |            |          |   |
| 4-1/2 x 1/4   | 7.2                   | 7/8                   | 60006      | 5/8-11              | 60014      | 13,300   | 10  |
| 5 x 1/4   | 7.2                   | 7/8                   | 60007      | 5/8-11              | 60015      | 12,200   | 10  |
| 7 x 1/4   | 7.2                   | 7/8                   | 60009      | 5/8-11              | 60017      | 8,600    | 10  |

General purpose grinding wheels for universal grinding applications on steel and stainless steel (INOX). Achieve high stock removal rates with minimal contact pressure.

**Abrasive: Aluminum oxide A**

**Workpiece materials**  
Steel, cast iron, stainless steel (INOX)



**CONTAMINATION FREE**  
**RATED FOR STAINLESS STEEL (INOX)**



**Applications**

Weld grinding, surface grinding, surface grinding, fillet weld grinding

**PFERD specification number**

A 24 L PSF



| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|   |                       | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                       |                       |            |                     |            |          |   |
| 4 x 1/4   | 6.3                   | 5/8                   | 61000      | -                   | -          | 15,300   | 10  |
| 4-1/2 x 1/4   | 7.2                   | 7/8                   | 61002      | 5/8-11              | 61001      | 13,300   | 10  |
| 5 x 1/4   | 7.2                   | 7/8                   | 61003      | 5/8-11              | 61008      | 12,200   | 10  |
| 6 x 1/4   | 7.2                   | 7/8                   | 61011      | 5/8-11              | 61012      | 10,200   | 10  |
| 7 x 1/4   | 7.2                   | 7/8                   | 61004      | 5/8-11              | 61006      | 8,600    | 10  |
| 9 x 1/4   | 7.2                   | 7/8                   | 61005      | 5/8-11              | 61007      | 6,600    | 10  |



Featured product!  
See the combination wheel DUODISC® for cutting and light deburring on page 57.

# Grinding wheels

## Depressed centre (type 27), pipeline – Performance line SG



PFERD pipeline wheels are designed for grinding and cutting of pipeline root pass, weld and flame cut grinding, and all facets of steel and non-ferrous metal production and fabrication.

Specializing in the pipeline industry, PFERD also produces a wide variety of other products commonly used in pipe-joining applications, such as stringer bead brushes and pipeline files.

Please contact PFERD for more information about how we can help you optimize your abrasive and brushing applications.



**PFERDMEDIA**

For more information, please visit [pferdusa.com/pipeline](http://pferdusa.com/pipeline)

**Steel**  
**Hardness grade R**



Developed with high edge stability for dimension-critical root pass grinding operations. Provides long service life and aggressive removal rates.

**Abrasive: Aluminum oxide A**

**Workpiece material**  
Steel

**Applications**



Weld grinding, chamfering, deburring, root pass grinding

**Recommendation for use**

Achieves optimal grinding results on high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps).

**PFERD specification number**

A 24 R SG-PIPE

| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|   |                       | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                       |                       |            |                     |            |          |   |
| 4-1/2 x 1/8   | 4.1                   | 7/8                   | 63400      | 5/8-11              | 63405      | 13,300   | 10  |
| 5 x 1/8   | 4.1                   | 7/8                   | 63406      | 5/8-11              | 63407      | 12,200   | 10  |
| 5 x 5/32  | 4.1                   | 7/8                   | 63351      | 5/8-11              | 63376      | 12,200   | 10  |
| 6 x 1/8   | 4.1                   | 7/8                   | 63399      | 5/8-11              | 63408      | 10,200   | 10  |
| 6 x 5/32  | 4.1                   | 7/8                   | 63352      | 5/8-11              | 63377      | 10,200   | 10  |
| 7 x 1/8   | 4.1                   | 7/8                   | 63401      | 5/8-11              | 63403      | 8,600    | 10  |
| 7 x 5/32  | 4.1                   | 7/8                   | 63353      | 5/8-11              | 63378      | 8,600    | 10  |
| 9 x 1/8   | 4.1                   | 7/8                   | 63402      | 5/8-11              | 63404      | 6,600    | 10  |



## Depressed centre (type 27), pipeline – Performance line SG

Premium zirconia grain, high edge stability and tight dimensional tolerance for professional root pass grinding operations. Extended service life minimizes wheel changes while removal rates allow grinders to keep pace with welders in pipeline construction.

**Abrasives: Zirconia alumina Z**

**Workpiece material**  
Steel

**Applications**



Weld grinding, chamfering, deburring, root pass grinding

**Recommendations for use**

- Achieves optimal grinding results on high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps).
- 4.1 mm thickness designed for standard 30° bevels. 4.6 mm version for full coverage of wider root passes/larger bevels.

**PFERD specification number**  
ZA 30 S SG-PIPE



| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|   |                       | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                       |                       |            |                     |            |          |   |
| 4-1/2 x 1/8   | 4.1                   | 7/8                   | 63251      | 5/8-11              | 63255      | 13,300   | 10  |
| 5 x 1/8   | 4.1                   | 7/8                   | 63252      | 5/8-11              | 63256      | 12,200   | 10  |
| 6 x 1/8   | 4.1                   | 7/8                   | 63250      | 5/8-11              | 63259      | 10,200   | 10  |
| 7 x 1/8   | 4.1                   | 7/8                   | 63253      | 5/8-11              | 63257      | 8,600    | 10  |
| 7 x 1/8   | 4.6                   | 7/8                   | 63448      | 5/8-11              | 63466      | 8,600    | 10  |
| 9 x 1/8   | 4.1                   | 7/8                   | 63254      | 5/8-11              | 63258      | 6,600    | 10  |
| 9 x 1/8   | 4.6                   | 7/8                   | 63449      | 5/8-11              | 63467      | 6,600    | 10  |

## Depressed centre (type 27), notching – Performance line SG

A combination of premium aluminum oxide grain, high edge stability and tight dimensional tolerances result in highly productive notching applications.

**Abrasive: Special Aluminum oxide A**

**Workpiece materials**  
Stainless steel (INOX), steel



**CONTAMINATION FREE**  
**RATED FOR STAINLESS STEEL (INOX)**

**Applications**



Notching wheels are designed for use on their edge, perpendicular to the workpiece. Recommended for edge grinding and cutting of pipeline root pass, and notching for weld repairs.

**Recommendation for use**

Achieves optimal grinding results on high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps).

**PFERD specification number**  
A 24/46 R SG-INOX-NOTCHING



| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|   |                       | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                       |                       |            |                     |            |          |   |
| 4-1/2 x 1/8   | 3.2                   | 7/8                   | 63421      | 5/8-11              | 63427      | 13,300   | 10  |
| 5 x 1/8   | 3.2                   | 7/8                   | 63422      | 5/8-11              | 63428      | 12,200   | 10  |
| 6 x 1/8   | 3.2                   | 7/8                   | 63423      | 5/8-11              | 63429      | 10,200   | 10  |
| 7 x 1/8   | 3.2                   | 7/8                   | 63424      | 5/8-11              | 63430      | 8,600    | 10  |
| 9 x 1/8   | 3.2                   | 7/8                   | 63425      | 5/8-11              | 63431      | 6,600    | 10  |

# Grinding wheels

## Depressed centre (type 27), pipeline – Universal line PSF

**Stainless steel (INOX)**  
Hardness grade M



General purpose wheel for fast stock removal on small construction jobs and for repair work.

**Abrasive: Aluminum oxide A**

**Workpiece material**

Stainless steel (INOX)



**CONTAMINATION FREE**  
**RATED FOR STAINLESS STEEL (INOX)**

**Applications**



Surface grinding, edge grinding, root pass grinding

**Recommendations for use**

- Achieves particularly high stock removal rates even at low contact pressure.
- 4.1 mm thickness designed for standard 30° bevels.
- 4.6 mm version for full coverage of wider root passes/larger bevels.

**PFERD specification number**

A 24/30/46 M PSF-INOX-PIPE

| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|-----------------------|-----------------------|------------|---------------------|------------|----------|---|
|   |                       | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                       |                       |            |                     |            |          |   |
| 4-1/2 x 1/8   | 4.1                   | 7/8                   | 63410      | 5/8-11              | 63414      | 13,300   | 10  |
| 5 x 1/8   | 4.1                   | 7/8                   | 63411      | 5/8-11              | 63415      | 12,200   | 10  |
| 6 x 1/8   | 4.1                   | 7/8                   | 63398      | 5/8-11              | 63418      | 10,200   | 10  |
| 7 x 1/8   | 4.1                   | 7/8                   | 63412      | 5/8-11              | 63416      | 8,600    | 10  |
| 7 x 1/8   | 4.6                   | 7/8                   | 63436      | 5/8-11              | 63454      | 8,600    | 10  |
| 9 x 1/8   | 4.1                   | 7/8                   | 63413      | 5/8-11              | 63417      | 6,600    | 10  |



PFERD offers a complete catalogue of solutions for pipeline construction. Visit [pferdusa.com/info](http://pferdusa.com/info) to request a free copy or to download a pdf version.



Please see PFERD's "Power and maintenance brushes" catalogue (section 208, which immediately follows this catalogue section) for complete information on brush products engineered for pipeline construction.





Double-reinforced grinding and snagging wheels for heavy stock removal. Ideal for grinding in hard-to-reach areas.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Steel, stainless steel (INOX), cast iron



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Application**

Grinding in hard-to-reach areas

**Recommendation for use**


When mandrel-mounted on a straight grinder for inside-grinding applications, these wheels can be operated without protective guards up to the lower of both RPMs.

**PFERD specification number**

A 24/36 M SG

**Steel/stainless steel (INOX)/cast iron  
Hardness grade M**



| Diameter x Thickness Nominal (U) [Inches] | Thickness metric [mm] | Bore [Inches] | Grit | EDP number | Max. RPM |  |
|---|-----------------------|---------------|------|------------|----------|---|
| <b>Flat (type 1)</b>                      |                       |               |      |            |          |   |
| 2 x 1/4                                   | 6.3                   | 3/8           | 24   | 69236      | 30,000   | 25  |
| 3 x 1/8                                   | 4.1                   | 3/8           | 24   | 69332      | 23,000   | 25  |
| 3 x 1/8                                   | 4.1                   | 3/8           | 36   | 69333      | 23,000   | 25  |
| 3 x 1/4                                   | 6.3                   | 3/8           | 24   | 69336      | 23,000   | 25  |
| 3 x 1/4                                   | 6.3                   | 3/8           | 36   | 69337      | 23,000   | 25  |
| 3 x 3/8                                   | 10.0                  | 3/8           | 24   | 69340      | 18,000   | 20  |
| 3 x 3/8                                   | 10.0                  | 3/8           | 36   | 69341      | 18,000   | 20  |
| 3 x 1/2                                   | 13.0                  | 3/8           | 24   | 69344      | 18,000   | 15  |
| 4 x 1/8                                   | 4.1                   | 3/8           | 24   | 69432      | 19,000   | 25  |
| 4 x 1/4                                   | 6.3                   | 3/8           | 24   | 69446      | 19,000   | 25  |
| 4 x 1/4                                   | 6.3                   | 3/8           | 36   | 69447      | 19,000   | 25  |
| 4 x 1/2                                   | 13.0                  | 3/8           | 24   | 69442      | 13,500   | 15  |

## Mandrels



Accessory for mounting snagging wheels on straight grinders.

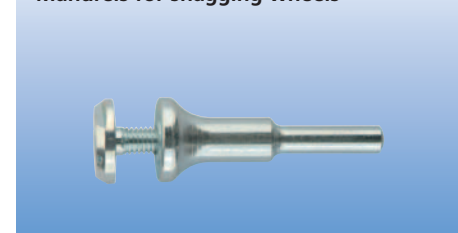
**Safety note**


When using these mandrels, the max. permissible rotational speed RPM stated on the wheel must be observed.

**PFERD specification number**

M-DG

**Mandrels for snagging wheels**



| Max. wheel diameter [Inches] | Fits wheel thickness [Inches] | Fits arbor hole size [Inches] | Shank diameter [Inches] | EDP number | Overall length [Inches] | Clamping width [Inches] | Flange diameter [Inches] | Max. RPM |  |
|------------------------------|-------------------------------|-------------------------------|-------------------------|------------|-------------------------|-------------------------|--------------------------|----------|---|
| 3                            | 1/8, 1/4                      | 3/8                           | 1/4                     | 69027      | 2-1/8                   | 0 - 5/16                | 3/4                      | 30,000   | 10  |
| 3                            | 3/8, 1/2                      | 3/8                           | 1/4                     | 69031      | 2-7/8                   | 3/8 - 1-1/4             | 3/4                      | 30,000   | 10  |

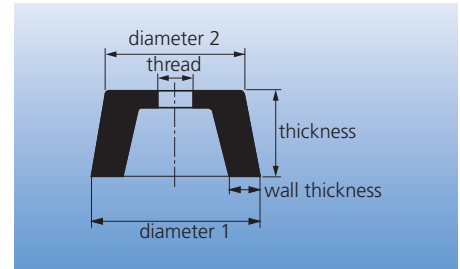
# Cup wheels

## Flared (type 11) – Performance line SG

Type 11 flaring cup wheels are widely used in grinding and snagging operations, especially in foundries on right angle grinders for removing gates, risers and parting lines from castings.

Cup wheels provide a large surface contact area, and are produced with a high amount of abrasive grain. This ensures high performance removal rates, especially on high power tools.

Available in aluminum oxide, silicon carbide and zirconia grain types. Produced with a steel back for maximum strength, durability and maximum safety in severe applications.



**Steel/cast iron**  
**Masonry/concrete/stone**  
**Hardness grade Q**

**Aluminum oxide** grain provides fast removal of flashing, clean castings and mold marks.

**Zirconia alumina** offers longest life and best performance for the toughest applications, outlasting aluminum oxide by more than 2 to 1.

Tough and sharp **silicon carbide** grain for surface grinding. Excellent for removal of mould marks, flashing and cleaning of castings.

**Abrasives:** Aluminum oxide A  
Zirconia alumina Z  
Silicon carbide C

### Workpiece materials

- **For steel and cast iron:**  
aluminum oxide (A) or zirconia alumina (Z)
- **For masonry, concrete, stone:**  
silicon carbide (C)


### Applications

Weld grinding, surface grinding, edge grinding

### Recommendations for use

- **Abrasive aluminum oxide** can be used at a slight angle for weld grinding.
- **Abrasive zirconia alumina** obtains optimal results when used with high-powered angle grinders.
- **Abrasive silicon carbide** is also suitable for wet grinding and dry grinding.

**PFERD specification number**  
A/Z/C16 Q SG

| Diameter 1 x diameter 2 [Inches] | Thickness [Inches] | Thread | EDP number | Wall thickness nominal [Inches] | Wall thickness metric [mm] | Max. RPM |  |
|----------------------------------|--------------------|--------|------------|---------------------------------|----------------------------|----------|---|
| <b>Aluminum oxide A</b>          |                    |        |            |                                 |                            |          |   |
| 4 x 3-1/2                        | 2                  | 5/8-11 | 61801      | 1                               | 25                         | 8,600    | 2   |
| 5 x 3-3/4                        | 2                  | 5/8-11 | 61802      | 1-1/2                           | 40                         | 7,600    | 2   |
| 6 x 4-3/4                        | 2                  | 5/8-11 | 61803      | 1-1/2                           | 40                         | 6,300    | 2   |
| <b>Zirconia alumina Z</b>        |                    |        |            |                                 |                            |          |   |
| 4 x 3-1/2                        | 2                  | 5/8-11 | 61817      | 1                               | 25                         | 8,600    | 2   |
| 5 x 3-3/4                        | 2                  | 5/8-11 | 61818      | 1-1/2                           | 40                         | 7,600    | 2   |
| 6 x 4-3/4                        | 2                  | 5/8-11 | 61819      | 1-1/2                           | 40                         | 6,300    | 2   |
| <b>Silicon carbide C</b>         |                    |        |            |                                 |                            |          |   |
| 4 x 3-1/2                        | 2                  | 5/8-11 | 61805      | 1                               | 25                         | 8,600    | 2   |
| 5 x 3-3/4                        | 2                  | 5/8-11 | 61806      | 1-1/2                           | 40                         | 7,600    | 2   |
| 6 x 4-3/4                        | 2                  | 5/8-11 | 61807      | 1-1/2                           | 40                         | 6,300    | 2   |



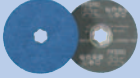








































# CC-GRIND®, CC-GRIND®-SOLID, POLIFAN® flap discs

Your quick product selection guide







| Workpiece material   | Product lines | Steel, cast steel   | Stainless steel (INOX)   |   |   |   | Aluminum, non-ferrous metals   |  |
|--|---------------|---|--|---|---|---|--|--|
| <b>Application</b>   |               |   |  |   |   |   |  |  |
| <b>Coated rough grinding discs</b>   |               |   |  |   |   |   |  |  |
| <ul style="list-style-type: none"> <li>■ Surface grinding</li> <li>■ Weld grinding</li> <li>■ Blending</li> <li>■ Chamfering</li> <li>■ Deburring</li> </ul> | SG            | <br><b>CC-GRIND® STEEL</b><br>p. 27      | <br><b>CC-GRIND®-SOLID STEEL</b><br>p. 29 | <br><b>CC-GRIND® INOX</b><br>p. 27      | <br><b>CC-GRIND®-SOLID INOX</b><br>p. 29 |   |  |  |
| <b>Flap discs</b>  |               |   |  |   |   |   |  |  |
| <ul style="list-style-type: none"> <li>■ Surface grinding</li> <li>■ Weld grinding</li> <li>■ Blending</li> </ul>  | SG            | <br><b>SG A</b><br>p. 30                 | <br><b>SG ZIRKON</b><br>p. 31             | <br><b>SG ZIRKON-COMPACT</b><br>p. 32    | <br><b>SG A</b><br>p. 30                   | <br><b>SG ZA</b><br>p. 33              | <br><b>SG A-COOL</b><br>p. 34         | <br><b>SG A-COOL</b><br>p. 34 |
|  | SG-PLUS       | <br><b>SG-PLUS ZIRKON-EXTRA</b><br>p. 34 | <br><b>ZIRKON-STRONG</b><br>p. 36         | <br><b>SG-PLUS ZIRKON-EXTRA</b><br>p. 34 | <br><b>SG-PLUS CO-COOL</b><br>p. 35      | <br><b>CO-STRONG-FREEZE</b><br>p. 37   |  |  |
|  | PSF           | <br><b>PSF ZIRKON</b><br>p. 40          | <br><b>PSF ZIRKON-EXTRA</b><br>p. 41     | <br><b>PSF ZIRKON-TRIM</b><br>p. 41     | <br><b>PSF ZIRKON</b><br>p. 40            | <br><b>PSF ZIRKON-EXTRA</b><br>p. 41  | <br><b>PSF ZIRKON-TRIM</b><br>p. 41  |  |
| <ul style="list-style-type: none"> <li>■ Chamfering</li> <li>■ Deburring</li> </ul>  | SG            | <br><b>SG ZIRKON</b><br>p. 31          | <br><b>SG ZIRKON-COMPACT</b><br>p. 32   | <br><b>SG ZIRKON</b><br>p. 31         | <br><b>SG ZIRKON-COMPACT</b><br>p. 32  | <br><b>SG A</b><br>p. 30             |  |  |
|  | SG-PLUS       | <br><b>ZIRKON-STRONG</b><br>p. 36      |  | <br><b>SG-PLUS CO-COOL</b><br>p. 35  |   | <br><b>SG-PLUS CO-COOL</b><br>p. 35  |  |  |
|  | PSF           | <br><b>PSF ZIRKON</b><br>p. 40         | <br><b>PSF ZIRKON-EXTRA</b><br>p. 41    | <br><b>PSF ZIRKON-TRIM</b><br>p. 41    | <br><b>PSF ZIRKON</b><br>p. 40           | <br><b>PSF ZIRKON-EXTRA</b><br>p. 41 | <br><b>PSF ZIRKON-TRIM</b><br>p. 41 |  |
| <ul style="list-style-type: none"> <li>■ Fillet weld grinding</li> </ul>   | SG-PLUS       | <br><b>ZIRKON-CURVE</b><br>p. 38       |  | <br><b>CO-CURVE</b><br>p. 39         |   | <br><b>CURVE-ALU</b><br>p. 39        |  |  |



Textile wheels are located on page 42.

| Performance line SG   |  |
|---|--|
|  | Widest range of products for professional use in industry and professional trades. |
|  | <b>Steel</b><br>black centre   |
|  | <b>Steel, stainless steel (INOX)</b><br>black/blue centre                          |
|  | <b>Aluminum, non-ferrous metals, stainless steel (INOX)</b><br>silver/blue centre  |
|  | <b>Stainless steel (INOX)</b><br>blue centre                                       |

| Special line SG-PLUS  |  |
|---|--|
|  | For highest possible performance, and for industrial niche applications. |
|  | <b>Steel</b><br>black centre   |
|  | <b>Steel, stainless steel (INOX)</b><br>black/blue centre                |
|  | <b>Stainless steel (INOX)</b><br>blue centre                             |

| Universal line PSF  |   |
|---|---|
|  | For general use in industry and professional trades.      |
|  | <b>Steel, stainless steel (INOX)</b><br>black/blue centre |



### CC-GRIND®-SOLID

PFERD presents the tough new CC-GRIND®-SOLID for rough grinding applications. PFERD advances the innovative CC-GRIND® by integrating a fibreglass backer and a high-performance coated abrasive.

#### Advantages

- 40% more productivity due to extremely high stock removal rates compared with grinding wheels.
- 50% less noise and vibration during use
- As tough and safe as a grinding wheel and 100% increased aggressiveness.
- Noise and vibration are reduced by 50%, dust by 80%.



### POLIFAN®-CURVE

POLIFAN®-CURVE is a PFERD innovation for work on fillet welds as well as butt joints and even grinding in overhead applications. The unique radial design (PFR) offers convincing results during complex and demanding work on fillet welds through the special arrangement of the abrasive flaps.

#### Advantages

- High stock removal rates through unparalleled fast, aggressive grinding and thus significant savings in labour costs.
- Precise and optimal fillet weld grinding.
- High-quality work results through form stability and an outstanding service life during work on fillet welds.



### POLIFAN®-STRONG

The patented design of POLIFAN®-STRONG, with its long, compactly arranged flaps, introduces a whole new dimension in material removal.

#### Advantages

- Fast grinding through consistent grinding aggressiveness to the last abrasive grain.
- Highest economic efficiency through greater performance per time unit, less wear on the disc and reduced set-up times.
- The greatest possible stock removal.
- Extremely long service life.



## PFERD innovations

# CC-GRIND® quick-change grinding discs

## Performance line SG



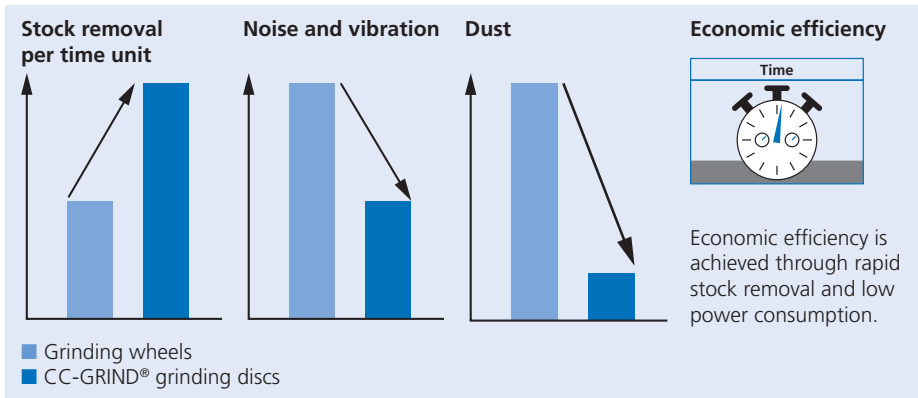
PFERD presents a newly developed, patented quick-mounting and cooling system for use with grinding discs in surface and contour grinding. This quick-mounting system and the high-performance abrasive guarantee ultimate stock removal rates.

The **CC-GRIND®** grinding disc combines unique backing pads and secure mounting on the rear side of the grinding wheel. With the dedicated backing pad, all CC-GRIND® grinding discs can be used on most angle grinders.

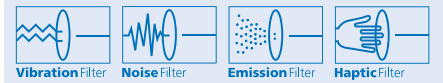
The quick-mounting system, secure attachment mechanism and the optimized cooling system lead to a considerable increase in aggressiveness and service life of the grinding discs. Compared to regular grinding wheels, noise and vibration are reduced by 50%, dust by 80%. The abrasive wheel's temperature is reduced by 30%.

### Flexible grinding

CC-GRIND® grinding discs offer soft and flexible grinding performance.



**PFERDERGONOMICS®** recommends the CC-GRIND® grinding disc to substantially reduce vibration, noise and dust levels generated during use and to improve working comfort.



**PFERDEFFICIENCY®** recommends the CC-GRIND® grinding disc for long, fatigue-free and resource saving work, with perfect results in the shortest possible time.



### Advantages

#### System



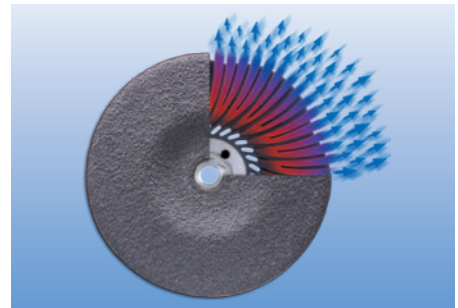
Very easy and comfortable use.

#### Mounting



Extremely fast and easy disc change reduces process costs.

#### Cooling effect



Cooling of the disc and the workpiece by the patented cooling system.

#### CC-GRIND® grinding discs allow very flat grinding!



Conventional fibre discs



#### CC-GRIND® grinding discs

No protruding metal components means no risk of scratching the workpiece. And, the whole disc surface can be consumed for longer service life.



**PFERDMEDIA**

For more information, please visit [pferdusa.com/ccgrind](http://pferdusa.com/ccgrind)

High performance quick-change grinding disc for extremely high stock removal performance on steel.

**Workpiece material**  
Steel

**Applications**

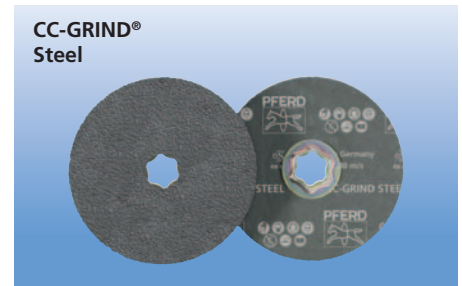
Surface grinding, weld grinding, blending


**Ordering note**

Please order backing pad separately.

**PFERD specification number**

CC-GRIND SG-STEEL



| Diameter [Inches] | EDP number | Compatible backing pad | Max. RPM |  |
|-------------------|------------|------------------------|----------|---|
| 4-1/2             | 61940      | EDP 69476, 69477       | 13,300   | 25  |
| 5                 | 61950      | EDP 69476, 69477       | 12,200   | 25  |

High performance quick-change grinding disc for cool grinding with very good stock removal on stainless steel (INOX).

**Workpiece material**  
Stainless steel (INOX)



**CONTAMINATION FREE**  
**RATED FOR STAINLESS STEEL (INOX)**

**Applications**

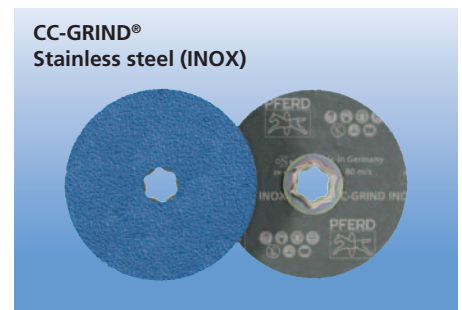
Surface grinding, weld grinding, blending


**Ordering note**

Please order backing pad separately.

**PFERD specification number**

CC-GRIND SG-INOX



| Diameter [Inches] | EDP number | Compatible backing pad | Max. RPM |  |
|-------------------|------------|------------------------|----------|---|
| 4-1/2             | 61941      | EDP 69478, 69479       | 13,300   | 25  |
| 5                 | 61951      | EDP 69478, 69479       | 12,200   | 25  |

With this backing pad, CC-GRIND® discs can be mounted on standard angle grinders.

The geometry of the cooling slits ensures high air flow. This significantly reduces the thermal load on the workpiece and the abrasive discs.

The patented quick-change system reduces change-up times to a minimum.

The special backing pad design significantly increases grinding performance.

For steel = grey  
For stainless steel (INOX) = blue


**Safety note**

The maximum permitted peripheral speed is 80 m/s.

**PFERD specification number**

CC-GRIND GT



| Diameter [Inches] | Thread Size | Workpiece material     | EDP number | Max. RPM |  |
|-------------------|-------------|------------------------|------------|----------|---|
| 4-1/2, 5          | 5/8-11      | Steel                  | 69476      | 13,300   | 1   |
| 4-1/2, 5          | M14         | Steel                  | 69477      | 13,300   | 1   |
| 4-1/2, 5          | 5/8-11      | Stainless steel (INOX) | 69478      | 13,300   | 1   |
| 4-1/2, 5          | M14         | Stainless steel (INOX) | 69479      | 13,300   | 1   |



For a comprehensive collection of COMBICLICK® products, please see PFERD'S "Fine grinding and finishing products" catalogue (section 204).

# NEW CC-GRIND®-SOLID grinding discs

## Performance line SG

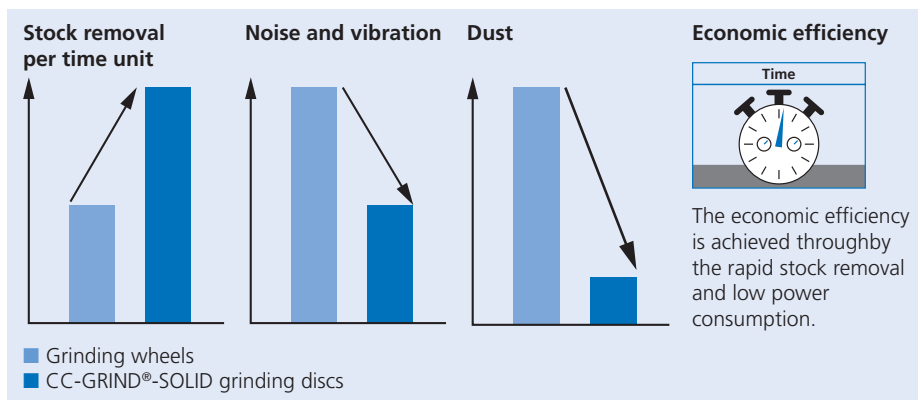
PFERD presents the tough **CC-GRIND®-SOLID** for controlled rough grinding applications. PFERD advances the innovative CC-GRIND® by integrating a fibreglass backer and a high-performance coated abrasive. Available with a patented cooling and mounting system, or with quick-change 5/8-11 threaded hub. With it, PFERD is presenting the new generation of grinding wheels!

The innovative high-strength layer structure of the fibreglass backer guarantees the same tough and safe use as with a grinding wheel. CC-GRIND®-SOLID fulfills all the safety

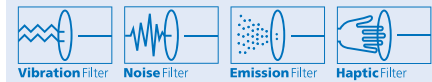
requirements of a grinding wheel according to ANSI B7.1 and EN 12413 standards, particularly the lateral load test.

Noise and vibration are reduced by 50%, dust by 80%.

CC-GRIND®-SOLID is a new grinding disc offering a large surface contact area. The quick-change hub version, and the un-hubbed version combined with custom flange set, allow flat grinding.



**PFERDERGONOMICS®** recommends the CC-GRIND®-SOLID grinding disc to substantially reduce vibration, noise and dust levels generated during use and to improve working comfort.

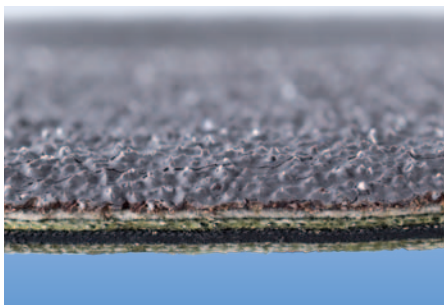


**PFERDEFFICIENCY®** recommends the CC-GRIND®-SOLID grinding disc for long, fatigue-free and resource saving work, with perfect results in the shortest possible time.



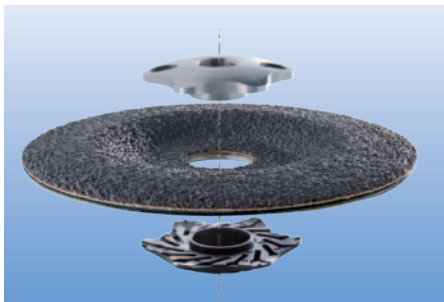
### User benefits

#### Layered structure



Innovative high-strength disc design for especially ergonomic, safe work.

#### Special mounting system



Unique mounting system allows for fast and easy disc change. CC-GRIND®-SOLID may also be purchased with 5/8-11 threaded quick-change hub.

#### Rough grinding and weld removal



CC-GRIND®-SOLID grinding discs excel on rough grinding applications.



Very low grinding angles create a large surface contact area and very comfortable grinding position.



**PFERDMEDIA**

To see it in action, please visit [pferdusa.com/vsolid](http://pferdusa.com/vsolid)



High performance grinding disc provides extremely high removal rate combined with long service life and high user comfort.

**Workpiece material**  
Steel


**Applications**  
Surface grinding, weld grinding, blending, chamfering, deburring

**Recommendation for use**  
Only use CC-GRIND®-SOLID grinding discs with the face of the disc.  
Not suitable for circumferential grinding.

**Ordering note**  
When ordering unthreaded discs, please order mounting flange set separately.

**PFERD specification number**  
CC-GRIND-SOLID STEEL



| Diameter [Inches] | Unthreaded arbor hole |            |                                   | Threaded arbor hole |            | Max. RPM |  |
|-------------------|-----------------------|------------|-----------------------------------|---------------------|------------|----------|---|
|                   | Bore [Inches]         | EDP number | Compatible mounting flange set    | Thread Size         | EDP number |          |   |
| 4                 | 5/8                   | 61199      | EDP 69097 (3/8-24) or 69098 (M10) | 3/8-24              | 61219      | 15,300   | 10  |
| 4-1/2             | 7/8                   | 61200      | EDP 69116 (5/8-11) or 69118 (M14) | 5/8-11              | 61220      | 13,300   | 10  |
| 5                 | 7/8                   | 61201      | EDP 69116 (5/8-11) or 69118 (M14) | 5/8-11              | 61221      | 12,200   | 10  |
| 6                 | 7/8                   | 61202      | EDP 69117 (5/8-11) or 69119 (M14) | 5/8-11              | 61222      | 10,200   | 10  |
| 7                 | 7/8                   | 61203      | EDP 69117 (5/8-11) or 69119 (M14) | 5/8-11              | 61223      | 8,500    | 10  |

Ideal on stainless steel (INOX) and alloys, CC-GRIND®-SOLID INOX provides high, cool stock removal with low grinding pressure. Easy handling with large surface contact area produces a more uniform surface finish with drastically reduced risk of gouging the surface.

**Workpiece material**  
Stainless steel (INOX)



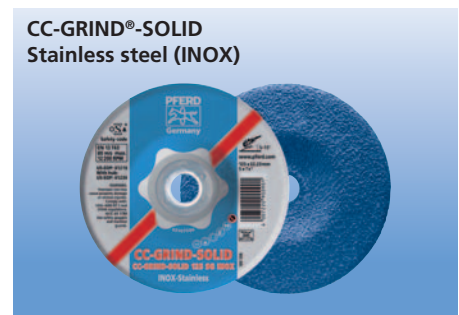
**CONTAMINATION FREE**  
**RATED FOR STAINLESS STEEL (INOX)**


**Applications**  
Surface grinding, weld grinding, blending, chamfering, deburring

**Recommendation for use**  
Only use CC-GRIND®-SOLID grinding discs with the face of the disc.  
Not suitable for circumferential grinding.

**Ordering note**  
When ordering unthreaded discs, please order mounting flange set separately.

**PFERD specification number**  
CC-GRIND-SOLID INOX



| Diameter [Inches] | Unthreaded arbor hole |            |                                   | Threaded arbor hole |            | Max. RPM |  |
|-------------------|-----------------------|------------|-----------------------------------|---------------------|------------|----------|---|
|                   | Bore [Inches]         | EDP number | Compatible mounting flange set    | Thread Size         | EDP number |          |   |
| 4-1/2             | 7/8                   | 61215      | EDP 69116 (5/8-11) or 69118 (M14) | 5/8-11              | 61235      | 13,300   | 10  |
| 5                 | 7/8                   | 61216      | EDP 69116 (5/8-11) or 69118 (M14) | 5/8-11              | 61236      | 12,200   | 10  |
| 7                 | 7/8                   | 61218      | EDP 69117 (5/8-11) or 69119 (M14) | 5/8-11              | 61238      | 8,500    | 10  |


The CC-GRIND®-SOLID mounting flange set is exclusively designed for use with unthreaded CC-GRIND®-SOLID grinding discs.

The geometry of the cooling slits ensures high air flow. This reduces the thermal load on the grinding disc and the workpiece.

**Recommendation for use**  
If your 6" angle grinder spindle is too short to mount the 6" CC-GRIND®-SOLID disc and recommended flange set, please use the hubbed wheel version (EDP 61222) or the flange set designated for diameter 4-1/2, 5.

**PFERD specification number**  
SFS CC-GRIND-SOLID



| Diameter [Inches] | Thread Size | EDP number |  |
|-------------------|-------------|------------|---|
| 4                 | 3/8-24      | 69097      | 1   |
| 4-1/2, 5          | 5/8-11      | 69116      | 1   |
| 6, 7              | 5/8-11      | 69117      | 1   |
| 4                 | M10         | 69098      | 1   |
| 4-1/2, 5          | M14         | 69118      | 1   |
| 6, 7              | M14         | 69119      | 1   |

# POLIFAN® flap discs

Flat (type 27) and conical (type 29) – Performance line SG

Steel/stainless steel (INOX)/plastics  
SG A



Highly versatile flap disc provides excellent performance and results on the widest combinations of workpiece materials and angle grinder power levels.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Steel, stainless steel (INOX), plastics, wood



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**

Surface grinding, weld grinding, blending; chamfering and deburring on aluminum and other non-ferrous metals

**Recommendation for use**

Achieves very high stock removal rates even at low contact pressure.

**PFERDERGONOMICS®**




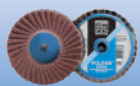
**PFERDEFFICIENCY®**



**PFERD specification number**

SG A

| Diameter [Inches]              | Unthreaded arbor hole |                     |       |       |       |       | Threaded arbor hole |                     |       |       |       | Max. RPM |  |     |
|--------------------------------|-----------------------|---------------------|-------|-------|-------|-------|---------------------|---------------------|-------|-------|-------|----------|---|-----|
|                                | Bore [Inches]         | Grit and EDP number |       |       |       |       | Thread              | Grit and EDP number |       |       |       |          |   |     |
|                                |                       | 24                  | 40    | 60    | 80    | 120   |                     | 24                  | 40    | 60    | 80    |          |   | 120 |
| <b>Flat (PFF – type 27)</b>    |                       |                     |       |       |       |       |                     |                     |       |       |       |          |   |     |
| 4                              | 5/8                   | -                   | 62140 | 62142 | 62144 | 62146 | 3/8-24              | -                   | 62141 | 62143 | 62145 | 62147    | 15,300  | 10  |
| 4-1/2                          | 7/8                   | 62149               | 62150 | 62152 | 62154 | 62156 | 5/8-11              | 62257               | 62250 | 62252 | 62254 | 62256    | 13,300  | 10  |
| 5                              | 7/8                   | -                   | 62158 | 62160 | 62162 | 62164 | 5/8-11              | -                   | 62258 | 62260 | 62262 | 62264    | 12,200  | 10  |
| 7                              | 7/8                   | 62166               | 62168 | 62170 | 62172 | 62174 | 5/8-11              | 62266               | 62268 | 62270 | 62272 | 62274    | 8,500   | 10  |
| <b>Conical (PFC – type 29)</b> |                       |                     |       |       |       |       |                     |                     |       |       |       |          |   |     |
| 4-1/2                          | 7/8                   | 62201               | 62202 | 62203 | 62204 | 62205 | 5/8-11              | 62301               | 62302 | 62303 | 62304 | 62305    | 13,300  | 10  |
| 5                              | 7/8                   | 62212               | 62213 | 62214 | 62215 | 62216 | 5/8-11              | 62312               | 62313 | 62314 | 62315 | 62316    | 12,200  | 10  |
| 6                              | 7/8                   | -                   | 62217 | 62218 | 62219 | 62227 | 5/8-11              | -                   | 62358 | 62359 | 62360 | 62368    | 10,200  | 10  |
| 7                              | 7/8                   | 62207               | 62208 | 62209 | 62210 | 62211 | 5/8-11              | 62307               | 62308 | 62309 | 62310 | 62311    | 8,500   | 10  |



For 2" and 3" flap discs, please see COMBIDISC®-Mini-POLIFAN®, located in PFERD's "Fine grinding and finishing products" catalogue (section 204).



Highly durable flap disc for demanding applications. Premium zirconia coated abrasive material provides sustained high stock removal rates throughout the long disc service life.

**Abrasive: Zirconia alumina Z**

**Workpiece materials**

Steel, stainless steel (INOX)



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**

Surface grinding, weld grinding, blending, chamfering, deburring

**Recommendation for use**

Zirconia alumina grain is a high-performance abrasive medium delivering optimal

performance on high-powered angle grinders at higher contact pressures and/or steeper work angles (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps).

**Ordering note**

Packaging unit: 10 pcs

**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**

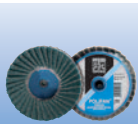


**PFERD specification number**

SG Z



| Diameter [Inches]              | Unthreaded arbor hole |                     |       |       |       |       |       | Threaded arbor hole |                     |       |       |       |       | Max. RPM |        |
|--------------------------------|-----------------------|---------------------|-------|-------|-------|-------|-------|---------------------|---------------------|-------|-------|-------|-------|----------|--------|
|                                | Bore [Inches]         | Grit and EDP number |       |       |       |       |       | Thread              | Grit and EDP number |       |       |       |       |          |        |
|                                |                       | 24                  | 36    | 40    | 60    | 80    | 120   |                     | 24                  | 36    | 40    | 60    | 80    |          | 120    |
| <b>Flat (PFF – type 27)</b>    |                       |                     |       |       |       |       |       |                     |                     |       |       |       |       |          |        |
| 4                              | 5/8                   | -                   | -     | 62138 | 62139 | -     | -     | 3/8-24              | -                   | -     | 62197 | 62198 | -     | -        | 15,300 |
| 4-1/2                          | 7/8                   | 62179               | 62173 | 62176 | 62178 | -     | -     | 5/8-11              | 62279               | 62273 | 62276 | 62278 | -     | -        | 13,300 |
| 5                              | 7/8                   | -                   | 62181 | 62182 | 62184 | -     | -     | 5/8-11              | -                   | 62281 | 62282 | 62284 | -     | -        | 12,200 |
| 7                              | 7/8                   | -                   | 62187 | 62188 | 62190 | -     | -     | 5/8-11              | -                   | 62287 | 62288 | 62290 | -     | -        | 8,500  |
| <b>Conical (PFC – type 29)</b> |                       |                     |       |       |       |       |       |                     |                     |       |       |       |       |          |        |
| 4-1/2                          | 7/8                   | 62221               | 62191 | 62222 | 62223 | 62220 | 62259 | 5/8-11              | 62321               | 62194 | 62322 | 62323 | 62324 | 62275    | 13,300 |
| 5                              | 7/8                   | -                   | 62192 | 62225 | 62226 | 62261 | 62263 | 5/8-11              | -                   | 62195 | 62325 | 62326 | 62291 | 62293    | 12,200 |
| 7                              | 7/8                   | -                   | 62193 | 62228 | 62229 | 62575 | 62576 | 5/8-11              | -                   | 62196 | 62328 | 62329 | 62580 | 62581    | 8,500  |



For 2" and 3" flap discs, please see COMBIDISC®-Mini-POLIFAN®, located in PFERD's "Fine grinding and finishing products" catalogue (section 204).



Product tip: For longer service life at the same price level in 40 and 60 grit, please consider POLIFAN® ZIRKON-COMPACT flap discs on next page.



# POLIFAN® flap discs

## Conical (type 29) – Performance line SG

Steel/stainless steel (INOX)  
SG ZIRKON-COMPACT



COMPACT flap discs are produced with more material in the same amount of space as typical flap discs. This results in faster grinding performance and increased service life without sacrificing flap grinding performance on edges.

**Abrasive: Zirconia alumina Z**

**Workpiece materials**

Steel, stainless steel (INOX)



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**

Weld grinding, chamfering, deburring, blending

**Recommendation for use**

Zirconia alumina grain is a high-performance abrasive delivering optimal performance on high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps).

**PFERDERGONOMICS®**





Vibration Filter Noise Filter Emission Filter

**PFERDEFFICIENCY®**



Energy Saving Time Saving

**PFERD specification number  
SG Z-COMPACT**

| Diameter<br>[Inches]   | Unthreaded arbor hole |                     |       | Threaded arbor hole |                     |       | Max.<br>RPM |  |  |
|--|-----------------------|---------------------|-------|---------------------|---------------------|-------|-------------|---|--|
|  | Bore<br>[Inches]      | Grit and EDP number |       | Thread              | Grit and EDP number |       |             |   |  |
|  |                       | 40                  | 60    |                     | 40                  | 60    |             |   |  |
| <b>Conical (PFC – type 29)</b>  |                       |                     |       |                     |                     |       |             |   |  |
| 4-1/2  | 7/8                   | 62781               | 62782 | 5/8-11              | 62791               | 62792 | 13,300      | 10  |  |
| 5  | 7/8                   | 62783               | 62784 | 5/8-11              | 62793               | 62794 | 12,200      | 10  |  |
| 6  | 7/8                   | 62785               | 62786 | 5/8-11              | 62795               | 62796 | 10,200      | 10  |  |
| 7  | 7/8                   | 62787               | 62788 | 5/8-11              | 62797               | 62798 | 8,500       | 10  |  |



Specialized for use on stainless steel (INOX) the unique zirconia coated material selected provides excellent removal rates and service life at lower contact pressure. Features reduced heat generation and significantly lower risk of glazing.

**Abrasive: Zirconia alumina and aluminum oxide ZA**

**Workpiece material**  
Stainless steel (INOX)



**CONTAMINATION FREE**  
**RATED FOR STAINLESS STEEL (INOX)**

**Applications**

Weld grinding, surface grinding, chamfering, deburring, blending

**Recommendation for use**

The high-performance abrasive zirconia alumina maintains good cutting qualities particularly during surface grinding on stainless steel (INOX).

**PFERDERGONOMICS®**




**PFERDEFFICIENCY®**



**PFERD specification number**  
SG ZA



| Diameter [Inches]              | Unthreaded arbor hole |                     |       |       |       | Threaded arbor hole |                     |       |       |       | Max. RPM |  |
|--------------------------------|-----------------------|---------------------|-------|-------|-------|---------------------|---------------------|-------|-------|-------|----------|---|
|                                | Bore [Inches]         | Grit and EDP number |       |       |       | Thread              | Grit and EDP number |       |       |       |          |   |
|                                |                       | 24                  | 40    | 60    | 80    |                     | 24                  | 40    | 60    | 80    |          |   |
| <b>Flat (PFF – type 27)</b>    |                       |                     |       |       |       |                     |                     |       |       |       |          |   |
| 4                              | 5/8                   | -                   | 60890 | 60891 | 60892 | 3/8-24              | -                   | 60920 | 60921 | 60922 | 15,300   | 10  |
| 4-1/2                          | 7/8                   | -                   | 60895 | 60897 | 60898 | 5/8-11              | -                   | 60925 | 60927 | 60928 | 13,300   | 10  |
| 5                              | 7/8                   | -                   | 60902 | 60904 | 60905 | 5/8-11              | -                   | 60932 | 60934 | 60935 | 12,200   | 10  |
| 7                              | 7/8                   | 60914               | 60916 | 60918 | 60919 | 5/8-11              | 60944               | 60946 | 60948 | 60949 | 8,500    | 10  |
| <b>Conical (PFC – type 29)</b> |                       |                     |       |       |       |                     |                     |       |       |       |          |   |
| 4-1/2                          | 7/8                   | -                   | 60952 | 60954 | 60955 | 5/8-11              | -                   | 60976 | 60978 | 60979 | 13,300   | 10  |
| 5                              | 7/8                   | -                   | 60959 | 60960 | 60961 | 5/8-11              | -                   | 60983 | 60984 | 60985 | 12,200   | 10  |
| 7                              | 7/8                   | 60969               | 60971 | 60972 | 60973 | 5/8-11              | 60993               | 60995 | 60996 | 60997 | 8,500    | 10  |



# POLIFAN® flap discs

## Flat (type 27) and conical (type 29) – Performance line SG



**Stainless steel (INOX)/aluminum/  
non-ferrous metals  
SG A-COOL**



A special topsized aluminum oxide abrasive material delivers very cool grinding and non-loading performance. Achieves highly productive grinding and finishing with a high grade surface finish on both stainless steel and aluminum.

**Abrasive: Aluminum oxide plus coolant  
A-COOL**

**Workpiece materials**

Stainless steel (INOX), aluminum, non-ferrous metals



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**

Surface grinding, weld grinding, blending

**Recommendations for use**

- Ensures low build-up of heat in the workpiece when used with minimum contact pressure.
- Performs exceptionally well on sheet metal and thin sectional material.

**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



**PFERD specification number  
SG A-COOL**

| Diameter<br>[Inches]           | Unthreaded arbor hole |                     |       |       |       | Threaded arbor hole |                     |       |       |       | Max.<br>RPM |    |
|--------------------------------|-----------------------|---------------------|-------|-------|-------|---------------------|---------------------|-------|-------|-------|-------------|----|
|                                | Bore<br>[Inches]      | Grit and EDP number |       |       |       | Thread              | Grit and EDP number |       |       |       |             |    |
|                                |                       | 40                  | 60    | 80    | 120   |                     | 40                  | 60    | 80    | 120   |             |    |
| <b>Flat (PFF – type 27)</b>    |                       |                     |       |       |       |                     |                     |       |       |       |             |    |
| 4-1/2                          | 7/8                   | 62361               | 62362 | 62363 | 62364 | 5/8-11              | 62373               | 62374 | 62375 | 62376 | 13,300      | 10 |
| 5                              | 7/8                   | 62365               | 62366 | 62367 | 63083 | 5/8-11              | 62377               | 62378 | 62379 | 63093 | 12,200      | 10 |
| 7                              | 7/8                   | 62369               | 62370 | 62371 | 62372 | 5/8-11              | 62381               | 62382 | 62383 | 62384 | 8,500       | 10 |
| <b>Conical (PFC – type 29)</b> |                       |                     |       |       |       |                     |                     |       |       |       |             |    |
| 4-1/2                          | 7/8                   | 62231               | 62232 | 62233 | 62234 | 5/8-11              | 62241               | 62242 | 62243 | 62244 | 13,300      | 10 |
| 5                              | 7/8                   | 62235               | 62236 | 62237 | 63081 | 5/8-11              | 62244               | 62245 | 62246 | 63091 | 12,200      | 10 |
| 7                              | 7/8                   | 62238               | 62239 | 62240 | 63082 | 5/8-11              | 62247               | 62248 | 62249 | 63092 | 8,500       | 10 |

## Flat (type 27) – Special line SG-PLUS

**Steel/stainless steel (INOX)  
SG-PLUS ZIRKON-EXTRA**



Maximized for durability and service life in tough applications, this flap disc is produced using premium zirconia material with both larger flaps and a higher flap count compared to conventional discs.

**Abrasive: Zirconia alumina Z**

**Workpiece materials**

Steel, stainless steel (INOX)



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**

Surface grinding, weld grinding, blending, chamfering, deburring

**Recommendation for use**

The use of zirconia alumina, a high-performance abrasive grain, in conjunction with the dense flap structure requires a high-output angle grinder (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps) to achieve best grinding results.

**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



**PFERD specification number  
SG-PLUS Z-EXTRA**

| Diameter<br>[Inches]        | Unthreaded arbor hole |                     |       |       |       | Threaded arbor hole |                     |       |       |       | Max.<br>RPM |    |
|-----------------------------|-----------------------|---------------------|-------|-------|-------|---------------------|---------------------|-------|-------|-------|-------------|----|
|                             | Bore<br>[Inches]      | Grit and EDP number |       |       |       | Thread              | Grit and EDP number |       |       |       |             |    |
|                             |                       | 40                  | 60    | 80    | 120   |                     | 40                  | 60    | 80    | 120   |             |    |
| <b>Flat (PFF – type 27)</b> |                       |                     |       |       |       |                     |                     |       |       |       |             |    |
| 4-1/2                       | 7/8                   | 62090               | 62091 | 62092 | 62093 | 5/8-11              | 62110               | 62111 | 62112 | 62113 | 13,300      | 10 |
| 7                           | 7/8                   | 62100               | 62101 | 62102 | -     | 5/8-11              | 62120               | 62121 | 62122 | -     | 8,500       | 10 |

Produced with a premium top-sized ceramic oxide coated material, CO-COOL flap discs offer very fast stock removal with low contact pressure and less heat generation. Ideal for stainless steel and high temperature alloys.

**Abrasive: Ceramic oxide plus coolant  
CO-COOL**

**Workpiece materials**

Chromium steels, CrNi steels, high-alloy steels, cast iron, nickel-based alloys, titanium alloys, non-ferrous metals, high-carbon steel



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**

Surface grinding, weld grinding, blending, chamfering, deburring

**Recommendation for use**

The self-sharpening action of the ceramic oxide is effective even at low contact pressures, giving optimal grinding performance without heat discoloration of the workpiece. This product is also recommended for use on hard rolling skin (scale). It delivers best results when used with a high-powered angle grinder (please refer to the table on page 4: 4-1/2" electric angle grinder= 8+ amps).

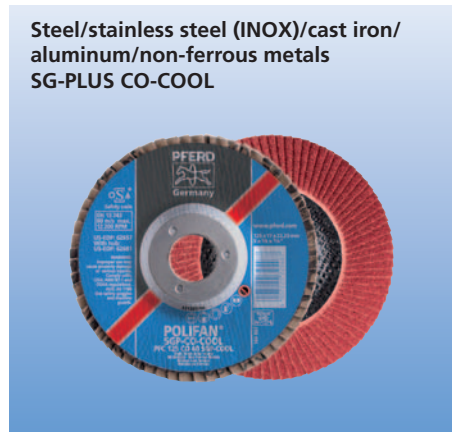
**PFERDERGONOMICS®**






**PFERDEFFICIENCY®**



**PFERD specification number  
SG-PLUS CO-COOL**



| Diameter [Inches]  | Unthreaded arbor hole |                     |       |        | Threaded arbor hole |       |        | Max. RPM |  |
|--|-----------------------|---------------------|-------|--------|---------------------|-------|--------|----------|---|
|  | Bore [Inches]         | Grit and EDP number |       | Thread | Grit and EDP number |       |        |          |   |
|  |                       | 40                  | 60    |        | 40                  | 60    |        |          |   |
| <b>Flat (PFF – type 27)</b>       |                       |                     |       |        |                     |       |        |          |   |
| 4-1/2  | 7/8                   | 62597               | 62599 | 5/8-11 | 62621               | 62623 | 13,300 | 10       |   |
| 5  | 7/8                   | 62603               | 62605 | 5/8-11 | 62627               | 62629 | 12,200 | 10       |   |
| 7  | 7/8                   | 62615               | -     | 5/8-11 | 62639               | -     | 8,500  | 10       |   |
| <b>Conical (PFC – type 29)</b>  |                       |                     |       |        |                     |       |        |          |   |
| 4-1/2  | 7/8                   | 62651               | 62653 | 5/8-11 | 62675               | 62677 | 13,300 | 10       |   |
| 5  | 7/8                   | 62657               | 62659 | 5/8-11 | 62681               | 62683 | 12,200 | 10       |   |
| 7  | 7/8                   | 62669               | -     | 5/8-11 | 62693               | -     | 8,500  | 10       |   |



# POLIFAN®-STRONG flap discs

## Conical (type 29) – Special line SG-PLUS

Steel  
SG-PLUS ZIRKON-STRONG



**POLIFAN®-STRONG** is a unique PFERD innovation offering extended service life and maximum stock removal rates for demanding grinding work.

The patented design of POLIFAN®-STRONG, with its long, compact flaps, introduces a whole new dimension in material removal.

- Fast grinding through constant aggressiveness to the last abrasive grain.
- Highest economic efficiency through greater performance per time unit, less wear on the disc and reduced set-up times.
- The greatest possible stock removal.
- Extremely long service life.

**Abrasive: Zirconia alumina Z**

**Workpiece materials**

Steel

**Applications**

Surface grinding, weld grinding, blending, chamfering, deburring

**Recommendations for use**

- **Grit sizes 36** ideal for high stock removal, such as when working on weld seams.
- **Grit size 50** ideal for work on edges, such as chamfering, or for attaining fine surfaces.
- Zirconia alumina grain is a high-performance abrasive delivering optimal performance on high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps).

**PFERDERGONOMICS®**





**PFERDEFFICIENCY®**



**PFERD specification number**

SG-PLUS Z-STRONG

| Diameter [Inches]   | Unthreaded arbor hole |                     |       | Threaded arbor hole |                     |       | Max. RPM |  |
|---|-----------------------|---------------------|-------|---------------------|---------------------|-------|----------|---|
|   | Bore [Inches]         | Grit and EDP number |       | Thread              | Grit and EDP number |       |          |   |
|   |                       | 36                  | 50    |                     | 36                  | 50    |          |   |
| <b>Conical (PFC – type 29)</b>  |                       |                     |       |                     |                     |       |          |   |
| 4-1/2   | 7/8                   | 62945               | 62947 | 5/8-11              | 62950               | 62952 | 13,300   | 10  |
| 5   | 7/8                   | 62955               | 62957 | 5/8-11              | 62960               | 62962 | 12,200   | 10  |
| 7   | 7/8                   | 62975               | 62977 | 5/8-11              | 62980               | 62982 | 8,500    | 10  |



**PFERDMEDIA**

To see it in action, please visit [pferdusa.com/vstrong](http://pferdusa.com/vstrong)





**POLIFAN®-STRONG-FREEZE** is a premium-performance flap disc that delivers maximum low-temperature stock removal and outstanding service life for demanding grinding tasks.

The innovative abrasive with ceramic oxide grain guarantees ultra-cool grinding on materials which do not conduct heat well.

POLIFAN®-STRONG-FREEZE delivers a cool grinding performance unparalleled worldwide. This is particularly beneficial for work on materials with poor thermal conductivity, such as stainless steel (INOX).

The usual sparks are reduced to a minimum due to the unique structure of the abrasive material. The risk of damage to stainless steel workpieces due to hot flying sparks is drastically reduced.

**Abrasive: Ceramic oxide CO plus special coolant**

### Workpiece materials

Stainless steel (INOX), nickel- and cobalt-based alloys (aircraft engine and turbine construction), titanium, Inconel®, Hastelloy®



**CONTAMINATION FREE**  
RATED FOR STAINLESS STEEL (INOX)

### Applications

Surface grinding, weld grinding, blending

### Recommendation for use

Achieves best results with high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps).

### PFERDERGONOMICS®



### PFERDEFFICIENCY®



**PFERD specification number**  
CO SG-PLUS-STRONG-FREEZE



| Diameter [Inches]              | Unthreaded arbor hole |                     |       | Threaded arbor hole |                     |       | Max. RPM |    |
|--------------------------------|-----------------------|---------------------|-------|---------------------|---------------------|-------|----------|----|
|                                | Bore [Inches]         | Grit and EDP number |       | Thread              | Grit and EDP number |       |          |    |
|                                |                       | 36                  | 50    |                     | 36                  | 50    |          |    |
| <b>Conical (PFC – type 29)</b> |                       |                     |       |                     |                     |       |          |    |
| 4-1/2                          | 7/8                   | 62946               | 62948 | 5/8-11              | 62951               | 62953 | 13,300   | 10 |
| 5                              | 7/8                   | 62956               | 62958 | 5/8-11              | 62961               | 62963 | 12,200   | 10 |
| 7                              | 7/8                   | 62976               | 62978 | 5/8-11              | 62981               | 62983 | 8,500    | 10 |



### PFERDMEDIA

To see it in action, please visit [pferdusa.com/vfreeze](http://pferdusa.com/vfreeze)

### Note

Even during first use of the POLIFAN®-STRONG-FREEZE, the flaps exhibit an exceptional wear pattern after just a few seconds. The highly effective fillers form a shiny cooling film on the flaps (Note! Looks similar to glazing – This is normal!). This provides the basis for

unprecedented cooling, aggressiveness, and service life.

The shape and colour of the chips generated with the POLIFAN®-STRONG-FREEZE attest to the extremely low temperatures during the grinding process.

### POLIFAN®-STRONG-FREEZE



Typical wear pattern with its characteristically shiny cooling film (not glazing!).



Long chips generated with the POLIFAN®-STRONG-FREEZE. No blue colouration due to low thermal loads.

### Conventional flap disc



Chips produced with conventional grinding wheels or flap discs. Blue colouration due to overheating.

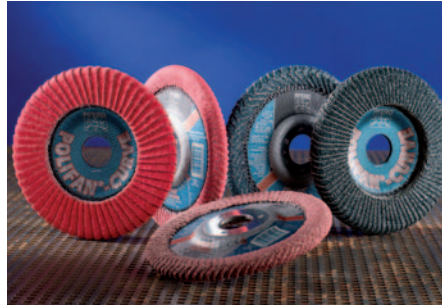
# POLIFAN®-CURVE flap discs

## Radial (type PFR) – Special line SG-PLUS

**POLIFAN®-CURVE** is a PFERD innovation designed to quickly achieve a smooth, consistent surface finish on fillet welds. The unique radial construction shape (PFR) offers a superior solution for this common task.

### Advantages

- High stock removal rates through unparalleled fast, aggressive grinding and thus significant savings in labour costs.
- Precise and optimal grinding out of fillet welds.
- Strong construction provide consistent, high quality results that are easy to achieve.
- Outstanding service life.
- Better control to reduce the chance of cutting into the base material.

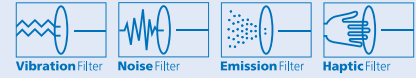


### Recommendations for use



|                                  |                  |                  |
|----------------------------------|------------------|------------------|
| <b>for fillet weld radii</b>     | > 3/16" (> 5 mm) | > 5/16" (> 8 mm) |
| <b>radial width of flap disc</b> | 7/16" (11 mm)    | 9/16" (14 mm)    |

**PFERDERGONOMICS®** recommends POLIFAN®-CURVE to substantially reduce vibration, noise and dust levels generated during use and to improve the working comfort.



**PFERDEFFICIENCY®** recommends POLIFAN®-CURVE for long, fatigue-free and resource saving work, with perfect results in the shortest possible time.



### PFERDMEDIA

To see it in action, please visit [pferdusa.com/vcurve](http://pferdusa.com/vcurve)

### Steel/stainless steel (INOX) SG-PLUS ZIRKON-CURVE



POLIFAN® ZIRKON-CURVE is produced with a premium Zirconia material that provides a combination of long service life and high stock removal rates in demanding applications.

### Abrasive: Zirconia alumina Z

### Workpiece materials

Steel, stainless steel (INOX)



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

### Applications

Fillet weld grinding, chamfering, deburring, contour grinding



### PFERD specification number

Z SG-PLUS-CURVE

| Diameter [Inches]                | Unthreaded arbor hole |                           |                  | Threaded arbor hole |                           |                  | Max. RPM |    |
|----------------------------------|-----------------------|---------------------------|------------------|---------------------|---------------------------|------------------|----------|----|
|                                  | Bore [Inches]         | Grit, size and EDP number |                  | Thread              | Grit, size and EDP number |                  |          |    |
|                                  |                       | 40<br>Size medium         | 40<br>Size large |                     | 40<br>Size medium         | 40<br>Size large |          |    |
| <b>CURVE (PFR – radial type)</b> |                       |                           |                  |                     |                           |                  |          |    |
| 4-1/2                            | 7/8                   | 67192                     | 67339            | 5/8-11              | 67212                     | 67359            | 13,300   | 10 |
| 5                                | 7/8                   | 67196                     | 67343            | 5/8-11              | 67216                     | 67363            | 12,200   | 10 |
| 6                                | 7/8                   | 67200                     | 67347            | 5/8-11              | 67220                     | 67367            | 10,200   | 10 |
| 7                                | 7/8                   | -                         | 67351            | 5/8-11              | -                         | 67371            | 8,500    | 10 |

POLIFAN® CO-CURVE is produced with a high quality ceramic oxide coated material for long service life, and topsized with a cooling agent, which guarantees cool grinding on poor heat-conducting materials, without thermal damage to the workpiece.

With 60 grit material for finer surface finishes, these discs are designed for all demanding grinding applications.

**Abrasive: Ceramic oxide CO**

**Workpiece materials**

Stainless steel (INOX), steel



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**



Fillet weld grinding, chamfering, deburring, contour grinding

**PFERD specification number**

CO SG-PLUS-CURVE

**Stainless steel (INOX)/steel  
SG-PLUS CO-CURVE**



| Diameter [Inches]  | Unthreaded arbor hole |                           |               | Threaded arbor hole |                           |               | Max. RPM |  |
|--|-----------------------|---------------------------|---------------|---------------------|---------------------------|---------------|----------|---|
|  | Bore [Inches]         | Grit, size and EDP number |               | Thread              | Grit, size and EDP number |               |          |   |
|  |                       | 60 Size medium            | 60 Size large |                     | 60 Size medium            | 60 Size large |          |   |
| <b>CURVE (PFR – radial type)</b>  |                       |                           |               |                     |                           |               |          |   |
| 4-1/2  | 7/8                   | 67234                     | 67381         | 5/8-11              | 67258                     | 67405         | 13,300   | 10  |
| 5  | 7/8                   | 67197                     | 67344         | 5/8-11              | 67217                     | 67364         | 12,200   | 10  |

POLIFAN®-CURVE-ALU is specially formulated for non-loading grinding performance on aluminum and soft non-ferrous metals.

Contains no fillers that could leave undesirable residues on the workpiece. The surface can therefore be welded immediately.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Aluminum, non-ferrous metals

**Applications**



Fillet weld grinding, chamfering, deburring, contour grinding

**PFERD specification number**

A SG-PLUS-CURVE ALU

**Aluminum/non ferrous metals  
SG-PLUS CURVE-ALU**



| Diameter [Inches]  | Unthreaded arbor hole |                           | Threaded arbor hole |                           | Max. RPM |  |
|--|-----------------------|---------------------------|---------------------|---------------------------|----------|---|
|  | Bore [Inches]         | Grit, size and EDP number | Thread              | Grit, size and EDP number |          |   |
|  |                       | 40 Size large             |                     | 40 Size large             |          |   |
| <b>CURVE (PFR – radial type)</b>  |                       |                           |                     |                           |          |   |
| 4-1/2  | 7/8                   | 67646                     | 5/8-11              | 67671                     | 13,300   | 10  |
| 5  | 7/8                   | 67651                     | 5/8-11              | 67676                     | 12,200   | 10  |



# POLIFAN® flap discs

Flat (type 27) and conical (type 29) – Universal line PSF



Steel/stainless steel (INOX)  
PSF ZIRKON



General purpose flap discs for multi-purpose use. Built with zirconia coated material for durable performance, even in demanding grinding applications.

**Abrasive: Zirconia alumina Z**

**Workpiece materials**

Steel, stainless steel (INOX)



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**

Surface grinding, weld grinding, blending, chamfering, deburring

**Recommendation for use**

Optimal stock removal rates are achieved with high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps). used at higher application pressures.

**PFERDERGONOMICS®**



**PFEREFFICIENCY®**



**PFERD specification number**

PSF Z

| Diameter [Inches]              | Unthreaded arbor hole |                     |       |       |       |       | Threaded arbor hole |                     |       |       |       | Max. RPM |        |     |
|--------------------------------|-----------------------|---------------------|-------|-------|-------|-------|---------------------|---------------------|-------|-------|-------|----------|--------|-----|
|                                | Bore [Inches]         | Grit and EDP number |       |       |       |       | Thread              | Grit and EDP number |       |       |       |          |        |     |
|                                |                       | 36                  | 40    | 60    | 80    | 120   |                     | 36                  | 40    | 60    | 80    |          |        | 120 |
| <b>Flat (PFF – type 27)</b>    |                       |                     |       |       |       |       |                     |                     |       |       |       |          |        |     |
| 4                              | 5/8                   | -                   | 62004 | 62005 | 62006 | 62007 | 3/8-24              | -                   | 62159 | 62161 | 62163 | 62165    | 15,300 | 10  |
| 4-1/2                          | 7/8                   | 62013               | 62014 | 62015 | 62016 | -     | 5/8-11              | 62032               | 62033 | 62034 | 62035 | -        | 13,300 | 10  |
| 5                              | 7/8                   | 63010               | 63011 | 63012 | 63013 | -     | 5/8-11              | 63014               | 63015 | 63016 | 63017 | -        | 12,200 | 10  |
| 6                              | 7/8                   | -                   | 63051 | 63052 | -     | -     | 5/8-11              | -                   | 63056 | 63057 | -     | -        | 10,200 | 10  |
| 7                              | 7/8                   | 62017               | 62024 | 62025 | 62026 | -     | 5/8-11              | 62027               | 62043 | 62044 | 62045 | -        | 8,500  | 10  |
| <b>Conical (PFC – type 29)</b> |                       |                     |       |       |       |       |                     |                     |       |       |       |          |        |     |
| 4                              | 5/8                   | -                   | 62000 | 62001 | -     | -     | 3/8-24              | -                   | 62990 | 62991 | -     | -        | 15,300 | 10  |
| 4-1/2                          | 7/8                   | 62051               | 62052 | 62053 | 62054 | 62055 | 5/8-11              | 62070               | 62071 | 62072 | 62073 | 62074    | 13,300 | 10  |
| 5                              | 7/8                   | 63030               | 63031 | 63032 | 63033 | 63034 | 5/8-11              | 63039               | 63035 | 63036 | 63037 | 63038    | 12,200 | 10  |
| 6                              | 7/8                   | -                   | 63071 | 63072 | -     | -     | 5/8-11              | -                   | 63076 | 63077 | -     | -        | 10,200 | 10  |
| 7                              | 7/8                   | 62061               | 62062 | 62063 | 62064 | 62065 | 5/8-11              | 62080               | 62081 | 62082 | 62083 | 62084    | 8,500  | 10  |



Conventional POLIFAN® PSF ZIRKON flap disc



Comparison of a POLIFAN® PSF ZIRKON and a POLIFAN® PSF ZIRKON-EXTRA flap disc



POLIFAN® PSF ZIRKON-EXTRA

Produced with 40% more zirconia coated material than standard PSF flap discs, PSF ZIRKON-EXTRA flap discs provide a long service life, an improved surface finish and a soft, cushioned grinding effect.

**Abrasive: Zirconia alumina Z**

**Workpiece materials**

Steel, stainless steel (INOX)



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**

Surface grinding, weld grinding, blending, chamfering, deburring

**Recommendation for use**

While these discs perform on all power outputs, high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps) will achieve optimal results.

**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



**PFERD specification number**

PSF Z-EXTRA

**Steel/stainless steel (INOX)  
PSF ZIRKON-EXTRA**



| Diameter [Inches] | Unthreaded arbor hole |                     |    |    |    | Threaded arbor hole |        |                     |    |    | Max. RPM |  |    |     |
|-------------------|-----------------------|---------------------|----|----|----|---------------------|--------|---------------------|----|----|----------|--|----|-----|
|                   | Bore [Inches]         | Grit and EDP number |    |    |    |                     | Thread | Grit and EDP number |    |    |          |  |    |     |
|                   |                       | 36                  | 40 | 60 | 80 | 120                 |        | 36                  | 40 | 60 |          |  | 80 | 120 |

**Flat (PFF – type 27)**



|       |     |       |       |       |       |       |        |       |       |       |       |       |        |    |
|-------|-----|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|--------|----|
| 4-1/2 | 7/8 | 60457 | 60458 | 60460 | 60461 | 60462 | 5/8-11 | 60485 | 60486 | 60488 | 60489 | 60490 | 13,300 | 10 |
| 5     | 7/8 | 60464 | 60465 | 60467 | 60468 | 60469 | 5/8-11 | 60492 | 60493 | 60495 | 60496 | 60497 | 12,200 | 10 |
| 6     | 7/8 | 60471 | 60472 | 60474 | 60475 | 60476 | 5/8-11 | 60499 | 60500 | 60502 | 60503 | 60504 | 10,200 | 10 |
| 7     | 7/8 | 60478 | 60479 | 60481 | 60482 | 60483 | 5/8-11 | 60506 | 60507 | 60509 | 60510 | 60511 | 8,500  | 10 |

**Conical (PFC – type 29)**



|       |     |       |       |       |       |       |        |       |       |       |       |       |        |    |
|-------|-----|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|--------|----|
| 4-1/2 | 7/8 | 60625 | 60626 | 60628 | 60629 | 60630 | 5/8-11 | 60653 | 60654 | 60656 | 60657 | 60658 | 13,300 | 10 |
| 5     | 7/8 | 60632 | 60633 | 60635 | 60636 | 60637 | 5/8-11 | 60660 | 60661 | 60663 | 60664 | 60665 | 12,200 | 10 |
| 6     | 7/8 | 60639 | 60640 | 60642 | 60643 | 60644 | 5/8-11 | 60667 | 60668 | 60670 | 60671 | 60672 | 10,200 | 10 |
| 7     | 7/8 | 60646 | 60647 | 60649 | 60650 | 60651 | 5/8-11 | 60674 | 60675 | 60677 | 60678 | 60679 | 8,500  | 10 |

The POLIFAN® PSF ZIRKON-TRIM has a composite backer which can be trimmed to extend the service life. The 5/8-11 quick-change version is produced with a zinc hub.

**Abrasive: Zirconia alumina Z**

**Workpiece materials**

Steel, stainless steel (INOX)



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Application**

Surface grinding, weld grinding

**Recommendation for use**

While these discs perform on all power outputs, high-powered angle grinders (please refer to the table on page 4: 4-1/2" electric angle grinder = 8+ amps) will achieve optimal results.

**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



**PFERD specification number**

PSF Z-TRIM

**Steel/stainless steel (INOX)  
PSF ZIRKON-TRIM**

**NEW**



| Diameter [Inches] | Unthreaded arbor hole |                     |    | Threaded arbor hole |        |                     | Max. RPM |  |    |    |
|-------------------|-----------------------|---------------------|----|---------------------|--------|---------------------|----------|--|----|----|
|                   | Bore [Inches]         | Grit and EDP number |    |                     | Thread | Grit and EDP number |          |  |    |    |
|                   |                       | 40                  | 60 | 80                  |        | 40                  |          |  | 60 | 80 |

**Flat (PFF – type 27)**



|       |     |       |       |       |        |       |       |       |        |    |
|-------|-----|-------|-------|-------|--------|-------|-------|-------|--------|----|
| 4-1/2 | 7/8 | 68098 | 68099 | 68100 | 5/8-11 | 68158 | 68159 | 68160 | 13,300 | 10 |
| 5     | 7/8 | 68104 | 68105 | 68106 | 5/8-11 | 68164 | 68165 | 68166 | 12,200 | 10 |
| 7     | 7/8 | 68116 | 68117 | 68118 | 5/8-11 | 68176 | 68177 | 68178 | 8,500  | 10 |

# Textile Wheels

## Depressed centre (type 27) – Performance line SG

**Stainless steel (INOX)  
SG TX-INOX**



Textile wheels are cotton-fibre based abrasive products developed for medium to light grinding, weld blending, deburring and surface finishing of stainless and aluminum.

Textile wheels grind and finish in one operation.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Stainless steel (INOX), aluminum





**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

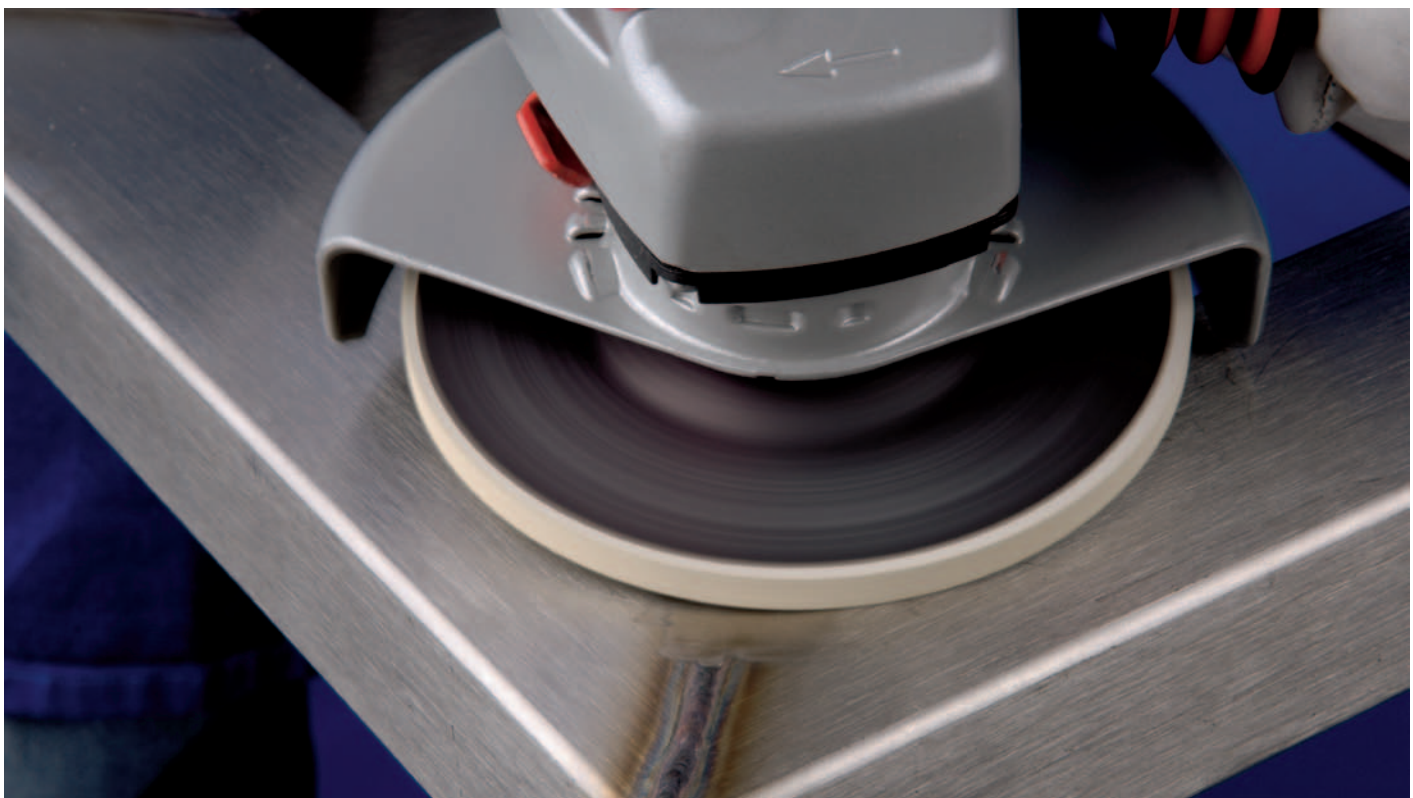
**Application**

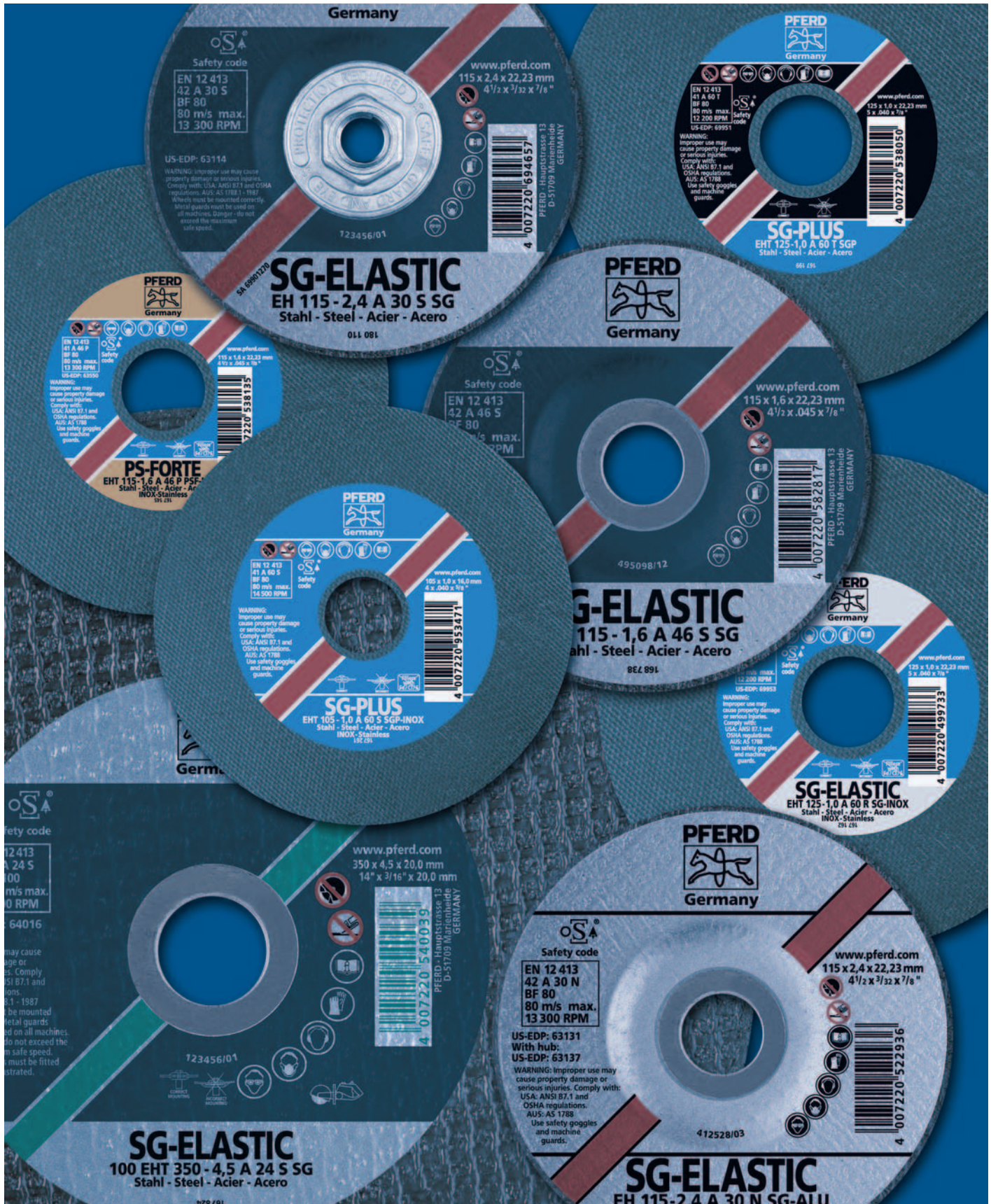
For surface grinding, weld removal, blending, deburring and edge grinding

**PFERD specification number**

A SG TX-INOX

| Diameter [Inches]   | Thickness Nominal [Inches] | Thickness Metric [mm] | Grit | Unthreaded arbor hole |            | Threaded arbor hole |            | Max. RPM |  |
|---|----------------------------|-----------------------|------|-----------------------|------------|---------------------|------------|----------|---|
|   |                            |                       |      | Bore [Inches]         | EDP number | Thread              | EDP number |          |   |
| <b>Depressed centre (type 27)</b>  |                            |                       |      |                       |            |                     |            |          |   |
| 4-1/2   | 1/4                        | 6.3                   | 36   | 7/8                   | 61433      | 5/8-11              | 61442      | 13,300   | 10  |
| 4-1/2   | 1/4                        | 6.3                   | 54   | 7/8                   | 61434      | 5/8-11              | 61443      | 13,300   | 10  |



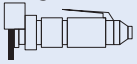
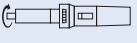




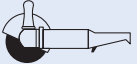









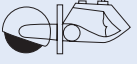




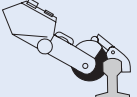



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# Cut-off wheels

## Your quick product selection guide



| Workpiece material  | Product lines | Steel, cast steel   | Stainless steel (INOX)  | Aluminum, non-ferrous metals   | Cast iron, masonry  |  |
|---|---------------|---|---|--|---|--|
| Die grinder<br><br>Straight grinder<br> | SG-PLUS       | <br>A 60 S INOX<br>p. 60       | <br>A 60 S INOX<br>p. 60       | <br>A 60 S INOX<br>p. 60  |   |  |
|   | PSF           | <br>A 60 P<br>p. 61            |   |  |   |  |
| Angle grinder<br>  | SG            | <br>A 46 S<br>p. 46-47         | <br>A 46 R INOX<br>p. 48-49    | <br>A 46 N ALU<br>p. 50-51 |   |  |
|   | SG-PLUS       | <br>A 46 T<br>p. 52-53         | <br>A 46 S INOX<br>p. 54-55    |  |   |  |
|   | PSF           | <br>A 46 P<br>p. 56           | <br>A 46 P INOX<br>p. 58-59   |  |   |  |
|   |               | <br>A 46 P INOX-DUO<br>p. 57 | <br>A 46 P INOX-DUO<br>p. 57 |  |   |  |
| Portable gas saw<br>   | SG            | <br>A 24 S<br>p. 64          | <br>A 24 T DECKING<br>p. 66  |  | <br>AC 24 Q<br>p. 65 | <br>C 24 R<br>p. 65 |
| Rail cut-off machine<br>   | SG            | <br>A 24 Q RAIL<br>p. 66     |   |  |   |  |

### SAFETY WARNING

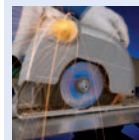
Never use any PFERD or any brand cut-off or grinding wheel on a pistol-grip sander, or on any power tool not specifically designed for use with cut-off and/or grinding wheels. Misuse of grinding and cut-off wheels may result in property damage, serious injury, or death.

It is the responsibility of the operator to use power tools in accordance with the safety

instructions supplied with the product, as well as with ANSI B7.1.

If any operating procedures or instructions are unclear, the operator should consult a supervisor or the product manufacturer prior to use.

**Please use caution with all power tools.**






For circular saw cut-off wheels please refer to page 62-63.






For chop and stationary saw cut-off wheels please refer to page 68.



| Performance line SG   |   |
|---|---|
|  | Widest range of products for use in industry and professional trades. |
|  | <b>Steel</b><br>black centre  |
|  | <b>Steel, stainless steel (INOX)</b><br>black/blue centre             |
|  | <b>Aluminum, non-ferrous metals</b><br>silver centre                  |
|  | <b>Stainless steel (INOX)</b><br>blue centre                          |
|  | <b>Masonry</b><br>green centre  |
|  | <b>Masonry, cast iron</b><br>green/red centre                         |

| Special line SG-PLUS  |  |
|---|--|
|  | For highest possible performance, and for industrial niche applications. |
|  | <b>Steel</b><br>black centre   |
|  | <b>Stainless steel (INOX)</b><br>blue centre                             |

| Universal line PSF  |  |
|---|--|
|  | For general use in industry and professional trades. |
|  | <b>Steel</b><br>black centre                         |
|  | <b>Stainless steel (INOX)</b><br>blue centre         |



### Thin cut-off wheels

PFERD has become a global leader in performance and safety of thin cut-off wheels by continuously striving to maximize the benefits for our users:

- Thinner, faster cutting with little burr formation
- Highest possible productivity
- Comfort and safety

Intensive research, development and targeted implementation in state-of-the-art production facilities guarantee our high quality and safety standards.

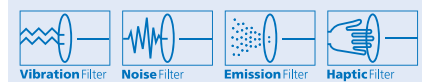
In addition to the high quality standards, health and safety as well as ergonomics play a prominent role at PFERD.

### Thin cut-off wheels for cordless angle grinders

.040" cut-off wheels are highly recommended for cordless angle grinders due to their narrow kerf, their superior cutting characteristics and optimal handling. They deliver more cuts per battery charge, making them very economical.

PFERDERGONOMICS® recommends the thin cut-off wheels to substantially reduce vibration, noise and dust levels during use and to improve working comfort.

The range of extremely thin cut-off wheels ( $\leq .045''$ ) made by PFERD will help to improve the working conditions of the user significantly. The wheels offer advantages including reduced noise values, reduced vibrations under 5 m/s<sup>2</sup> (according to ISO 5349-1+2) and less dust. Working with the exceptionally aggressive and fast PFERD cut-off wheels allows cool cutting with little burr formation and unsurpassed comfort.



PFERDEFFICIENCY® recommends the cut-off wheels for long, fatigue-free and resource saving work, with perfect results in the shortest possible time.



PFERDMEDIA

To see them in action, please visit [pferdusa.com/vthin](http://pferdusa.com/vthin)

# Cut-off wheels

## Depressed centre (type 27) and flat (type 1) – Performance line SG



Steel/cast iron  
Hardness grade S



PFERD's best selling range of cut-off wheels for steel are globally recognized for their fast, free cutting performance and excellent service life. The price/performance ratio makes these wheels a top value worldwide.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Steel, cast iron

**Applications**



Cutting of sections and solid material

**Recommendations for use**

- .045" thickness for fast, convenient cutting with minimized burr formation.
- 3/32" thickness for universal cut-off applications.
- 1/8" thickness for maximum service life with high lateral stability.
- The use of 3" support flanges (page 58) increases wheel stability and ensures precise cutting guidance. Highly recommended for use with thin 7" and 9" flat (type 1) cut-off wheels.

**PFERD specification number**

A 24/30/46 S SG

| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Unthreaded arbor hole |            |   | Threaded arbor hole |            |   | Max. RPM |
|---------------------------------------|-----------------------|-----------------------|------------|---|---------------------|------------|---|----------|
|                                       |                       | Bore [Inches]         | EDP number |  | Thread              | EDP number |  |          |
| <b>Depressed centre (type 27)</b>     |                       |                       |            |   |                     |            |   |          |
| 4 x 3/32                              | 2.4                   | 5/8                   | 63102      | 25  | -                   |            |   | 15,300   |
| 4 x 1/8                               | 3.2                   | 3/8                   | 63101      | 25  | -                   |            |   | 15,300   |
| 4-1/2 x .045                          | 1.6                   | 7/8                   | 63162      | 25  | 5/8-11              | 63182      | 10  | 13,300   |
| 4-1/2 x 3/32                          | 2.4                   | 7/8                   | 63103      | 25  | 5/8-11              | 63114      | 10  | 13,300   |
| 4-1/2 x 1/8                           | 3.2                   | 7/8                   | 63104      | 25  | 5/8-11              | 63115      | 10  | 13,300   |
| 5 x .045                              | 1.6                   | 7/8                   | 63163      | 25  | 5/8-11              | 63183      | 10  | 12,200   |
| 5 x 3/32                              | 2.4                   | 7/8                   | 63105      | 25  | 5/8-11              | 63116      | 10  | 12,200   |
| 5 x 1/8                               | 3.2                   | 7/8                   | 63106      | 25  | 5/8-11              | 63117      | 10  | 12,200   |
| 6 x .045                              | 1.6                   | 7/8                   | 63164      | 25  | 5/8-11              | 63184      | 10  | 10,200   |
| 6 x 1/8                               | 3.0                   | 7/8                   | 63107      | 25  | 5/8-11              | 63119      | 10  | 10,200   |
| 7 x .045                              | 1.9                   | 7/8                   | 63165      | 25  | -                   |            |   | 8,600    |
| 7 x 1/8                               | 3.2                   | 7/8                   | 63109      | 25  | 5/8-11              | 63112      | 10  | 8,600    |
| 9 x 1/8                               | 3.2                   | 7/8                   | 63111      | 25  | 5/8-11              | 63113      | 10  | 6,600    |
| <b>Flat (type 1)</b>                  |                       |                       |            |   |                     |            |   |          |
| 4 x 3/32                              | 2.4                   | 5/8                   | 63502      | 25  | -                   |            |   | 15,200   |
| 4-1/2 x 3/32                          | 2.4                   | 7/8                   | 63503      | 25  | -                   |            |   | 13,300   |
| 5 x 3/32                              | 2.4                   | 7/8                   | 63505      | 25  | -                   |            |   | 12,200   |
| 7 x .045                              | 1.9                   | 7/8                   | 69975      | 25  | -                   |            |   | 8,600    |
| 7 x 1/8                               | 2.9                   | 7/8                   | 63508      | 25  | -                   |            |   | 8,600    |
| 9 x .065                              | 1.9                   | 7/8                   | 69995      | 25  | -                   |            |   | 6,600    |
| 9 x 1/8                               | 2.9                   | 7/8                   | 63510      | 25  | -                   |            |   | 6,600    |

PFERD's best selling range of cut-off wheels for steel are globally recognized for their fast, free cutting performance and excellent service life. The price/performance ratio makes these wheels a top value worldwide.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Steel, cast iron

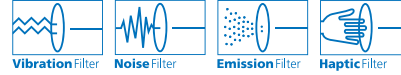
**Applications**

Cutting of sheet metal, sections and solid material

**Recommendation for use**

.040", .045" thickness for fast, convenient cutting with minimized burr formation.

**PFERDERGONOMICS®**




**PFERDEFFICIENCY®**



**PFERD specification number**

A 46/60 S SG



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|---------------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |               |            |   |          |
| 4 x 3/32                              | 2.4                   | 3/8           | 63501      | 25  | 15,300   |
| 4-1/2 x .040                          | 1.0                   | 7/8           | 69947      | 25  | 13,300   |
| 4-1/2 x .045                          | 1.6                   | 7/8           | 69934      | 25  | 13,300   |
| 5 x .040                              | 1.0                   | 7/8           | 69952      | 25  | 12,200   |
| 5 x .045                              | 1.6                   | 7/8           | 69955      | 25  | 12,200   |
| 6 x .045                              | 1.6                   | 7/8           | 69965      | 25  | 10,200   |



**PFERDMEDIA**

To see them in action, please visit [pferdusa.com/vthin\\_assg](http://pferdusa.com/vthin_assg)



# Cut-off wheels

## Depressed centre (type 27) and flat (type 1) – Performance line SG

**Stainless steel (INOX)  
Hardness grade R**



Premium, long-life cut-off wheel for stainless steel (INOX) and high temperature alloys. Smooth, fast cutting action is achieved with minimal contact pressure.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Stainless steel (INOX), high temperature alloys  
Also suitable for carbon steel and all ferrous metals.



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**



For cutting sections and solid material

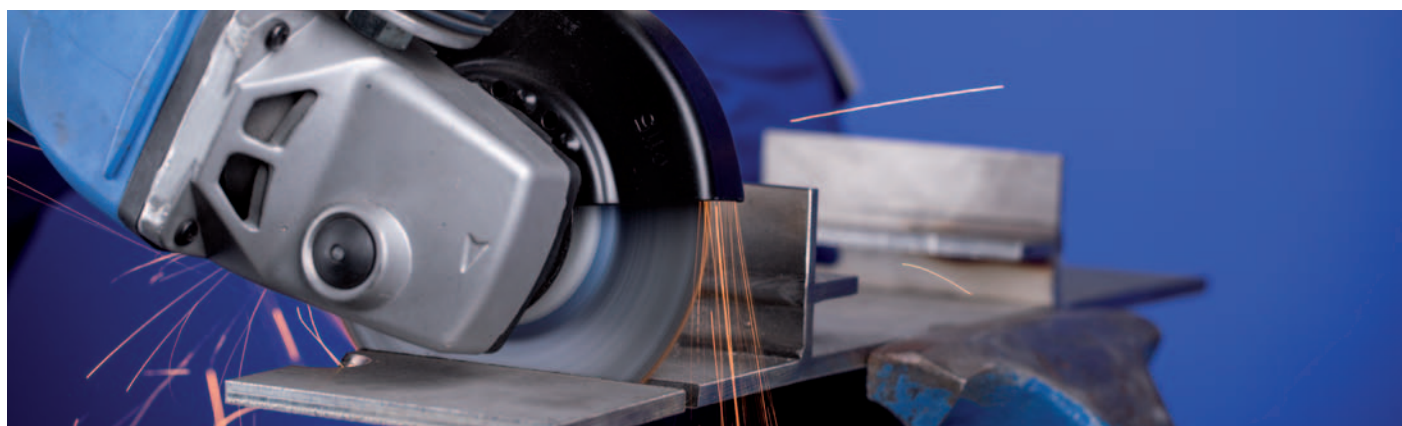
**Recommendations for use**

- .040", .045" thickness for fast, convenient cutting with minimized burr formation.
- 3/32" thickness for universal cut-off applications.
- 1/8" thickness for maximum service life with high lateral stability.
- The use of 3" support flanges (page 58) increases wheel stability and ensures precise cutting guidance. Highly recommended for use with thin, 7" x .045 flat (type 1) cut-off wheels.

**PFERD specification number**

A 24/46/60 R SG-INOX

| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Unthreaded arbor hole |            |   | Threaded arbor hole |            |   | Max. RPM |
|---------------------------------------|-----------------------|-----------------------|------------|---|---------------------|------------|---|----------|
|                                       |                       | Bore [Inches]         | EDP number |  | Thread              | EDP number |  |          |
| <b>Depressed centre (type 27)</b>     |                       |                       |            |   |                     |            |   |          |
| 4-1/2 x .045                          | 1.6                   | 7/8                   | 63167      | 25  | 5/8-11              | 63187      | 10  | 13,300   |
| 4-1/2 x 3/32                          | 2.4                   | 7/8                   | 63202      | 25  | 5/8-11              | 63212      | 10  | 13,300   |
| 4-1/2 x 1/8                           | 3.2                   | 7/8                   | 63204      | 25  | 5/8-11              | 63213      | 10  | 13,300   |
| 5 x .045                              | 1.6                   | 7/8                   | 63168      | 25  | 5/8-11              | 63188      | 10  | 12,200   |
| 5 x 3/32                              | 2.4                   | 7/8                   | 63205      | 25  | 5/8-11              | 63214      | 10  | 12,200   |
| 5 x 1/8                               | 3.2                   | 7/8                   | 63206      | 25  | 5/8-11              | 63215      | 10  | 12,200   |
| 6 x .045                              | 1.6                   | 7/8                   | 63169      | 25  | 5/8-11              | 63189      | 10  | 10,200   |
| 6 x 3/32                              | 2.5                   | 7/8                   | 63208      | 25  | 5/8-11              | 63216      | 10  | 10,200   |
| 7 x .045                              | 1.6                   | 7/8                   | 63170      | 25  | -                   |            |   | 8,600    |
| 7 x 3/32                              | 2.5                   | 7/8                   | 63207      | 25  | 5/8-11              | 63210      | 10  | 8,600    |
| 9 x 3/32                              | 2.5                   | 7/8                   | 63209      | 25  | 5/8-11              | 63211      | 10  | 6,600    |
| <b>Flat (type 1)</b>                  |                       |                       |            |   |                     |            |   |          |
| 4-1/2 x .040                          | 1.0                   | 7/8                   | 63576      | 25  | -                   |            |   | 13,300   |
| 4-1/2 x .045                          | 1.6                   | 7/8                   | 63582      | 25  | -                   |            |   | 13,300   |
| 5 x .040                              | 1.0                   | 7/8                   | 63577      | 25  | -                   |            |   | 12,200   |
| 5 x .045                              | 1.6                   | 7/8                   | 63583      | 25  | -                   |            |   | 12,200   |
| 7 x .045                              | 1.6                   | 7/8                   | 63612      | 25  | -                   |            |   | 8,600    |
| 7 x 3/32                              | 2.5                   | 7/8                   | 63609      | 25  | -                   |            |   | 8,600    |
| 8 x 3/32                              | 2.5                   | 7/8                   | 63610      | 25  | -                   |            |   | 7,600    |
| 9 x 3/32                              | 2.5                   | 7/8                   | 63611      | 25  | -                   |            |   | 6,600    |



Premium, long-life cut-off wheel for stainless steel (INOX) and high temperature alloys. Smooth, fast cutting action is achieved with minimal contact pressure.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Stainless steel (INOX), high temperature alloys  
Also suitable for carbon steel and all ferrous metals.



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

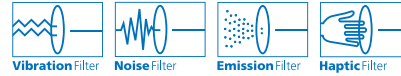
**Applications**

For cutting sheet metal, sections and solid material

**Recommendations for use**

- .040", .045" thickness for fast, convenient cutting with minimized burr formation.
- The use of 3" support flanges (page 58) increases wheel stability and ensures precise cutting guidance. Highly recommended for use with thin, 7" x .045 flat (type 1) cut-off wheels.

**PFERDERGONOMICS®**




**PFERDEFFICIENCY®**



**PFERD specification number**

A 46/60 R SG-INOX



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|---------------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |               |            |   |          |
| 4 x .040                              | 1.0                   | 5/8           | 69943      | 25  | 15,300   |
| 4 x .045                              | 1.6                   | 5/8           | 63613      | 25  | 15,300   |
| 4-1/2 x .040                          | 1.0                   | 7/8           | 69948      | 25  | 13,300   |
| 4-1/2 x .045                          | 1.6                   | 7/8           | 63607      | 25  | 13,300   |
| 5 x .040                              | 1.0                   | 7/8           | 69953      | 25  | 12,200   |
| 5 x .045                              | 1.6                   | 7/8           | 63608      | 25  | 12,200   |
| 6 x .040                              | 1.0                   | 7/8           | 69963      | 25  | 10,200   |
| 6 x .045                              | 1.6                   | 7/8           | 63614      | 25  | 10,200   |
| 7 x .045                              | 1.6                   | 7/8           | 63616      | 25  | 8,600    |



**PFERDMEDIA**

To see them in action, please visit [pferdusa.com/vthin\\_arsg](http://pferdusa.com/vthin_arsg)



# Cut-off wheels

## Depressed centre (type 27) and flat (type 1) – Performance line SG

Aluminum/non-ferrous metals  
Hardness grade N



Engineered for problem-free cutting of aluminum and all soft metals. Paraffin-free design leaves residue-free surface for immediate welding without secondary surface cleaning operation.

**Abrasive: Aluminum oxide A**

Contains no fillers which might leave an undesirable surface residue. The workpiece can be welded right away, without any further treatment.

**Workpiece materials**

Aluminum, non-ferrous metals

**Applications**



Cutting of sections and solid material

**Recommendations for use**

- .045" thickness for fast, convenient cutting with minimized burr formation.
- 3/32" thickness for universal cut-off applications.
- 1/8" thickness for maximum service life with high lateral stability.
- The only type 1 wheels are 1/8" in the table, no need for support flanges.

**PFERD specification number**

A 24/30 N SG-ALU

| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Unthreaded arbor hole |            |   | Threaded arbor hole |            |   | Max. RPM |
|---------------------------------------|-----------------------|-----------------------|------------|---|---------------------|------------|---|----------|
|                                       |                       | Bore [Inches]         | EDP number |  | Thread              | EDP number |  |          |
| <b>Depressed centre (type 27)</b>     |                       |                       |            |   |                     |            |   |          |
| 4-1/2 x .045                          | 1.6                   | 7/8                   | 63177      | 25  | 5/8-11              | 63197      | 10  | 13,300   |
| 4-1/2 x 3/32                          | 2.4                   | 7/8                   | 63131      | 25  | 5/8-11              | 63137      | 10  | 13,300   |
| 5 x .045                              | 1.6                   | 7/8                   | 63178      | 25  | 5/8-11              | 63198      | 10  | 12,200   |
| 5 x 3/32                              | 2.4                   | 7/8                   | 63133      | 25  | 5/8-11              | 63139      | 10  | 12,200   |
| 6 x .045                              | 1.6                   | 7/8                   | 63179      | 25  | 5/8-11              | 63199      | 10  | 10,200   |
| 7 x .045                              | 1.6                   | 7/8                   | 63180      | 25  | -                   |            |   | 8,600    |
| 7 x 1/8                               | 2.9                   | 7/8                   | 63135      | 25  | 5/8-11              | 63141      | 10  | 8,600    |
| 9 x 1/8                               | 2.9                   | 7/8                   | 63136      | 25  | 5/8-11              | 63142      | 10  | 6,600    |
| <b>Flat (type 1)</b>                  |                       |                       |            |   |                     |            |   |          |
| 4-1/2 x 3/32                          | 2.4                   | 7/8                   | 63602      | 25  | -                   |            |   | 13,300   |
| 5 x 3/32                              | 2.4                   | 7/8                   | 63603      | 25  | -                   |            |   | 12,200   |
| 7 x 1/8                               | 2.9                   | 7/8                   | 63605      | 25  | -                   |            |   | 8,600    |
| 9 x 1/8                               | 2.9                   | 7/8                   | 63606      | 25  | -                   |            |   | 6,600    |



Engineered for problem-free cutting of aluminum and all soft metals. Paraffin-free design leaves residue-free surface for immediate welding without secondary surface cleaning operation.

**Abrasive: Aluminum oxide A**

Contains no fillers which might leave an undesirable surface residue. The workpiece can be welded right away, without any further treatment.

**Workpiece materials**

Aluminum, non-ferrous metals

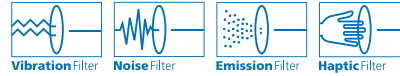
**Applications**

Cutting of sheet metal, sections and solid material

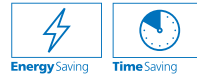
**Recommendations for use**

- .040", .045" thickness for fast, convenient cutting with minimized burr formation.
- The use of 3" support flanges (page 58) increases wheel stability and ensures precise cutting guidance. Highly recommended for use with thin, 7" x .045 flat (type 1) cut-off wheels.

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**PFERDEFFICIENCY®**




Aluminum/non-ferrous metals  
Hardness grade N



**PFERD specification number**

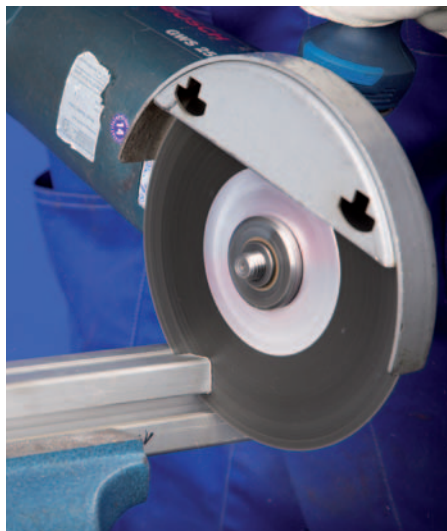
A 46/60 N SG-ALU

| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|---------------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |               |            |   |          |
| 4 x .040                              | 1.0                   | 7/8           | 63588      | 25  | 15,300   |
| 4-1/2 x .040                          | 1.0                   | 7/8           | 63589      | 25  | 13,300   |
| 4-1/2 x .045                          | 1.6                   | 7/8           | 63595      | 25  | 13,300   |
| 5 x .040                              | 1.0                   | 7/8           | 63590      | 25  | 12,200   |
| 5 x .045                              | 1.6                   | 7/8           | 63596      | 25  | 12,200   |
| 6 x .045                              | 1.6                   | 7/8           | 63597      | 25  | 12,200   |
| 7 x .045                              | 1.6                   | 7/8           | 63598      | 25  | 8,600    |



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# Cut-off wheels

## Depressed centre (type 27) and flat (type 1) – Special line SG-PLUS



**Steel**  
**Hardness grade T**



Engineered for maximum productivity in high volume cutting environments. More cuts per wheel results in less down-time and increased productivity. Measurable reductions in labor cost and wheel units significantly reduce overall cutting costs.

**Abrasive: Aluminum oxide A**

**Workpiece material**

Steel

**Applications**



Cutting of sections and solid material

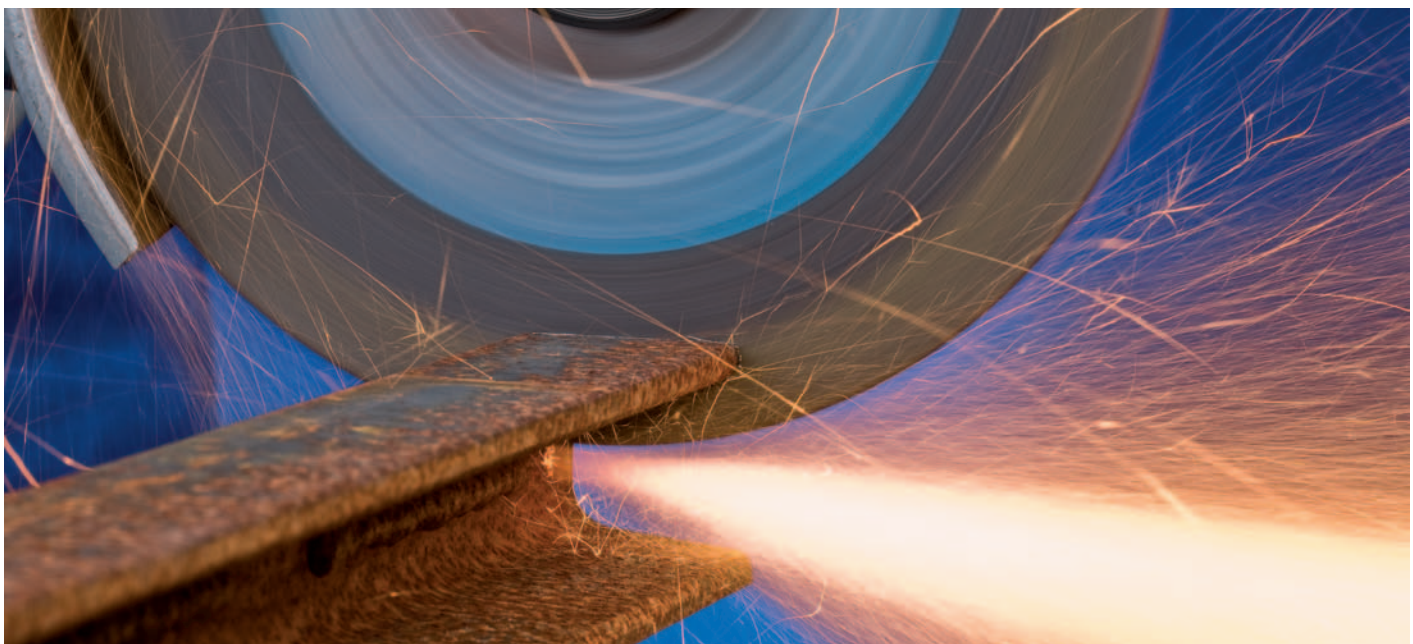
**Recommendation for use**

3/32" thickness for universal cut-off use with maximum service life and high lateral stability.

**PFERD specification number**

A 24/30 T SG-PLUS

| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Unthreaded arbor hole |            |   | Threaded arbor hole |            |   | Max. RPM |
|---------------------------------------|-----------------------|-----------------------|------------|---|---------------------|------------|---|----------|
|                                       |                       | Bore [Inches]         | EDP number |  | Thread              | EDP number |  |          |
| <b>Depressed centre (type 27)</b>     |                       |                       |            |   |                     |            |   |          |
| 4-1/2 x 3/32                          | 2.4                   | 7/8                   | 63118      | 25  | 5/8-11              | 63125      | 10  | 13,300   |
| 5 x 3/32                              | 2.4                   | 7/8                   | 63120      | 25  | 5/8-11              | 63127      | 10  | 12,200   |
| 7 x 3/32                              | 2.8                   | 7/8                   | 63123      | 25  | 5/8-11              | 63128      | 10  | 8,600    |
| 9 x 3/32                              | 2.8                   | 7/8                   | 63124      | 25  | 5/8-11              | 63129      | 10  | 6,600    |
| <b>Flat (type 1)</b>                  |                       |                       |            |   |                     |            |   |          |
| 4-1/2 x 3/32                          | 2.4                   | 7/8                   | 63625      | 25  | -                   | -          | -   | 13,300   |
| 5 x 3/32                              | 2.4                   | 7/8                   | 63626      | 25  | -                   | -          | -   | 12,200   |
| 7 x 3/32                              | 2.8                   | 7/8                   | 63627      | 25  | -                   | -          | -   | 8,600    |
| 9 x 3/32                              | 2.8                   | 7/8                   | 63628      | 25  | -                   | -          | -   | 6,600    |





Engineered for maximum productivity in high volume cutting environments. More cuts per wheel results in less down-time and increased productivity. Measurable reductions in labor cost and wheel units significantly reduce overall cutting costs.

**Abrasive: Aluminum oxide A**

**Workpiece material**

Steel

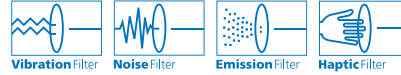
**Applications**

Cutting of sheet metal, sections and solid material

**Recommendations for use**

- .040" thickness for cutting sheet metal.
- .045" thickness for cutting sheet metal, sections, and solid material.

**PFERDERGONOMICS®**




**PFERDEFFICIENCY®**




**PFERD specification number**

A 46/60 T SG-PLUS



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|---------------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |               |            |   |          |
| 4-1/2 x .040                          | 1.0                   | 7/8           | 69946      | 25  | 13,300   |
| 4-1/2 x .045                          | 1.6                   | 7/8           | 63623      | 25  | 13,300   |
| 5 x .040                              | 1.0                   | 7/8           | 69951      | 25  | 12,200   |
| 5 x .045                              | 1.6                   | 7/8           | 63630      | 25  | 12,200   |
| 6 x .045                              | 1.6                   | 7/8           | 63634      | 25  | 10,200   |



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# Cut-off wheels

## Depressed centre (type 27) and flat (type 1) – Special line SG-PLUS

**Stainless steel (INOX)**  
Hardness grade S



Engineered for maximum productivity in high volume cutting environments. More cuts per wheel results in less down-time and increased productivity. Measurable reductions in labor cost and wheel units significantly reduce overall cutting costs.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Stainless steel (INOX)  
Also suitable for carbon steel and all ferrous metals.



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**



Cutting of sections and solid material

**Recommendations for use**

- .045" thickness for fast, convenient cutting with minimized burr formation.
- 3/32" thickness for universal cut-off applications.
- The use of 3" support flanges (page 58) increases wheel stability and ensures precise cutting guidance. Highly recommended for use with thin, 7" x .045" flat (type 1) cut-off wheels.

**PFERD specification number**

A 24/46 S SG-PLUS-INOX

| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Unthreaded arbor hole |            |   | Threaded arbor hole |            |   | Max. RPM |
|---------------------------------------|-----------------------|-----------------------|------------|---|---------------------|------------|---|----------|
|                                       |                       | Bore [Inches]         | EDP number |  | Thread              | EDP number |  |          |
| <b>Depressed centre (type 27)</b>     |                       |                       |            |   |                     |            |   |          |
| 4-1/2 x .045                          | 1.6                   | 7/8                   | 63172      | 25  | 5/8-11              | 63192      | 10  | 13,300   |
| 4-1/2 x 3/32                          | 2.2                   | 7/8                   | 63231      | 25  | 5/8-11              | 63237      | 10  | 13,300   |
| 5 x .045                              | 1.6                   | 7/8                   | 63173      | 25  | 5/8-11              | 63193      | 10  | 12,200   |
| 5 x 3/32                              | 2.2                   | 7/8                   | 63233      | 25  | 5/8-11              | 63239      | 10  | 12,200   |
| 6 x .045                              | 1.6                   | 7/8                   | 63174      | 25  | 5/8-11              | 63194      | 10  | 10,200   |
| 7 x .045                              | 1.6                   | 7/8                   | 63175      | 25  | -                   |            |   | 8,600    |
| 7 x 3/32                              | 2.8                   | 7/8                   | 63235      | 25  | 5/8-11              | 63241      | 10  | 8,600    |
| 9 x 3/32                              | 2.8                   | 7/8                   | 63236      | 25  | 5/8-11              | 63242      | 10  | 6,600    |
| <b>Flat (type 1)</b>                  |                       |                       |            |   |                     |            |   |          |
| 4-1/2 x 3/32                          | 2.2                   | 7/8                   | 63635      | 25  | -                   |            |   | 13,300   |
| 5 x 3/32                              | 2.2                   | 7/8                   | 63636      | 25  | -                   |            |   | 12,200   |
| 6 x .045                              | 1.6                   | 7/8                   | 69865      | 25  | -                   |            |   | 10,200   |
| 7 x .045                              | 1.6                   | 7/8                   | 69872      | 25  | -                   |            |   | 8,600    |
| 7 x 3/32                              | 2.3                   | 7/8                   | 63533      | 25  | -                   |            |   | 8,600    |
| 7 x 3/32                              | 2.8                   | 7/8                   | 63637      | 25  | -                   |            |   | 8,600    |
| 9 x 3/32                              | 2.8                   | 7/8                   | 63638      | 25  | -                   |            |   | 6,600    |



Engineered for maximum productivity in high volume cutting environments. More cuts per wheel results in less down-time and increased productivity. Measurable reductions in labor cost and wheel units significantly reduce overall cutting costs.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Stainless steel (INOX)  
Also suitable for carbon steel and all ferrous metals.



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**

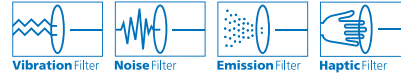
Cutting of sheet metal, sections and solid material

**Recommendations for use**

- .030", .040" thickness for cutting sheet metal.
- .045", .065" thickness for cutting sheet metal, sections and solid material.
- The use of 3" support flanges (page 58) increases wheel stability and ensures precise cutting guidance. Highly recommended for use with thin 9" flat (type 1) cut-off wheels.

**PFERDERGONOMICS®**

Thin cut-off wheels ≤ .045"



**PFERDEFFICIENCY®**



**PFERD specification number**

A 46/60 S SG-PLUS-INOX



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore [Inches] | EDP number |    | Max. RPM |
|---------------------------------------|-----------------------|---------------|------------|----|----------|
| <b>Flat (type 1)</b>                  |                       |               |            |    |          |
| 4 x .030                              | 0.8                   | 5/8           | 69816      | 25 | 15,300   |
| 4 x .040                              | 1.0                   | 5/8           | 69842      | 25 | 15,300   |
| 4 x .045                              | 1.6                   | 5/8           | 69844      | 25 | 15,300   |
| 4-1/2 x .030                          | 0.8                   | 7/8           | 69817      | 25 | 13,300   |
| 4-1/2 x .040                          | 1.0                   | 7/8           | 69845      | 25 | 13,300   |
| 4-1/2 x .045                          | 1.6                   | 7/8           | 69846      | 25 | 13,300   |
| 5 x .030                              | 0.8                   | 7/8           | 69818      | 25 | 12,200   |
| 5 x .040                              | 1.0                   | 7/8           | 69855      | 25 | 12,200   |
| 5 x .045                              | 1.6                   | 7/8           | 69857      | 25 | 12,200   |
| 6 x .040                              | 1.0                   | 7/8           | 69862      | 25 | 10,200   |
| 9 x .065                              | 1.9                   | 7/8           | 63633      | 25 | 6,600    |

**PFERDMEDIA**  
To see them in action, please visit [pferdusa.com/vthin\\_assgpinox](http://pferdusa.com/vthin_assgpinox)



# Cut-off wheels

## Flat (type 1) – Universal line PSF

**Steel**  
Hardness grade P



General purpose wheels provide fast cutting performance and good service life. Recommended for universal cutting applications on steel.

**Abrasive: Aluminum oxide A**

**Workpiece material**

Steel

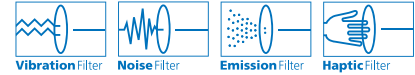
**Applications**

Cutting of sheet metal, sections and solid materials

**Recommendations for use**

- .040", .045" thickness for fast, convenient cutting with minimized burr formation.
- .040" cut-off wheels are highly recommended for cordless angle grinders due to their narrow kerf, their superior cutting characteristics and optimal handling. They deliver more cuts per battery charge, making them very economical.

**PFERDERGONOMICS®**




**PFERDEFFICIENCY®**



**PFERD specification number**

A 46/60 P PSF

| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|---------------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |               |            |   |          |
| 4 x .040                              | 1.0                   | 5/8           | 69940      | 25  | 15,300   |
| 4 x .045                              | 1.6                   | 5/8           | 69944      | 25  | 15,300   |
| 4-1/2 x .040                          | 1.0                   | 7/8           | 69945      | 25  | 13,300   |
| 4-1/2 x .045                          | 1.6                   | 7/8           | 69949      | 25  | 13,300   |
| 5 x .040                              | 1.0                   | 7/8           | 69950      | 25  | 12,200   |
| 5 x .045                              | 1.6                   | 7/8           | 69954      | 25  | 12,200   |
| 6 x .040                              | 1.0                   | 7/8           | 69960      | 25  | 10,200   |
| 6 x .045                              | 1.6                   | 7/8           | 69964      | 25  | 10,200   |





# DUODISC® combination cutting and grinding wheels

Depressed centre (type 27) – Universal line PSF

DUODISC® combination cutting and light deburring wheels conform to all North American and international safety standards.

DUODISC® is ideal for dual-purpose cutting and deburring, on steel and stainless steel. Heavily-reinforced for maximum safety, DUODISC® also offers market-leading performance compared to competitive brands.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Steel, stainless steel (INOX)



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**

Cut-off work, light deburring, light surface grinding

**Recommendations for use**

- 1/8" thickness for maximum service life and high lateral stability.
- .065" thickness for faster cutting with less material waste. Use on thinner workpieces such as sheet metal, sections and tube stock.

**PFERDEFFICIENCY®**



Time Saving

**PFERD specification number**

A 24/46 P PSF-INOX-DUO

**Steel/stainless steel (INOX)  
Hardness grade P**



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Unthreaded arbor hole |            |    | Threaded arbor hole |            |    | Max. RPM |
|---------------------------------------|-----------------------|-----------------------|------------|----|---------------------|------------|----|----------|
|                                       |                       | Bore [Inches]         | EDP number |    | Thread              | EDP number |    |          |
| <b>Depressed centre (type 27)</b>     |                       |                       |            |    |                     |            |    |          |
| 4-1/2 x .065                          | 1.9                   | 7/8                   | 63320      | 10 | 5/8-11              | 63326      | 10 | 13,300   |
| 4-1/2 x 1/8                           | 2.8                   | 7/8                   | 63333      | 10 | 5/8-11              | 63339      | 10 | 13,300   |
| 5 x .065                              | 1.9                   | 7/8                   | 63321      | 10 | 5/8-11              | 63327      | 10 | 12,200   |
| 5 x 1/8                               | 2.8                   | 7/8                   | 63334      | 10 | 5/8-11              | 63340      | 10 | 12,200   |
| 6 x 1/8                               | 3.5                   | 7/8                   | 63335      | 10 | 5/8-11              | 63341      | 10 | 10,200   |
| 7 x 1/8                               | 3.5                   | 7/8                   | 63336      | 10 | 5/8-11              | 63342      | 10 | 8,600    |



**PFERDMEDIA**

To see them in action, please visit [pferdusa.com/vduodisc](http://pferdusa.com/vduodisc)



# Cut-off wheels

## Flat (type 1) – Universal line PSF

**Stainless steel (INOX)  
Hardness grade P**



With fast cutting performance, good service life and low heat generation, these wheels are recommended for general purpose cut-off use on stainless steel.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Stainless steel (INOX)

Also suitable for carbon steel and all ferrous metals.



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

### Applications


Cutting of sections and solid materials

### Recommendations for use

- .040", .045" thickness for fast, convenient cutting with minimized burr formation.
- 3/32" thickness for universal cut-off applications.
- The use of 3" support flanges (page 58) increases wheel stability and ensures precise cutting guidance. Highly recommended for use with thin 7" and 9" flat (type 1) cut-off wheels.

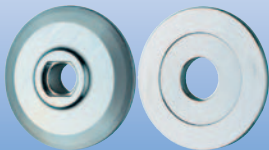
### PFERD specification number

A 24/46/60 P PSF-INOX

| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|---------------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |               |            |   |          |
| 4-1/2 x .040                          | 1.0                   | 7/8           | 63545      | 25  | 13,300   |
| 4-1/2 x .045                          | 1.6                   | 7/8           | 63557      | 25  | 13,300   |
| 4-1/2 x 3/32                          | 2.4                   | 7/8           | 63563      | 25  | 13,300   |
| 5 x .040                              | 1.0                   | 7/8           | 63546      | 25  | 12,200   |
| 5 x .045                              | 1.6                   | 7/8           | 63558      | 25  | 12,200   |
| 5 x 3/32                              | 2.4                   | 7/8           | 63564      | 25  | 12,200   |
| 6 x .045                              | 1.6                   | 7/8           | 63559      | 25  | 10,200   |
| 7 x .045                              | 1.6                   | 7/8           | 63553      | 25  | 8,600    |
| 7 x 3/32                              | 2.5                   | 7/8           | 63566      | 25  | 8,600    |
| 9 x .065                              | 1.9                   | 7/8           | 63554      | 25  | 6,600    |
| 9 x 3/32                              | 2.5                   | 7/8           | 63567      | 25  | 6,600    |

## Accessories

**Flange set  
for cut-off wheels**



Special accessory providing increased lateral stability and improved power transfer to abrasive cut-off wheels.

Made of high-grade tool steel.


### Recommendation for use

Provides superior lateral stability and precise wheel control, especially with 7" and 9" diameter thin cut-off wheels (.040"/.045"/.065" thickness).

### PFERD specification number

SFS 76



| Flange Diameter [Inches] | Flange Diameter [mm] | Machine spindle thread | EDP number |  |
|--------------------------|----------------------|------------------------|------------|---|
| 3                        | 76                   | 5/8-11"                | 69038      | 1   |
| 3                        | 76                   | M14                    | 69037      | 1   |

With fast cutting performance, good service life and low heat generation, these wheels are recommended for general purpose cut-off use on stainless steel.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Stainless steel (INOX)  
Also suitable for carbon steel and all ferrous metals.



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

**Applications**

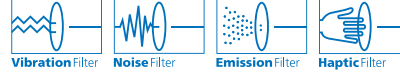
Cutting of sheet metal, sections and solid materials

**Recommendations for use**

■ .040", .045" thickness for fast, convenient cutting with minimized burr formation.

■ .040" cut-off wheels are highly recommended for cordless angle grinders due to their narrow kerf, their superior cutting characteristics and optimal handling. They deliver more cuts per battery charge, making them very economical.

**PFERDERGONOMICS®**




**PFERDEFFICIENCY®**

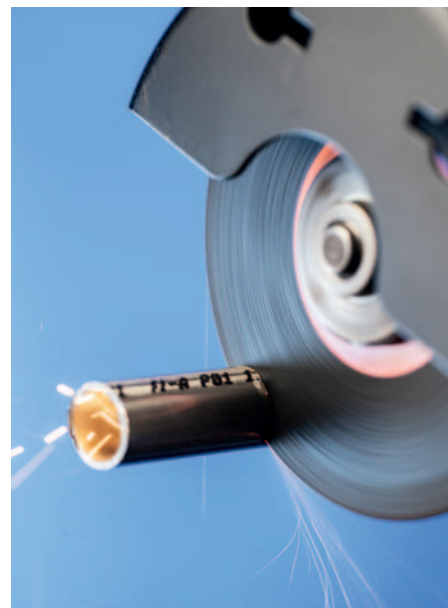


**PFERD specification number**

A 46/60 P PSF-INOX



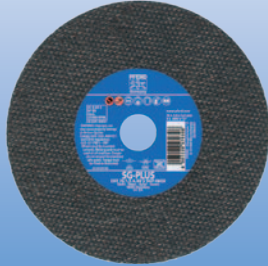
| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|---------------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |               |            |   |          |
| 4-1/2 x .040                          | 1.0                   | 7/8           | 63540      | 25  | 13,300   |
| 4-1/2 x .045                          | 1.6                   | 7/8           | 63550      | 25  | 13,300   |
| 5 x .040                              | 1.0                   | 7/8           | 63541      | 25  | 12,200   |
| 5 x .045                              | 1.6                   | 7/8           | 63551      | 25  | 12,200   |
| 6 x .045                              | 1.6                   | 7/8           | 63552      | 25  | 10,200   |



# Cut-off wheels

## Die grinder, flat (type 1) – Special line SG-PLUS

**Stainless steel (INOX)**  
**Hardness grade S**



Premium die grinder wheels engineered to provide fast, cool cuts with minimal heat and longest possible service life for reduced wheel changes.

**Abrasive: Aluminum oxide A**

**Workpiece materials**

Stainless steel (INOX)  
Also suitable for carbon steel and all non-ferrous metals.



**CONTAMINATION FREE**  
**RATED FOR STAINLESS STEEL (INOX)**

**Applications**

Cutting of sheet metal, sections and solid material

**Recommendations for use**

- .040" thickness for fast cutting action, least material waste.
- .045" thickness for high lateral stability, longer service life.

**PFERDERGONOMICS®**




**PFERDEFFICIENCY®**



**PFERD specification number**

A 46/60 S SG-PLUS-INOX

| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|---------------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |               |            |   |          |
| 3 x .040                              | 1.0                   | 1/4           | 69831      | 50  | 25,000   |
| 3 x .040                              | 1.0                   | 3/8           | 69832      | 50  | 25,000   |
| 3 x .045                              | 1.6                   | 3/8           | 69834      | 50  | 25,000   |
| 4 x .040                              | 1.0                   | 3/8           | 69841      | 25  | 19,000   |
| 4 x .045                              | 1.6                   | 3/8           | 69843      | 25  | 19,000   |
| 5 x .040                              | 1.0                   | 1/2           | 69853      | 25  | 12,200   |

## Accessories

**Mandrels for die grinder wheels**



Accessory for mounting small cut-off wheels on straight grinders. Rugged product with maximum shank fracture resistance.


**Safety note**

When using this arbor, observe the maximum permissible speed [RPM] stated on the enclosed instruction sheet.

**PFERD specification number**

M-DG



| Max. wheel dia. [Inches] | Fits arbor hole size [Inches] | Shank dia. [Inches] | EDP number |  | Clamping width [Inches] | Flange dia. [Inches] | Overall Length [Inches] | Max. RPM |
|--------------------------|-------------------------------|---------------------|------------|---|-------------------------|----------------------|-------------------------|----------|
| 3                        | 1/4                           | 1/4                 | 69026      | 10  | 0 - 5/16                | 3/4                  | 2-1/8                   | 30,000   |
| 3                        | 3/8                           | 1/4                 | 69027      | 10  | 0 - 5/16                | 3/4                  | 2-1/8                   | 30,000   |
| 3                        | 1/4, 3/8                      | 1/4                 | 69028      | 10  | 0 - 5/16                | 3/4                  | 2-1/8                   | 30,000   |
| 4                        | 1/4                           | 1/4                 | 69033      | 10  | 0 - 5/16                | 1                    | 2-1/8                   | 30,000   |
| 4                        | 3/8                           | 1/4                 | 69034      | 10  | 0 - 5/16                | 1                    | 2-1/8                   | 30,000   |
| 4                        | 1/4, 3/8                      | 1/4                 | 69035      | 10  | 0 - 5/16                | 1                    | 2-1/8                   | 30,000   |



General purpose cut-off wheels for use on die grinders. Ideal for working in hard-to-reach areas or close quarters.

**Abrasive: Aluminum oxide A**

**Workpiece material**

Steel

**Applications**

Cutting of sheet metal, sections and solid material

**Recommendations for use**

- Thin cut-off wheels (.035" and .1/16") provide fast and convenient cutting with minimized burr formation.
- Use 1/8" cut-off wheels for maximum service life and high lateral stability.
- Fully reinforced for use in hand-held cut-off work. Ideal for working in hard-to-reach areas or close quarters.


**Ordering note**

Mandrels for die grinder wheels listed on page 60.

**PFERD specification number**

A 24/36/60 P PSF



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Grit | Bore [Inches] | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|------|---------------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |      |               |            |   |          |
| 2 x .035                              | 0.9                   | 60   | 1/4           | 69201      | 50  | 30,000   |
| 2 x .035                              | 0.9                   | 60   | 3/8           | 69203      | 50  | 30,000   |
| 2 x 1/16                              | 1.6                   | 36   | 1/4           | 69205      | 50  | 30,000   |
| 2 x 1/16                              | 1.6                   | 60   | 1/4           | 69207      | 50  | 30,000   |
| 2 x 1/16                              | 1.6                   | 36   | 3/8           | 69209      | 50  | 30,000   |
| 2 x 1/16                              | 1.6                   | 60   | 3/8           | 69211      | 50  | 30,000   |
| 2 x 1/8                               | 3.2                   | 36   | 3/8           | 69217      | 50  | 30,000   |
| 3 x .035                              | 0.9                   | 60   | 1/4           | 69301      | 50  | 25,000   |
| 3 x .035                              | 0.9                   | 60   | 3/8           | 69303      | 50  | 25,000   |
| 3 x 1/16                              | 1.6                   | 36   | 1/4           | 69305      | 50  | 25,000   |
| 3 x 1/16                              | 1.6                   | 60   | 1/4           | 69307      | 50  | 25,000   |
| 3 x 1/16                              | 1.6                   | 36   | 3/8           | 69309      | 50  | 25,000   |
| 3 x 1/16                              | 1.6                   | 60   | 3/8           | 69311      | 50  | 25,000   |
| 3 x 1/8                               | 3.2                   | 36   | 1/4           | 69313      | 50  | 25,000   |
| 3 x 1/8                               | 3.2                   | 60   | 1/4           | 69315      | 50  | 25,000   |
| 3 x 1/8                               | 3.2                   | 24   | 3/8           | 69316      | 50  | 25,000   |
| 3 x 1/8                               | 3.2                   | 36   | 3/8           | 69317      | 50  | 25,000   |
| 3 x 1/8                               | 3.2                   | 60   | 3/8           | 69319      | 50  | 25,000   |
| 4 x .035                              | 0.9                   | 60   | 1/4           | 69401      | 50  | 19,000   |
| 4 x .035                              | 0.9                   | 60   | 3/8           | 69403      | 50  | 19,000   |
| 4 x 1/16                              | 1.6                   | 36   | 1/4           | 69405      | 50  | 19,000   |
| 4 x 1/16                              | 1.6                   | 60   | 1/4           | 69407      | 50  | 19,000   |
| 4 x 1/16                              | 1.6                   | 36   | 3/8           | 69409      | 50  | 19,000   |
| 4 x 1/16                              | 1.6                   | 60   | 3/8           | 69411      | 50  | 19,000   |
| 4 x 1/16                              | 1.6                   | 36   | 5/8           | 69413      | 50  | 19,000   |
| 4 x 1/8                               | 3.2                   | 24   | 3/8           | 69420      | 50  | 19,000   |
| 4 x 1/8                               | 3.2                   | 60   | 3/8           | 69423      | 50  | 19,000   |
| 5 x .035                              | 0.9                   | 60   | 3/8           | 69501      | 50  | 12,200   |
| 5 x 1/16                              | 1.6                   | 36   | 3/8           | 69503      | 50  | 12,200   |
| 6 x .035                              | 0.9                   | 60   | 1/2           | 69601      | 25  | 10,200   |

# Cut-off wheels

## Flat (type 1) for circular saws – Performance line SG

**Steel**  
**Hardness grade S**



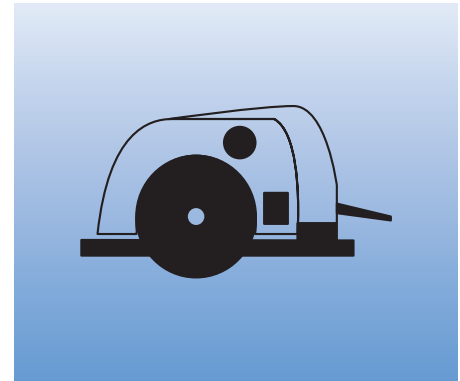
Specially designed cut-off wheels for metal-cutting applications using circular saws. Available in diamond and round arbor hole styles. Diamond version includes 5/8" and 1/2" adapters.


**Abrasive: Aluminum oxide A**

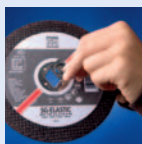
**Workpiece material**  
Steel

**Applications**  
Cutting of sheet metal, sections and solid material

**PFERD specification number**  
A 24 S SG



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore [Inches]      | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|--------------------|------------|---|----------|
| <b>Flat (type 1) Diamond Bore</b>     |                       |                    |            |   |          |
| 7 x 1/8                               | 3.2                   | Diamond, 5/8 - 1/2 | 63842      | 25  | 8,600    |
| 8 x 1/8                               | 3.2                   | Diamond, 5/8 - 1/2 | 63843      | 25  | 7,600    |
| <b>Flat (type 1) 5/8" Round Bore</b>  |                       |                    |            |   |          |
| 7 x .045                              | 1.6                   | 5/8                | 63667      | 25  | 8,600    |
| 8 x 1/8                               | 3.2                   | 5/8                | 63853      | 25  | 7,600    |
| 10 x 1/8                              | 3.2                   | 5/8                | 63762      | 25  | 6,100    |



Adapters are located on page 73 (EDP 69041 and EDP 69042).



Specially designed cut-off wheels for metal-cutting applications using circular saws.

**Abrasive: Aluminum oxide A**

**Workpiece materials**  
Stainless steel (INOX), steel

**Applications**


Cutting of sheet metal, sections, and solid material

**PFERD specification number**

A 46 S SG-PLUS-INOX

**Stainless steel (INOX)**  
**Hardness grade S-INOX**



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|---------------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |               |            |   |          |
| 6 x .040                              | 1.0                   | 5/8           | 69861      | 25  | 10,200   |
| 6 x .045                              | 1.6                   | 5/8           | 69864      | 25  | 10,200   |
| 8 x .045                              | 1.6                   | 5/8           | 69882      | 25  | 7,600    |

## Flat (type 1) for circular saws – Universal line PSF

General purpose cut-off wheels for metal-cutting applications using circular saws.

**Abrasive: Aluminum oxide A**

**Workpiece material**  
Steel

**Applications**


Cutting of sheet metal, sections and solid material

**PFERD specification number**

A 36/60 P PSF

**Steel**  
**Hardness grade P**



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|---------------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |               |            |   |          |
| 6 x .035                              | 0.9                   | 5/8           | 69603      | 25  | 10,200   |
| 6 x 1/16                              | 1.6                   | 5/8           | 69606      | 25  | 10,200   |
| 7 x .035                              | 0.9                   | 5/8           | 69711      | 25  | 8,600    |
| 7 x 1/16                              | 1.6                   | 5/8           | 69719      | 25  | 8,600    |
| 8 x .035                              | 0.9                   | 5/8           | 69801      | 25  | 7,600    |
| 8 x 1/16                              | 1.6                   | 5/8           | 69802      | 25  | 7,600    |

# Large diameter cut-off wheels

## Portable gas saw – Performance line SG

PFERD portable wheels offer market-leading performance. Manufactured with a combination of heavy reinforcement and a high concentration of premium abrasive grain, they are the preferred brand of professional contractors, demolition personnel, rescue personnel and municipalities.

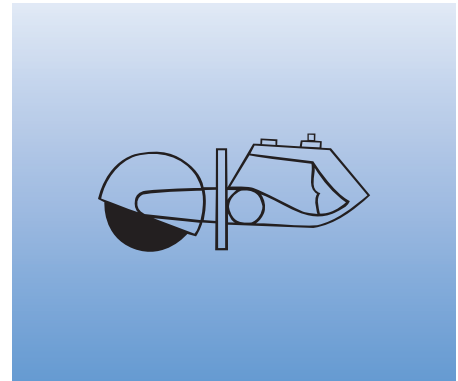
They withstand extremely tough operating environments with high consistency and reliability. Their high safety level, fast cut rate and long service life results generate unparalleled productivity levels and overall cost-savings.

**PFERD portable wheels comply with all U.S. safety standards. In addition, they comply with European and international safety standards which exceed the requirements imposed by ANSI.**



PFERDMEDIA

For more information, please visit [pferdusa.com/portable](http://pferdusa.com/portable)



**Steel**  
**Hardness grade S**



Performance metal-cutting wheels for use on steel and ferrous metals. Aggressive cutting action and long service life. For use on electric or gas-powered portable cut-off saws.


**Abrasive: Aluminum oxide A**

**Workpiece material**  
Steel

**Applications**  
Cutting of sections and solid material

**PFERD specification number**  
A 24 S SG



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore  | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|-------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |       |            |   |          |
| 12 x 1/8                              | 4.0                   | 20 mm | 64010      | 20  | 6,400    |
| 12 x 1/8                              | 4.0                   | 1"    | 64015      | 20  | 6,400    |
| 14 x 3/16                             | 4.5                   | 20 mm | 64016      | 10  | 5,500    |
| 14 x 3/16                             | 4.5                   | 1"    | 64018      | 10  | 5,500    |
| 16 x 3/16                             | 4.8                   | 1"    | 64019      | 10  | 4,800    |



Blended grain portable cut-off wheel designed to cut ductile iron, water main pipe and cast iron quickly and efficiently. For use on electric or gas-powered portable cut-off saws.

**Abrasive: Aluminum oxide A and silicon carbide C**

**Workpiece materials**

Ductile iron, cast iron, steel-reinforced concrete, composite materials

**Application**


Cutting of reinforced solid materials

**PFERD specification number**

AC 24 Q SG

**Cast iron/steel-reinforced concrete**  
**Hardness grade Q**



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore  | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|-------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |       |            |   |          |
| 12 x 1/8                              | 4.0                   | 20 mm | 64118      | 20  | 6,400    |
| 12 x 1/8                              | 4.0                   | 1"    | 64120      | 20  | 6,400    |
| 14 x 3/16                             | 4.5                   | 20 mm | 64123      | 10  | 5,500    |
| 14 x 3/16                             | 4.5                   | 1"    | 64124      | 10  | 5,500    |
| 16 x 3/16                             | 4.5                   | 20 mm | 64117      | 10  | 4,800    |
| 16 x 3/16                             | 4.5                   | 1"    | 64126      | 10  | 4,800    |



Designed for cutting masonry and natural materials on electric and gas-powered portable saws. Aggressive cutting action and long service life.

**Abrasive: Silicon carbide C**

**Workpiece materials**

Masonry, natural stone, refractory brick

**Application**


Cutting of solid material

**PFERD specification number**

C 24 R SG

**Masonry**  
**Hardness grade R**



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore  | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|-------|------------|---|----------|
| <b>Flat (type 1)</b>                  |                       |       |            |   |          |
| 12 x 1/8                              | 4.0                   | 20 mm | 64230      | 20  | 6,400    |
| 12 x 1/8                              | 4.0                   | 1"    | 64235      | 20  | 6,400    |
| 14 x 3/16                             | 4.5                   | 20 mm | 64236      | 10  | 5,500    |
| 14 x 3/16                             | 4.5                   | 1"    | 64238      | 10  | 5,500    |
| 16 x 3/16                             | 4.5                   | 1"    | 64239      | 10  | 4,800    |

# Large diameter cut-off wheels

## Portable gas saw – Performance line SG

**Decking**  
**Hardness grade T**

**NEW**



Special-purpose wheel for cutting thin metal, sheet metal and roof decking. Very long service life in applications that present sharp edges to the wheel.

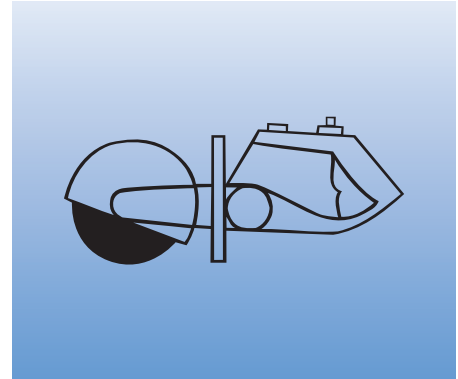
**Abrasive: Aluminum oxide A**

**Workpiece material**  
 Steel

**Application**  
 Cutting of metal decking

**Recommendation for use**  
 Best cutting results are obtained with high-powered machines.

**PFERD specification number**  
 A 24 T SG-DECKING



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore  | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|-------|------------|---|----------|
| 12 x 5/32                             | 3.8                   | 20 mm | 64030      | 20  | 6,400    |
| 12 x 5/32                             | 3.8                   | 1"    | 64032      | 20  | 6,400    |
| 14 x 5/32                             | 3.8                   | 20 mm | 64034      | 10  | 5,500    |
| 14 x 5/32                             | 3.8                   | 1"    | 64036      | 10  | 5,500    |

## Rail cut-off machine – Performance line SG

**Rail**  
**Hardness grade Q**



Heavily-reinforced wheel with premium aluminum oxide grain provides fast, straight cuts on all rail steel track profiles.

**Abrasive: Aluminum oxide A**

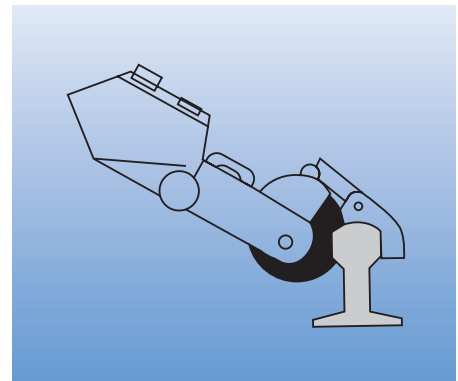
**Workpiece material**  
 Steel


**Application**  
 Rail cutting operations

**Recommendation for use**  
 Best cutting results are obtained with high-powered machines.

**Safety note**  
 For use with rail cutting machines.

**PFERD specification number**  
 A 24 Q SG-RAIL



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Bore  | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|-------|------------|---|----------|
| 12 x 1/8                              | 3.8                   | 20 mm | 64395      | 20  | 6,400    |
| 12 x 1/8                              | 3.8                   | 1"    | 64401      | 20  | 6,400    |
| 14 x 1/8                              | 3.8                   | 20 mm | 64396      | 10  | 5,500    |
| 14 x 1/8                              | 3.8                   | 1"    | 64402      | 10  | 5,500    |
| 16 x 1/8                              | 4.2                   | 20 mm | 64397      | 10  | 4,800    |
| 16 x 1/8                              | 4.2                   | 1"    | 64403      | 10  | 4,800    |



# Chopsaw and stationary cut-off wheels

## General information



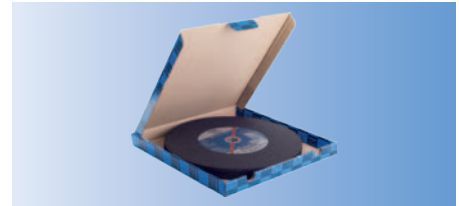
PFERD stationary cut-off wheels are developed, manufactured and tested to the highest quality standards. Research and Development, in-house machine and plant construction, as well as the continuous testing and further development of the quality and safety standards in our own laboratories guarantee the high PFERD quality.

The diameter of the stationary wheels can be produced up to a diameter of 50".

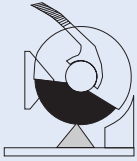








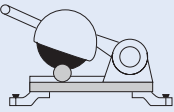


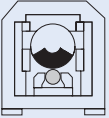





**PFERDMEDIA**

For more information, please visit [www.pferd.com/stationary](http://www.pferd.com/stationary)




### Your quick product selection guide

| Power tool   | Workpiece material  | Product lines | Steel, cast steel   | Stainless steel (INOX)   | Cast iron   |  |
|--|---|---------------|---|--|---|--|
| <b>Portable electric CHOPSAW</b><br><br>Universal cut-off wheels for use on solid materials and steel sections in power tools with a <b>max. power output of 5 horsepower.</b> |   | SG            | <br><b>A 36 K SG-CHOP</b><br><br>p. 69        | <br><b>A 36 K SG-STUD</b><br><br>p. 70 | <br><b>A 36 K SG CHOP-INOX</b><br><br>p. 69 |  |
|  |   | PSF           | <br><b>A 36 K PSF-CHOP</b><br><br>p. 70   |  |   |  |
| <b>CHOPSAW-HD</b><br><br>Universal cut-off wheels for use on solid materials and steel sections.  |   | SG            | <br><b>A 30 L SG-CHOP-HD</b><br><br>p. 71 |  |   |  |
| <b>HEAVY DUTY stationary</b><br><br>High-performance cut-off wheels for use on solid material in <b>high-powered stationary machines.</b>                                     |   | SG            | <br><b>A 24/36 N/Q/S SG-HD</b><br>p. 72  |  | <br><b>ZA 24 R SG-HD</b><br>p. 73  |  |
| <b>Engineered solutions made to customer requirements up to diameter of 50"</b>  | On request, we can produce stationary cut-off wheels in premium PFERD quality up to a diameter of 50", tailor-made to meet the requirements of your job. Please contact us. Our experienced technical advisors will be pleased to assist you. |               |   |  |   |  |



With one middle reinforcement for aggressive cutting with minimized burr formation



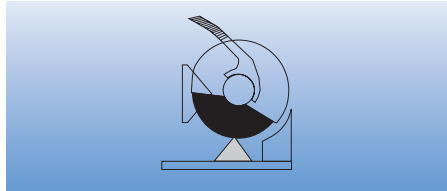
With two outer reinforcements for high lateral stability



PFERD's versatile chop saw wheel features premium aluminum oxide grain and a strong centre reinforcement layer for fast, free cutting action and long service life.

### Advantages

- Very long service life
- Fast cutting
- Low side friction
- For demanding cutting work



**Abrasive: Aluminum oxide A**

### Workpiece material

Steel

### Applications

Cutting of sections and solid material, rebar, tubing, and other small cross sections

### Recommendation for use

Provides excellent cutting results on machines with up to 5 horsepower output.



### PFERD specification number

A 36 K SG-CHOP

Steel

Hardness grade K

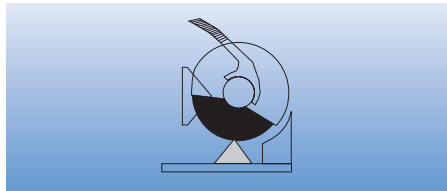


| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---|-----------------------|---------------|------------|---|----------|
| <b>80 m/s</b>  |                       |               |            |   |          |
| 12 x 3/32   | 2.8                   | 1             | 64501      | 20  | 5,100    |
| 14 x 3/32   | 2.8                   | 1             | 64502      | 10  | 4,400    |
| 16 x 1/8  | 3.8                   | 1             | 64503      | 10  | 3,800    |

Also featuring premium aluminum oxide grain and a strong centre reinforcement layer, the INOX version is produced without the addition of fillers which could cause corrosion on stainless steel.

### Advantages

- Very long service life
- Fast cutting
- Low side friction
- For demanding cutting work



**Abrasive: Aluminum oxide A**

### Workpiece material

Stainless steel (INOX)



**CONTAMINATION FREE  
RATED FOR STAINLESS STEEL (INOX)**

### Applications

Cutting of sections and solid material

### Recommendation for use

Provides excellent cutting results on machines with up to 5 horsepower output.



### PFERD specification number

A 36 K SG-CHOP-INOX

Stainless steel (INOX)

Hardness grade K



| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---|-----------------------|---------------|------------|---|----------|
| <b>80 m/s</b>  |                       |               |            |   |          |
| 12 x 3/32   | 2.8                   | 1             | 64510      | 20  | 5,100    |
| 14 x 3/32   | 2.8                   | 1             | 64508      | 10  | 4,400    |
| 16 x 3/32   | 2.8                   | 1             | 64509      | 10  | 3,800    |



# Chopsaw wheels

## Portable electric CHOPSAW wheels – Performance line SG

Steel  
Hardness grade K



Ideal for cutting bundles of metal studs and thin gauge metals, the STUD CUTTER features dual external layers of reinforcement. The smooth side of the wheel eliminate workpiece vibration and chatter.

**Advantages**

- Maximum service life
- High lateral stability for straight cuts
- Optimized for cutting stacks and bundles of building studs

**Abrasive: Aluminum oxide A**

**Workpiece material**

Steel

**Applications**

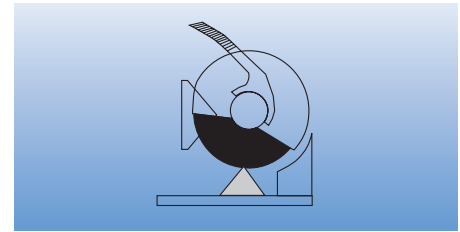
Cuts metal studs, thin rebar, sheet stock and light gauge metal



**Recommendation for use**

Provides excellent cutting results on machines with up to 5 horsepower output.

**PFERD specification number**

A 36 K SG-STUD



| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---|-----------------------|---------------|------------|---|----------|
| <b>80 m/s</b>  |                       |               |            |   |          |
| 12 x 3/32   | 3.0                   | 1             | 64504      | 20  | 5,100    |
| 14 x 3/32   | 3.0                   | 1             | 64505      | 10  | 4,400    |
| 16 x 1/8  | 3.8                   | 1             | 64506      | 10  | 3,800    |

## Portable electric CHOPSAW wheels – Universal line PSF

Steel  
Hardness grade K



General purpose, centre-reinforced chopsaw wheel for universal cutting applications. Provides aggressive cutting action with minimal burr formation.

**Advantages**

- Long service life
- Fast cutting
- Low side friction
- For multipurpose cutting work

**Abrasive: Aluminum oxide A**

**Workpiece material**

Steel

**Applications**

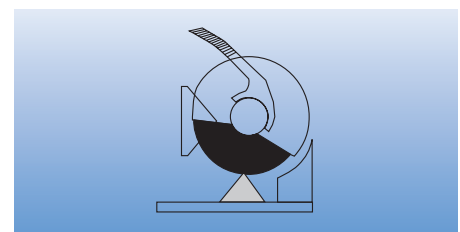
Cutting of sections and solid material, rebar, tubing, and other small cross sections



**Recommendation for use**

Provides excellent cutting results on CHOPSAW machines with up to 5 horsepower.

**PFERD specification number**

A 36 K PSF-CHOP

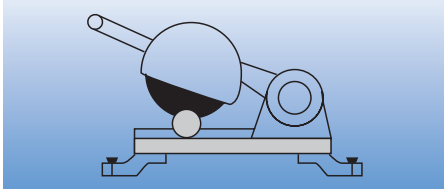


| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---|-----------------------|---------------|------------|---|----------|
| <b>80 m/s</b>  |                       |               |            |   |          |
| 12 x 3/32   | 2.8                   | 1             | 64491      | 20  | 5,100    |
| 14 x 3/32   | 2.8                   | 1             | 64492      | 10  | 4,400    |
| 16 x 1/8  | 3.8                   | 1             | 64493      | 10  | 3,800    |

Dual external reinforcement layers provide high wheel strength and stability. This heavy-duty construction prevents the wheel from flexing when cutting pressure is applied, allowing for straight cuts.

### Advantages

- Very long service life
- High lateral stability
- For demanding cutting work



**Abrasive: Aluminum oxide A**

**Workpiece material**  
Steel

### Applications

Cutting of sections, solid material, profiles and tubes


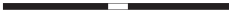
### Recommendation for use

Ideal for portable electric chop saws generating 5 horsepower or higher, and small, low-power stationary machines.

**PFERD specification number**  
A 30 L SG-CHOP-HD

**Steel**  
**Hardness grade L**



| Diameter x thickness<br>nominal<br>[Inches]  | Thickness<br>metric<br>[mm] | Bore<br>[Inches] | EDP<br>number |  | Max.<br>RPM |
|--|-----------------------------|------------------|---------------|---|-------------|
| 80 m/s  |                             |                  |               |   |             |
| 12 x 7/64  | 3.0                         | 1                | 64530         | 20  | 5,100       |
| 14 x 7/64  | 3.0                         | 1                | 64531         | 10  | 4,400       |
| 16 x 1/8   | 4.0                         | 1                | 64532         | 10  | 3,800       |



# Stationary cut-off wheels

## HEAVY DUTY wheels– Performance line SG



**Steel**  
Hardness grade N/Q/S



The stock range of stationary wheels provides a quick, high quality solution for most applications on common saw configurations.

**Advantages**

- Optimal service life
- Optimal cutting results

**Abrasives: Aluminum oxide A**

**Workpiece material**

Steel

**Applications**

Cutting of solid material, profiles and tubes

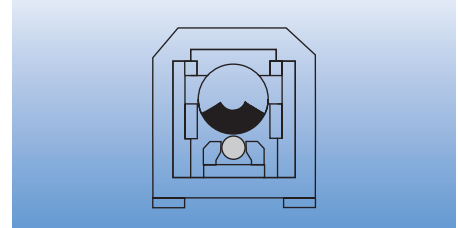
**Recommendations for use**

- Best cutting results are obtained on high-powered stationary machines. 80 m/s wheels run optimally when the saw power rating in horsepower is 75% to 100% of the wheel diameter.

- 100 m/s wheels should be selected when there is 1 horsepower or more per inch of wheel, or for machines operating at higher RPMs. Never exceed maximum RPM listed on wheel label.

**PFERD specification number**

A 24/36 N/Q/S SG-HD



| Diameter x thickness nominal [Inches] | Thickness metric [mm] | Hardness grade | Bore [Inches] | EDP number |  | Max. RPM |
|---------------------------------------|-----------------------|----------------|---------------|------------|---|----------|
| <b>80 m/s</b>                         |                       |                |               |            |   |          |
| 10 x 3/32                             | 2.4                   | S              | 5/8           | 66113      | 20  | 6,100    |
| 10 x 3/32                             | 2.4                   | S              | 1             | 66114      | 20  | 6,100    |
| 12 x 1/8                              | 3.4                   | Q              | 1             | 66115      | 20  | 5,100    |
| 14 x 1/8                              | 3.8                   | Q              | 1             | 66116      | 10  | 4,400    |
| 16 x 1/8                              | 4.0                   | Q              | 1             | 66117      | 10  | 3,800    |
| 20 x 3/16                             | 4.5                   | N              | 1             | 66005      | 5   | 3,100    |
| 20 x 3/16                             | 5.5                   | Q              | 1             | 66123      | 5   | 3,100    |
| 26 x 1/4                              | 6.5                   | N              | 1             | 66132      | 5   | 2,300    |
| <b>100 m/s</b>                        |                       |                |               |            |   |          |
| 10 x 1/8                              | 3.2                   | Q              | 5/8           | 66009      | 20  | 7,600    |
| 12 x 1/8                              | 3.6                   | Q              | 1             | 66011      | 20  | 6,400    |
| 14 x 1/8                              | 4.0                   | Q              | 1             | 66012      | 10  | 5,500    |
| 16 x 3/16                             | 4.4                   | S              | 1             | 66013      | 10  | 4,800    |
| 18 x 3/16                             | 5.0                   | N              | 1             | 66016      | 5   | 4,200    |
| 20 x 1/4                              | 5.7                   | N              | 1             | 66019      | 5   | 3,800    |
| 24 x 1/4                              | 6.0                   | N              | 1             | 66022      | 5   | 3,200    |



Heavy duty cut-off wheels for demanding stationary cutting applications. Designed for aggressive cutting action, leaving a clean and bright cut even in large-diameter material.

**Abrasives:** Zirconia alumina Z and aluminum oxide A

**Workpiece materials**

Steel, cast iron

**Applications**

Cutting of solid material, profiles and tubes

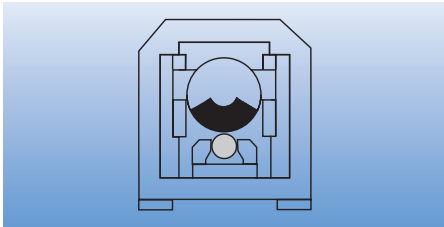
**Recommendation for use**



Best cutting results are obtained in high-powered stationary machines.

**PFERD specification number**

ZA 24 R SG-HD

Steel/cast iron  
Hardness grade R



| Diameter x thickness nominal [Inches]   | Thickness metric [mm] | Bore [Inches] | EDP number |  | Max. RPM |
|---|-----------------------|---------------|------------|---|----------|
| 100 m/s  |                       |               |            |   |          |
| 20 x 3/16   | 5.4                   | 1             | 66045      | 5   | 3,800    |

### Accessories

**Reducer bushings**

Reducing bushings enable secure adjustment of the standard arbor hole to a reduced arbor hole dimension.

**Advantages**

- Flexible adjustment to the prerequisites of the power tool system
- With stop collar, to prevent the ring from pushing through the arbor hole of the cut-off wheel

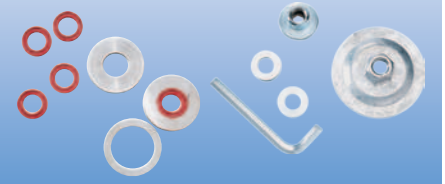
**Safety note**


Ensure that the flanges on the power tool system are backed off in order to mount the wheel securely.

**Quick-change adapter Kit**

Reusable hub for use with 7" and 9" type 27 wheels on right angle grinders with 5/8-11 spindle.

**Reducer bushings and quick-change adapter kit**



| Outside diameter [Inches] from to | EDP number |  |
|-----------------------------------|------------|---|
| <b>Reducer bushings</b>           |            |   |
| 2-3/8 (60 mm) 1 (steel)           | 69020      | 1   |
| 2-3/8 (60 mm) 1-1/4 (steel)       | 69021      | 1   |
| 2-3/8 (60 mm) 1-1/2 (steel)       | 69022      | 1   |
| 2-3/8 (60 mm) 1-3/4 (steel)       | 69023      | 1   |
| 1-1/2 1-1/4                       | 69001      | 1   |
| 1-1/4 1                           | 69007      | 1   |
| 1-1/8 1                           | 69008      | 1   |
| 1 7/8                             | 69003      | 1   |
| 1 20 mm                           | 69004      | 1   |
| 1 5/8                             | 69005      | 1   |
| 7/8 5/8                           | 69006      | 1   |
| diamond bore to 1/2" round        | 69041      | 1   |
| diamond bore to 5/8" round        | 69042      | 1   |
| <b>Adapter kit</b>                |            |   |
| arbor adapter Kit 5/8-11          | 69009      | 1   |

# Stationary cut-off wheels

Engineered solutions made to customer requirements





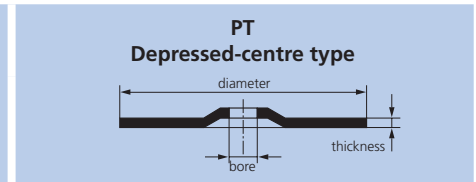
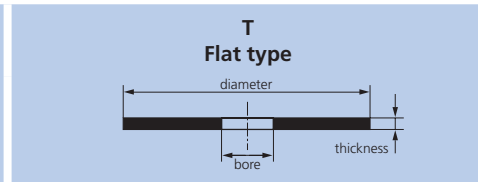
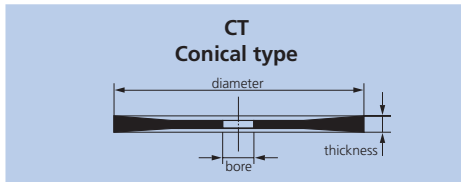
# Stationary cut-off wheels

Engineered solutions made to customer requirements



## Dimensions and designs to meet customer requirements up to a diameter of 50"

If you cannot find the solution for your particular application in our product range, we can produce stationary cut-off wheels in premium PFERD quality on request, tailor-made to meet the requirements of your job.



### Application area

Particularly suitable for use in the steel industry

### Advantages

- Lower side friction
- Particularly advantageous for deep cuts and transverse cutting

### Application area

Suitable for use in the steel and plant construction, in the steel industry and in foundries

### Advantage

- Universally usable

### Application area

Particularly suitable for use in foundries

### Advantages

- Clamping flange does not protrude beyond the cut-off wheel
- Flush cutting of risers for castings is possible
- In general, no post-processing required

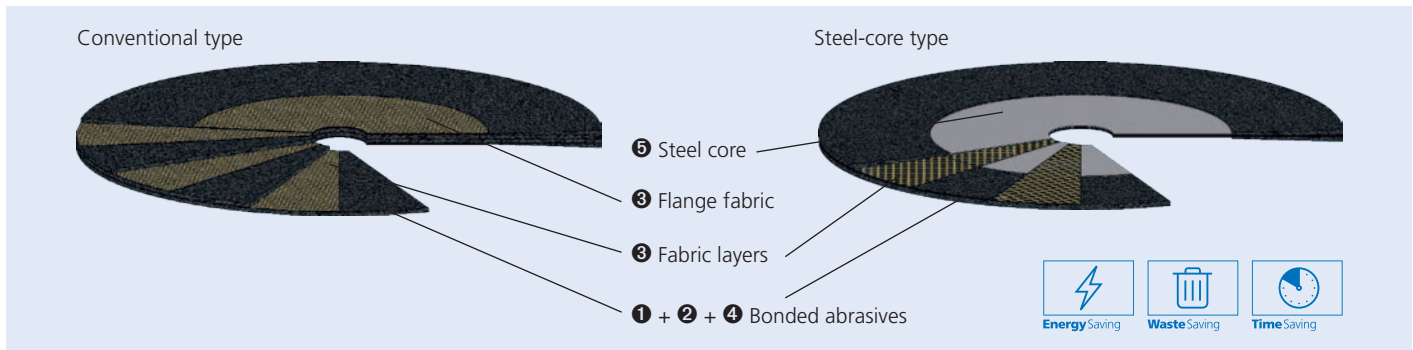
| Outer dia. [Inches] | Arbor hole dia.   | Outer dia. [Inches] | Arbor hole dia.      | Outer dia. [Inches] | Arbor hole dia.      |
|---------------------|-------------------|---------------------|----------------------|---------------------|----------------------|
| 50                  | 5"; 6"; 9"        | -                   | -                    | -                   | -                    |
| 40                  | 100 mm; 5"; 6"    | -                   | -                    | -                   | -                    |
| 32                  | 80 mm; 100 mm; 6" | 32                  | 80 mm; 100 mm; 6"    | 32                  | 80 mm; 100 mm; 6"    |
| -                   | -                 | 28                  | 60 mm; 80 mm; 100 mm | 28                  | 60 mm; 80 mm; 100 mm |
| -                   | -                 | 26                  | 40 mm; 60 mm; 80 mm  | -                   | -                    |
| -                   | -                 | 24                  | 40 mm; 60 mm; 3"     | 24                  | 40 mm; 60 mm; 3"     |
| -                   | -                 | 20                  | 40 mm; 60 mm; 3"     | 20                  | 40 mm; 60 mm; 3"     |
| -                   | -                 | 18                  | 1"; 32 mm; 40 mm     | -                   | -                    |
| -                   | -                 | 16                  | 1"; 32 mm; 40 mm     | 16                  | 1"; 32 mm; 40 mm     |
| -                   | -                 | 14                  | 1"; 32 mm; 40 mm     | -                   | -                    |
| -                   | -                 | 12                  | 1"; 32 mm; 40 mm     | -                   | -                    |
| -                   | -                 | 10                  | 1"; 30 mm; 32 mm     | -                   | -                    |

Other designs and arbor hole diameters are available on request. Please contact us!





### An example of the construction of a cut-off wheel



#### Conventional type

For stationary cut-off grinding, resinoid-bonded, fibre-reinforced cut-off wheels are used, which are essentially composed of four components:

- ① Abrasives
- ② Bond, which holds the abrasive grit in the cut-off wheel
- ③ Fabric layers/flange fabric, which ensure that the cut-off wheel is secure and stable
- ④ Active additives

#### Steel-core type

The steel-core cut-off wheel, developed and patented by PFERD, is characterized by its solid steel body ⑤ constructed in layers which does not contain any abrasive.

The special wheel structure has the following advantages:

- 1. **Use of smaller mounting flanges possible**
  - Advantages
    - Larger usable grinding area
    - Cutting of large material cross sections
    - Reduced cutting costs

#### 2. Increased lateral stability of the cut-off wheel

Advantages

- More stable cut with less vibration
- Less noise
- Longer service life
- Higher feed speeds
- Shorter cutting times

#### 3. Reduced cut-off wheel thickness

Advantages

- Lower drive power output required
- Less loss of workpiece material
- Reduced chips or cinder waste

#### 4. No cost for the disposal of the old wheel

### Possible applications of cut-off grinding

A differentiation is made between cold, warm and hot cutting-off, depending on the material temperature of the workpieces.

| Operating conditions          | Cold cut-off               | Warm cut-off               | Hot cut-off                 |
|-------------------------------|----------------------------|----------------------------|-----------------------------|
| <b>Operating parameters</b>   |                            |                            |                             |
| Material temperature T        | up to 212° F               | 212° F to 1,112° F         | 1,112° F to above 1,832° F  |
| Peripheral speed Vs*          | 80 to 100 m/s              | 80 to 100 m/s              | 80 to 100 m/s               |
| Specific cutting efficiency Z | 4 to 15 cm <sup>2</sup> /s | 8 to 20 cm <sup>2</sup> /s | 15 to 35 cm <sup>2</sup> /s |

\* Please adhere to the maximum operating speed of the cut-off wheels.

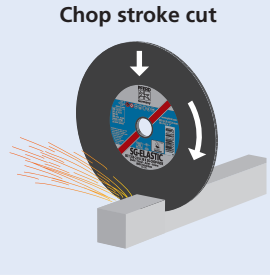
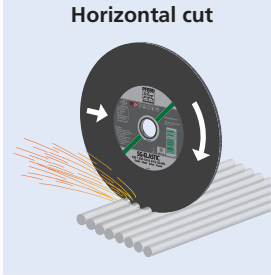
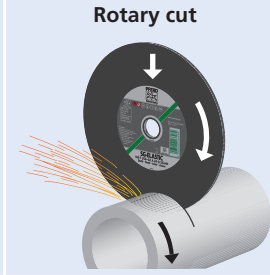
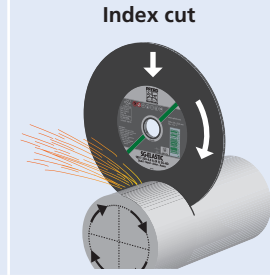
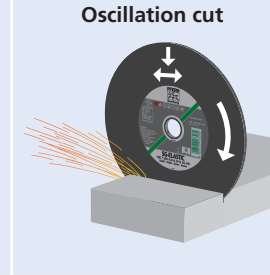


# Stationary cut-off wheels

Engineered solutions made to customer requirements

## Cut-off processes

According to the material and the application, cut-off processes differ depending on the positioning and relative motion of the cut-off wheel and workpiece.

| Chop stroke cut   | Horizontal cut  | Rotary cut   | Index cut  | Oscillation cut   |
|---|---|--|--|---|
|  <p><b>Application area</b></p> <ul style="list-style-type: none"> <li>For cutting individual workpieces as well as small or slim material layers</li> <li>Very common cut-off process</li> </ul> <p><b>Cutting process</b></p> <ul style="list-style-type: none"> <li>Cut-off wheel cuts the workpiece in a radial movement over a joint mid-point</li> </ul> <p><b>Advantages</b></p> <ul style="list-style-type: none"> <li>Low vibration</li> <li>Short cutting times</li> <li>Less load on cut-off wheels for smaller material dimensions</li> </ul> |  <p><b>Application area</b></p> <ul style="list-style-type: none"> <li>For cutting multiple adjacent workpieces, as well as slabs, plates and sheets</li> <li>In particular on the approach side of the rolling mill after the cooling bed</li> </ul> <p><b>Cutting process</b></p> <ul style="list-style-type: none"> <li>Cut-off wheel cuts the entire layer width of different cross sections in one cycle</li> </ul> <p><b>Advantages</b></p> <ul style="list-style-type: none"> <li>Short cutting times</li> <li>Very high throughput capacity</li> </ul> |  <p><b>Application area</b></p> <ul style="list-style-type: none"> <li>For cutting very large pipes as well as round solid material</li> </ul> <p><b>Cutting process</b></p> <ul style="list-style-type: none"> <li>The workpiece is continuously rotated during the cutting process</li> </ul> <p><b>Advantages</b></p> <ul style="list-style-type: none"> <li>Use of small wheel diameters is possible</li> <li>Lower drive power output required</li> <li>Low workpiece temperature</li> </ul> |  <p><b>Application area</b></p> <ul style="list-style-type: none"> <li>For cutting very large round solid material and blocks</li> <li>In particular in steel works and foundries</li> </ul> <p><b>Cutting process</b></p> <ul style="list-style-type: none"> <li>The workpiece is cut with several partial cuts. After each partial cut, the workpiece is rotated (2 - 4 partial cuts, 180 - 90° rotation, depending on the material dimensions).</li> </ul> <p><b>Advantage</b></p> <ul style="list-style-type: none"> <li>Working on very large material cross sections is possible with smaller wheel diameters</li> </ul> |  <p><b>Application area</b></p> <ul style="list-style-type: none"> <li>For cutting sprues and risers in foundries</li> <li>Demanding tasks in wet cut-off grinding</li> </ul> <p><b>Cutting process</b></p> <ul style="list-style-type: none"> <li>Cut-off wheel moves into the material to be cut with additional forward and backward movements in the horizontal cut</li> </ul> <p><b>Advantages</b></p> <ul style="list-style-type: none"> <li>Lower drive power output required</li> <li>Low workpiece temperature</li> <li>Optimal removal of chips</li> </ul> |

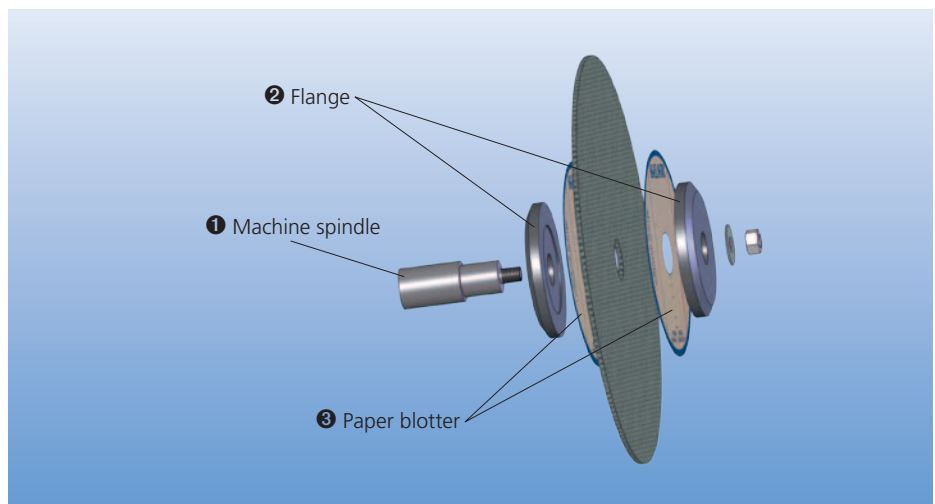
## Proper mounting of cut-off wheels

The correct mounting of the cut-off wheel is a prerequisite for optimal performance and is essential for the safety of the user. The adjacent illustration shows the proper procedure:

- Machine spindle with high concentricity
- Equally sized flanges
- Paper blotters, if required for secure clamping and safe use

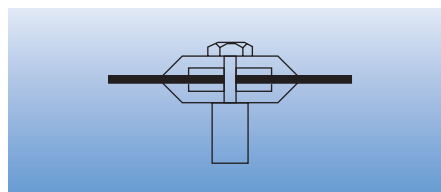
### Our recommendations

- After every second wheel change, change the intermediate paper blotters
- For a wheel diameter > 16" / 400 mm, always use paper blotters

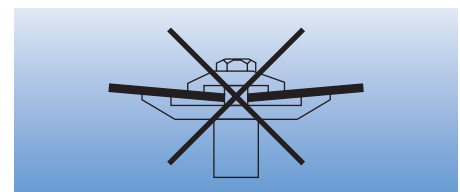


## Safety notes

The safe use of PFERD products depends on proper mounting systems. Both flanges between which a wheel is mounted must have the same outer diameter and same support area (according to EN 13218, ANSI B7.1, AS 1788.1).



correct



incorrect

### Packaging

Three packaging units and styles are available to meet your individual requirements. Please describe packaging preferences when ordering.



Crate



Pallet



Carton

### Transport and storage

To avoid damage to the cut-off wheels through improper transport or adverse environmental influences during storage, e.g. UV radiation, temperature or humidity, please observe the following recommendations:

- As far as possible, transport and store cut-off wheels in their original packaging lying on a flat surface, e.g. on a shelf or vertically in racks
- Avoid bending the wheels
- Ensure that the cut-off wheels are stored in dry, frost-free rooms with consistent temperatures
- Use supplies in the order of their arrival

#### Recommendation

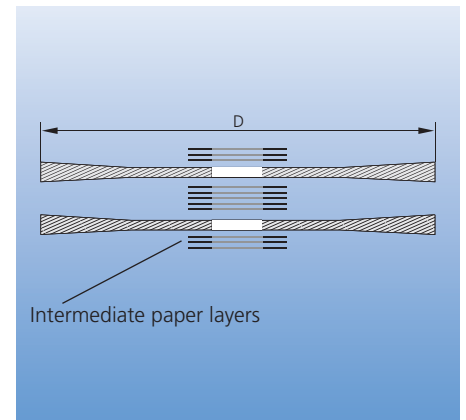
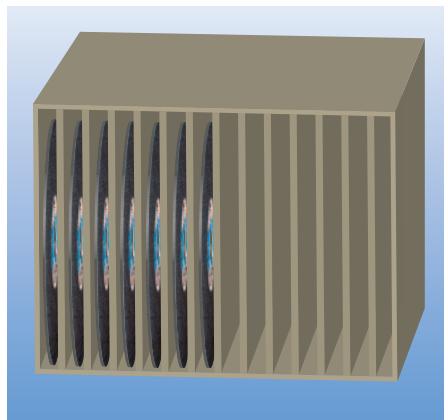
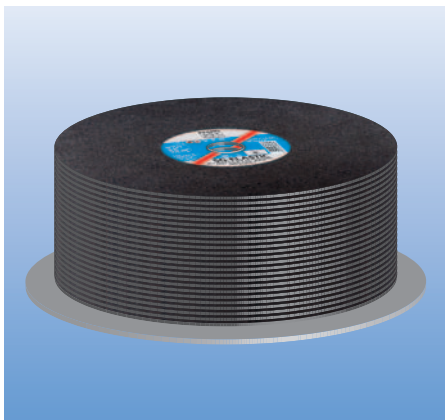
Room temperature: 65° F – 71° F  
 Relative humidity: 45–65%  
 No direct sunlight



#### Advice on the storage of conical wheels (CT)

Conical cut-off wheels must be stacked with paper blotters, so that the tapered area is supported and bending of the cut-off wheels is avoided.

PFERD supplies conical cut-off wheels with intermediate paper layers included.





**TRUST BLUE**



# ADVANCE BRUSH is now PFERD

## New name, same quality!

The tradition of quality American brush manufacturing continues on under the brand name PFERD.

ADVANCE BRUSH is a leader in the manufacture of industrial quality power and maintenance brushes, having served the U.S. market for over 100 years. Headquartered in Marienheide, Germany, PFERD has been manufacturing premium products for metal finishing since 1799.

Since joining the global family of PFERD companies in 1997, ADVANCE BRUSH has strengthened its position by investing in state-of-the-art production equipment, modern quality control systems, and a new manufacturing and distribution facility in Milwaukee, Wisconsin.

- Joint know-how for excellent quality, top performance and efficiency
- Unique broad product range under the brand name PFERD
- Over 200 years experience
- Industrial quality made in the USA
- Optimal service package



### PFERDMEDIA

You will receive more information on PFERD products here or at [www.pferd.com](http://www.pferd.com)

PFERD brush manufacturing plant, Milwaukee, WI



PFERD Marienheide, Germany





**New name, same quality!**



**2015**

- Over 20 subsidiaries and more than 100 international trading partner representatives worldwide
- More than 1,800 employees worldwide
- 6 manufacturing sites

**2015**

The same brushes sold under the ADVANCE BRUSH brand name will now be sold as PFERD brushes.

**2007**

Extension of the logistics center

**2000**

Founding member of the "Organisation for the Safety of Abrasives" (oSa)

**1979**

PFERD INC., USA is founded

**1961-1975**

Establishment of numerous foreign subsidiaries

**1960**

Technical brushes become part of the PFERD product range

**1936-1960**

Expansion of the PFERD product range

**1799**

PFERD begins making files for farriers in Rüggeberg in the Westphalian region of Germany

**1997**

The MILWAUKEE BRUSH Manufacturing Company becomes part of the PFERD family of companies.

**1990**

ADVANCE MILWAUKEE BRUSH becomes The MILWAUKEE BRUSH Manufacturing Company.

**1984**

ADVANCE BRUSH is acquired by MILWAUKEE BRUSH of Menomonee Falls, Wisconsin.

**1968**

MANUFACTURERS' BRUSH Company changes its name to ADVANCE BRUSH.



**1911**

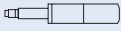
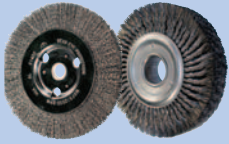
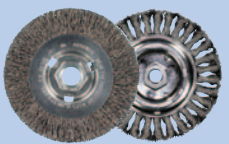

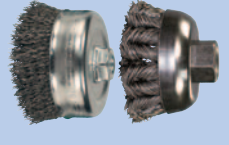
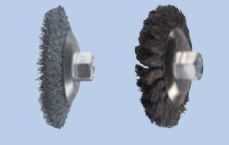
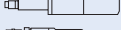
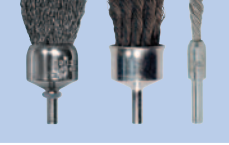
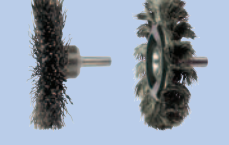
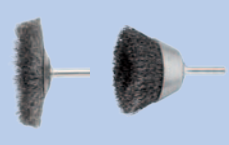
The MANUFACTURERS' BRUSH Company begins operations in Cleveland, Ohio.

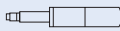



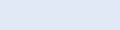
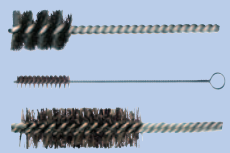
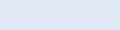
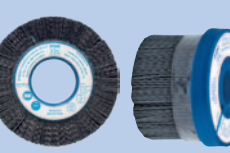








# Power and maintenance brushes

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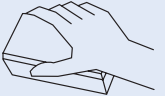


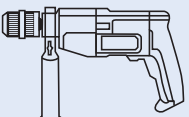
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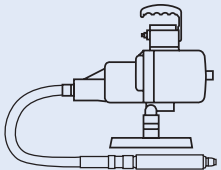
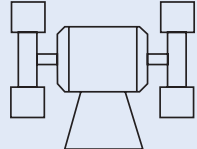
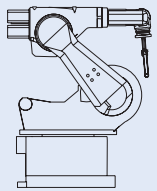
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# Power and maintenance brushes

## General information



PFERD Milwaukee Brush, Milwaukee, Wisconsin, USA; manufacturing plant

PFERD offers a full and comprehensive range of high-grade products for cutting and machining materials to any desired condition, from coarse to mirror-polish. PFERD power brushes are used where exacting demands are placed on efficiency and outcome of cutting and surface conditioning operations.

### Private label programs

PFERD has been a supplier of private label brushes for many years. If you are interested in getting details about our extensive offering, please contact customer service. Our national accounts manager will contact you to review your requirements and prepare a comprehensive proposal for you.

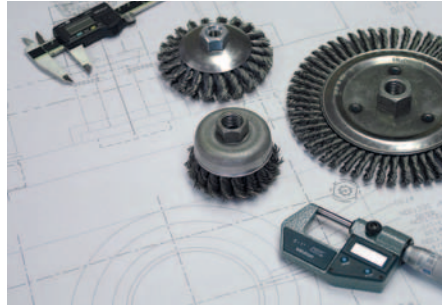
### Quick product selection guide

The PFERD brush offering is separated into the two categories: **power brushes** (wire and nonwire brushes) and **maintenance brushes**.

The quick product selection guide for power brushes may be found on pages 8-9, and for maintenance brushes on page 75.

#### Power brushes

- **Industrial quality power wire brushes** are designed to be used on power tools and are available in a large variety of brush styles and wire configurations. This group of brushes consists of carbon steel, stainless steel (INOX) and brass filled wire in crimped, knotted and ECAP® configurations.
- **Industrial quality power non-wire brushes** encompass a broad range of M-BRAD® abrasive filament brushes, as well as tampico and nylon wheel brushes.
- **Economy line power brushes** contain a selection of the most popular brush sizes and styles used by contractors and tradesmen in single-use, shift-work environments.



### Special products made to order

If your application requires power brushes with metric threads or shanks, PFERD will be happy to consider your request.

If our extensive stock range does not present the ideal solution for your particular application, we can produce brushes specifically to meet your requirements.

We will take into account your application requirements, as well as technical drawings and samples. Please contact us.



#### 1 Select filament material

First, the optimum filament material for the brush application is chosen to suit the material to be brushed. The filament materials are colour-coded for easier recognition:

|                             |          |
|-----------------------------|----------|
| Carbon steel wire           | – grey   |
| Stainless steel wire (INOX) | – blue   |
| Brass/bronze wire           | – yellow |
| M-BRAD® abrasive filament   | – red    |
| Nylon/natural bristle       | – brown  |

#### 2 Select filament style

Depending on the desired brushing effect, you can choose between wire filament (crimped wire or knot wire), and M-BRAD® abrasive filament.

#### 3 Select brush

The recommended PFERD power brush can be found below your application.

**Maintenance brushes** are available in a variety of styles including scratch brushes, push brooms, chip brushes, painting sundries, and more. These are offered with a selection of filament types including wire, natural, and synthetic.

In order to help you find the optimal power brush/maintenance brush quickly, we have compiled charts on pages 8-9 for power brush selection and page 75 for maintenance brush selection.



### Technical customer support

Our sales consultants, customer service and technical support agents will be glad to assist you by phone or on-site to optimize your brushing applications. Please contact us:

**Canada Phone: (905) 501-1555**

**Toll-Free: (866) 245-1555**

**USA Phone: (262) 255-3200**

**Toll-Free: (800) 342-9015**

You will find our worldwide contact information at [www.pferd.com](http://www.pferd.com).

### PFERD PRAXIS

PFERD PRAXIS brochures contain valuable information on material properties, and technical tips on the use of PFERD products. Visit [pferdusa.com/info](http://pferdusa.com/info) to request a free copy or to download a pdf version.

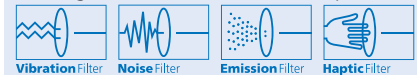
### PFERDVALUE® –

#### Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD products offer measurable added value.

Discover **PFERDERGONOMICS®** and **PFERDEFFICIENCY®**

As part of **PFERDERGONOMICS®**, PFERD offers ergonomically optimized products and power tools that contribute to greater safety and working comfort, and thus to health protection.



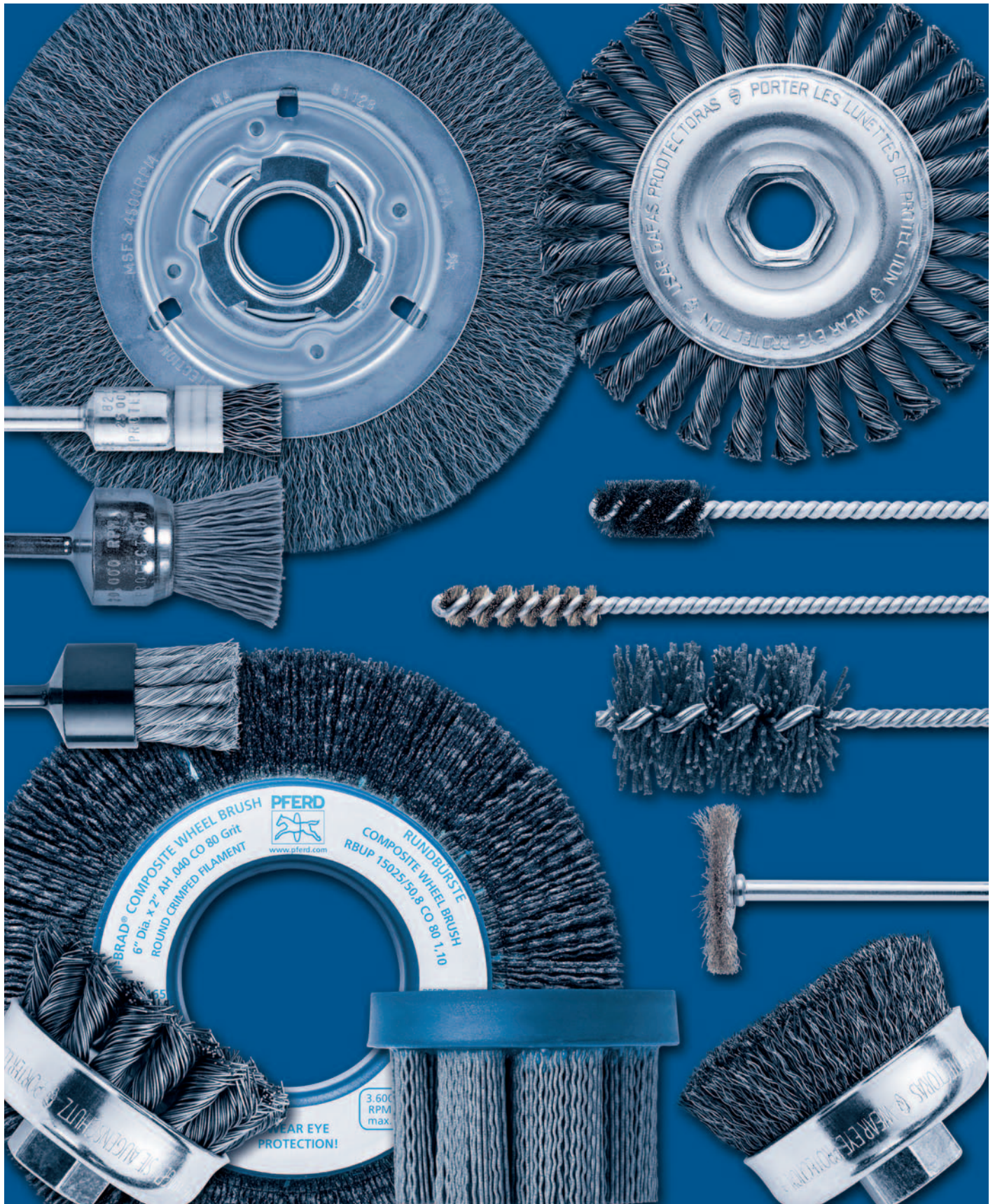
As part of **PFERDEFFICIENCY®**, PFERD offers innovative, high-performance product solutions and power tools with outstanding added value.



#### PFERDMEDIA

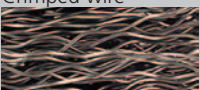















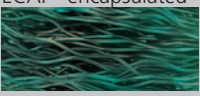


















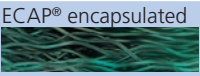











For more information, a complete brochure is available. Please visit [pferdusa.com/pferdvalue](http://pferdusa.com/pferdvalue) to request a free copy or to download a pdf version.




































































































































# Power brushes

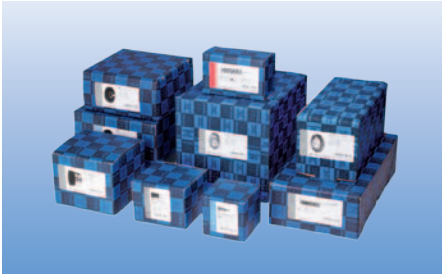
## Quick product selection guide

| ① Selection of filament material<br>From the workpiece material to the filament material  |  | ② Selection of filament style<br>From the filament material to the filament style   | ③ Selection of brushes   |  |   |  |
|---|--|---|--|--|---|--|
| Workpiece material  | Filament material  | Filament style  | Weld preparation   |  | Honing  |  |
|   |  |   | Scale removal  | Cleaning oxidation/<br>discolouration  |   |  |
|   |  |   | Page   | Page   | Page  | Page   |
| <ul style="list-style-type: none"> <li>■ Construction steel</li> <li>■ Carbon steel</li> <li>■ Alloy steel</li> <li>■ Non-alloy steel</li> <li>■ Titanium</li> <li>■ Concrete</li> </ul>            | <b>Carbon steel wire</b><br><br><b>Colour code: grey</b><br><br><ul style="list-style-type: none"> <li>■ Tough, high tensile strength</li> <li>■ Long service life</li> <li>■ Recommended for high rotational speeds</li> <li>■ General purpose</li> <li>■ Low cost</li> </ul> | Crimped wire<br>   |  |  |  17<br> 40-41<br> 43       |  18-20, 27<br> 35, 39<br> 77-79       |
|   |  | Knot wire/COMBITWIST®<br>  |  30-32<br> 36-38     |  24<br> 36-38<br> 42-43 |  29<br> 39<br> 44          |  |
|   |  | ECAP® encapsulated<br>   |  21<br> 35        |  33<br> 46  |   |  |
| <ul style="list-style-type: none"> <li>■ Stainless steel (INOX)</li> <li>■ Aluminum</li> <li>■ Brass</li> <li>■ Wood</li> <li>■ Plastics</li> <li>■ Copper</li> <li>■ Non-ferrous metals</li> </ul> | <b>Stainless steel wire (INOX)</b><br><br><b>Colour code: blue</b><br><br><ul style="list-style-type: none"> <li>■ Corrosion resistant</li> <li>■ Resistant to high thermal loads</li> <li>■ Does not leave any corrosive residues behind on the workpiece</li> </ul>          | Crimped wire<br>   |  |  |  17<br> 40-41<br> 43 |  18-20, 27<br> 35, 39<br> 77-79 |
|   |  | Knot wire/COMBITWIST®<br>  |  30-32<br> 36-38 |  29<br> 42-43  |  36-39<br> 49   |  |
|   |  | ECAP® encapsulated<br>   |  |  |   |  |
| <ul style="list-style-type: none"> <li>■ Brass/bronze</li> <li>■ Non-ferrous metals</li> </ul>  | <b>Brass/bronze wire</b><br><br><b>Colour code: yellow</b><br><br><ul style="list-style-type: none"> <li>■ Works without sparking</li> <li>■ Flexible</li> </ul>   | Crimped wire<br>   |  |  |  18  |  |
|   |  | Knot wire<br>  |  |  |  28<br> 42  |  37   |
| <ul style="list-style-type: none"> <li>■ Steel</li> <li>■ Stainless steel (INOX)</li> <li>■ Nickel alloys</li> <li>■ Aluminum and non-ferrous metals</li> </ul>                                     | <b>M-BRAD® abrasive filament silicon carbide, ceramic oxide or aluminum oxide</b><br><br><b>Colour code: red</b>   | Crimped<br><br> |  |  |   |  56-57<br> 58<br> 59-60         |

| ③ Selection of brushes  |  |   |  |   |  |  |   |  |   |
|---|--|---|--|---|--|--|---|--|---|
| Deburring   |  |   |  | Cleaning  |  |  |   | Surface texturing  |   |
| Internal  |  | Edge/surface  |  | Internal/tube, pipe I.D.  |  | Edge/surface   |   | Surface texturing  |   |
|          |  |          |  |          |  |             |   |                 |   |
| Page  | Page   | Page  | Page   | Page  | Page   | Page   | Page  | Page   | Page  |
|  40-41   |  49         |  18-20   |  27       |  40-41   |  49         |  17-20       |  27      |  18-20          |  35      |
|  52-53   |  47         |  43      |  45-46    |  52-53   |  47         |  43          |  39      |  |   |
|  50      |  51, 99-101 |  35, 39  |  40-41    |  50      |  51, 99-101 |  40-41       |  45-46   |  |   |
|  42      |  43         |  22-26   |  36-38    |  42      |  43         |  28-29       |  36-38   |  22-26, 28-29   |  36-38   |
|   |  |  39      |  44       |   |  |  39          |  42-43   |  |   |
|   |  |   |  |  44      |  |  44          |   |  |   |
|  41     |  |  33     |  33      |  41     |  |  |   |  |   |
|   |  |  35    |  46     |   |  |  |   |  |   |
|  40    |  41       |  18-20 |  27     |  40    |  41       |  17-20, 27 |  35    |  18-20        |  35    |
|  52-53 |  47       |  43    |  35, 39 |  52-53 |  47       |  39        |  40-41 |  |   |
|  49    |  99       |  40-41 |  45-46  |  49    |  99       |  43        |  46    |  |   |
|  42    |  43       |  22-23 |  36-38  |  42    |  43       |  28-29     |  36-38 |  22-26, 28-29 |  36-38 |
|   |  |  39    |  44     |   |  |  39        |  42-43 |  |   |
|  41    |  |   |  |  41    |  |  |   |  |   |
|  47    |  52-53    |  43    |  18     |  47    |  52-53    |  18        |  43    |  18           |   |
|   |  |  28    |  37     |   |  |  28        |  42    |  28           |  37    |
|   |  |   |  |   |  |  37        |   |  |   |
|  62    |  63       |  56-57 |  58     |  62    |  63       |  |   |  56-57        |  58    |
|  64    |  |  59-60 |  61     |  64    |  |  |   |  59-60        |  61    |
|   |  |   |  61     |   |  |  |   |  |  61    |

# Power brushes

## PFERD product presentation



### Industrial packaging (standard)

All brushes ship in a robust blue PFERD standard box.

Box labels information includes box quantity, physical product description, and maximum safe free speed guidelines.

In addition to the brushes the inside of the box contains ABMA/ANSI safety information and in many cases vapor corrosion inhibitors.

### Advantages

- Robust packaging suited to the product.
- EDP number on the packaging label.
- Guidelines for safe use in each brush package.



### Point-of-purchase packaging (POP range)

A selection of the most widely used industrial power brushes is available in singular sales promoting self-service packs. These products can be neatly displayed in our PFERD TOOL-CENTER for maximum impact and appeal at the point of sale.

The brush and its characteristics are easy to see through the clear plastic clamshell.

A multi-language safety sheet is enclosed with every brush and provides valuable advice on the use of PFERD power brushes.

Brushes available in POP packaging are marked with a "P" in this catalogue. To order brushes in POP versions, please add a "P" to the end of the EDP number. The minimum order quantity of POP items is printed in "blue" accordingly.

### Advantages

- Clear plastic clamshell.
- Easy identification of brush.
- Individually labelled clamshell packaging.
- Brush fully enclosed – Keeps brush protected from contaminants. Handle without risk of wire cuts.
- Reusable storage container.
- Encourages safety on the job with easy reference.
- Includes safety inserts in English, French and Spanish.
- No need to purchase more than you want.
- Useful hanging hole for optimum product presentation on your sales wall.



For more information on our range of POP packaged brushes, refer to the POINT OF PURCHASE BRUSHES brochure.

### Packaging label

#### Advantages

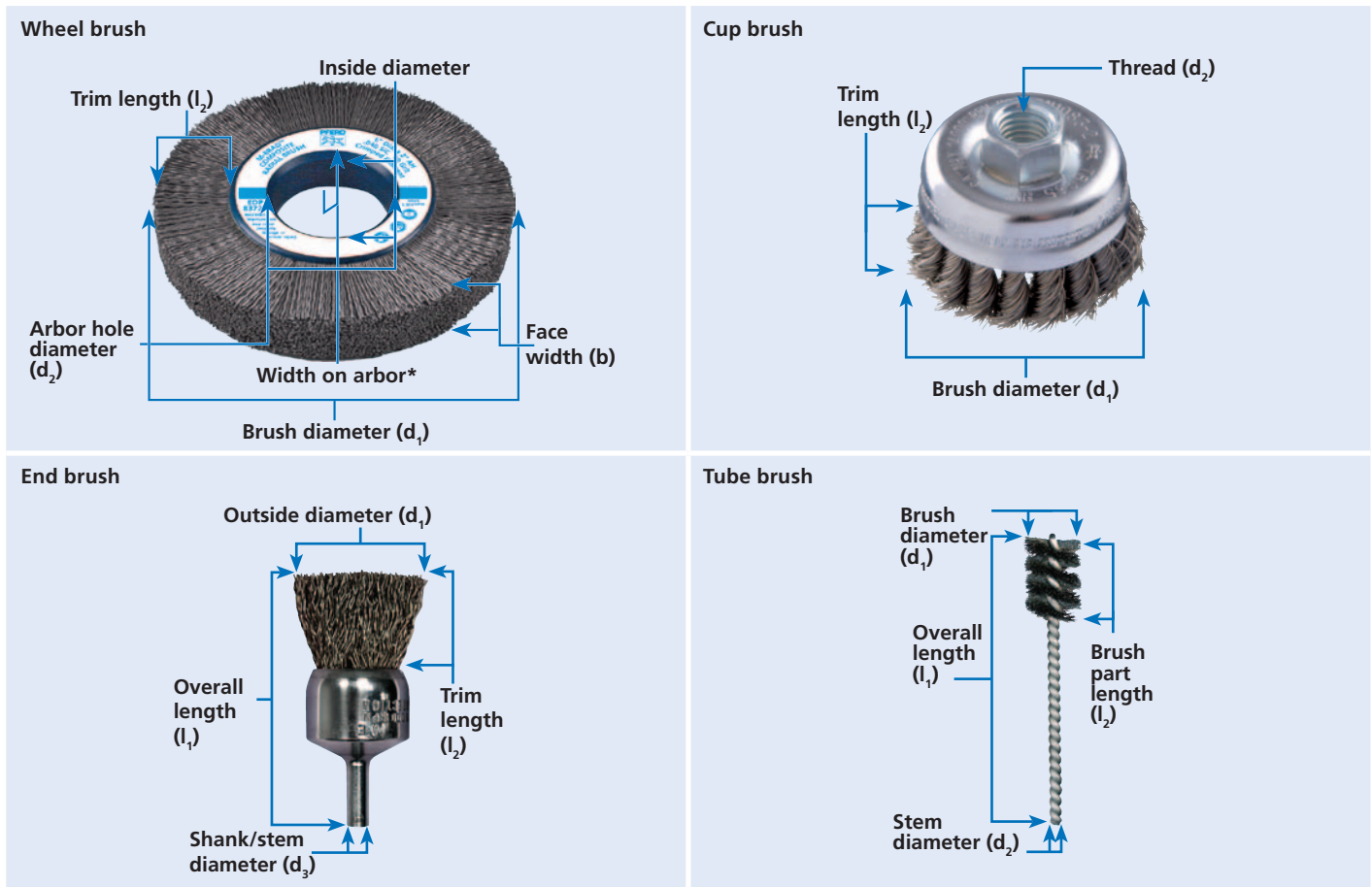
- Pictograms for clarification of the most important product features.
- Information regarding the safe and best use of brushes.



| Brush diameter $d_1$ |   |
|----------------------|---|
|                      | Wheel brushes crimped/knotted               |
|                      | Shank mounted wheel brushes crimped/knotted |
|                      | Shank mounted bevel and cup brushes crimped |
|                      | Shank mounted end brushes crimped/knotted   |
|                      | Threaded cup brushes crimped/knotted        |
|                      | Threaded bevel brushes crimped/knotted      |
|                      | Disc brushes/tube brushes                   |

| Face width $b$          |                               |
|-------------------------|-------------------------------|
|                         | Wheel brushes crimped/knotted |
| Mounting type           |                               |
|                         | Arbor hole/shank              |
|                         | Thread                        |
| Filament diameter $d_6$ |                               |
|                         | Filament diameter $d_6$       |
| Overall length $l_1$    |                               |
|                         | Tube brushes/Scratch brushes  |
| No. of rows             |                               |
|                         | Scratch brushes               |

These diagrams demonstrate the method for measuring power brushes according to ANSI 165.1 standard, and can be used as a reference for selecting the right brush.


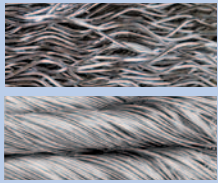



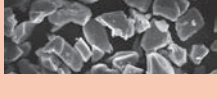
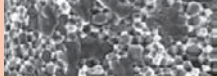


**\*Wheel brush note:** "Width on arbor" is not the width at the arbor hole. It is a measurement at the widest point of the faceplates. This is used to calculate the number of brushes that can be gang-mounted on a given length of arbor or shaft.

### Conversion table [Inches – mm – gauge]

| Brush diameter    |               | Arbor hole diameter |               | Face width      |             | Wire diameter     |               |            |
|-------------------|---------------|---------------------|---------------|-----------------|-------------|-------------------|---------------|------------|
| $d_1$<br>[Inches] | $d_1$<br>[mm] | $d_2$<br>[Inches]   | $d_2$<br>[mm] | $b$<br>[Inches] | $b$<br>[mm] | $d_6$<br>[Inches] | $d_6$<br>[mm] | wire gauge |
| 2-3/4             | 70            | 1/4                 | 6.4           | 1/8             | 3           | .004              | 0.10          | 50         |
| 3                 | 75            | 3/8                 | 9.5           | 1/4             | 6           | .006              | 0.15          | 43         |
| 3-1/2             | 90            | 1/2                 | 12.7          | 3/8             | 10          | .008              | 0.20          | 38         |
| 4                 | 100           | 5/8                 | 15.9          | 1/2             | 12          | .010              | 0.25          | 34         |
| 5                 | 125           | 3/4                 | 19.0          | 5/8             | 16          | .012              | 0.30          | 33         |
| 6                 | 150           | 7/8                 | 22.2          | 3/4             | 19          | .014              | 0.35          | 30         |
| 7                 | 178           | 1                   | 25.4          | 7/8             | 22          | .018              | 0.45          | 26         |
| 8                 | 200           | 1-1/8               | 28.6          | 1               | 25          | .020              | 0.50          | 25         |
| 10                | 250           | 1-1/4               | 31.8          | 1-1/8           | 29          | .023              | 0.60          | 24         |
| 12                | 300           | 1-1/2               | 38.1          | 1-1/4           | 32          | .026              | 0.65          | 23         |
| 14                | 350           | 1-3/4               | 44.5          | 1-1/2           | 38          | .032              | 0.80          | 21         |
| 15                | 380           | 2                   | 50.8          | 2               | 50          | .035              | 0.90          | 20         |
| 16                | 400           | 3                   | 76.2          | 3               | 75          | .040              | 1.01          | 19         |

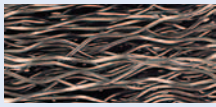




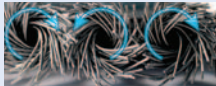
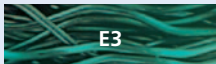


### Wire filaments and M-BRAD® abrasive grain types



|                               |   |  |
|-------------------------------|---|--|
| <b>Tempered carbon steel</b>  |    | Provides excellent abrasion and wear resistance, along with high flexing action. High strength filament is able to remove heavy buildups. Good bend recovery. Available in crimped and knotted configurations.   |
| <b>Stainless steel (INOX)</b> |    | Corrosion resistant, non-rusting material works well with chemicals and solvents. Features excellent bend recovery with a high level of abrasion and wear resistance. Stainless steel brushes in this catalogue are produced with 302 stainless steel wire (INOX). 316 stainless steel wire (INOX) is also available upon request. Stainless steel wire brushes can be degreased upon request. |
| <b>Brass/bronze</b>           |    | Non-corrosive, flexible filaments that provide low sparking characteristics, but are softer than stainless steel or carbon steel to clean surfaces without damaging them. Great for applications where the workpiece cannot sustain heavy scratches.   |
| <b>M-BRAD®</b>                |   | M-BRAD® is a 6.12 nylon monofilament that evenly encapsulates abrasive grit particles. M-BRAD® won't degrade the dimensions of the workpiece, which reduces scrap.   |
| <b>Silicon carbide (SiC)</b>  |  | Has a jagged crystal structure and is easily friable. It is the most common grain used on light to heavy deburring applications on ferrous and non-ferrous alloys.   |
| <b>Aluminum oxide (AO)</b>    |  | More rounded crystal structure. It is more commonly used for wood applications. Due to the flexible nylon filament carrier, in most cases it is not as aggressive as silicon carbide brushes.  |
| <b>Ceramic oxide (CO)</b>     |  | Ceramic oxide is a more aggressive grain than silicon carbide. It is ideal for heavy deburring as well as for surface finishing applications where reduced cycle time is critical. During controlled testing, ceramic grain filled brushes outperformed silicon carbide filled brushes by 200-300%. It is highly effective on ferrous workpieces.  |

| Filament material                | Material to be brushed |                        |                    |  |  |           |          |
|----------------------------------|------------------------|------------------------|--------------------|--|--|-----------|----------|
|                                  | Steel                  | Stainless steel (INOX) | Non-ferrous metals |  |  | Cast iron | Plastics |
|                                  |                        |                        | Aluminum           | Soft non-ferrous metals<br>Brass, copper, zinc | Hard non-ferrous metals<br>Titanium, bronze, nickel- and cobalt-based alloys |           |          |
| Carbon steel wire                | ●                      | –                      | –                  | –  | –  | ●         | ○        |
| Stainless steel wire (INOX)      | ○                      | ●                      | ●                  | ○  | ○  | –         | –        |
| Brass wire                       | –                      | –                      | –                  | ●  | –  | –         | –        |
| <b>M-BRAD® abrasive filament</b> |                        |                        |                    |  |  |           |          |
| Silicon carbide (SiC)            | ●                      | ●                      | ●                  | –  | ○  | ●         | ●        |
| Ceramic oxide (CO)               | ●                      | ●                      | ●                  | –  | ●  | ○         | ○        |
| Nylon                            | –                      | –                      | ○                  | ○  | –  | –         | ●        |

● = highly recommended    ○ = recommended    – = not recommended



| Wire construction – power wire brushes |  |   |
|--|--|---|
| <b>Crimped wire</b>                    |   | Tough, cost-effective wire with high-tensile strength recommended for high speeds and long service life. Crimped wire brushes are available in carbon steel, stainless steel, and brass wire filament. Crimped steel wire is best for light surface work and for removing rust.   |
| <b>Standard twist</b>                  |  Standard flag<br> Long flag   | <p>The standard twist knot brush is more aggressive than crimped wire brushes, and leaves a good surface finish. Available in two variations:</p> <ul style="list-style-type: none"> <li>■ Standard flag, with wire loosely twisted for approximately 75% of the total trim length.</li> <li>■ Long flag, which features wire loosely twisted for approximately 50% of the trim length for better surface area coverage on uneven surfaces.</li> </ul> <p>Also available in COMBITWIST® (see below).</p>  |
| <b>Full cable twist</b>                |   | <p>Full cable twist knotted wire is efficient for weld spatter removal, blending tool marks, cleaning, deburring, and removal of encrustations. Used in pipe joining for cleaning scale and spatter following welding. Low flex, high impact cleaning.</p> <p>Also available in COMBITWIST®</p>   |
| <b>Stringer bead</b>                   |    | <p>Stringer bead style is intended for tough applications, featuring low flex, high impact cleaning. It is most commonly used in the pipeline industry for removing the bead scale that occurs after the joining of two sections of pipe. Knot diameter for stringer bead brushes is between 3/16" and 5/16".</p> <p>Also available in COMBITWIST®</p>  |
| <b>COMBITWIST®</b>                     |   | <p>COMBITWIST® is a variation on existing knot styles in which the knots are alternately twisted to offer superior balance during rotation. This construction style offers a more aggressive and effective brushing solution for cleaning and deburring applications.</p>   |
| <b>ECAP® encapsulated</b>              |  E3<br> E4<br> E5 | <p>Wire is bonded in a synthetic elastomer material which firmly supports the wire filaments, providing precisely controlled brush face, longer brush life and very aggressive removal rates. Limited flexibility. ECAP® brushes are available in three hardness grades:</p> <ul style="list-style-type: none"> <li>■ E3 is aggressive enough for most applications. Best grade for general use. Green colour.</li> <li>■ E4 is good for higher pressure applications. Black colour.</li> <li>■ E5 is for super-aggressive, tough cleaning, for most severe applications. Blue colour.</li> </ul> |

| M-BRAD® filament geometries – power non-wire brushes |   |  |
|--|---|--|
| <b>Round filament</b>                                |  | Round filaments create point contact on the workpiece. They are the most popular filaments for general deburring and surface conditioning applications.                              |
| <b>Rectangular filament</b>                          |  | Rectangular filaments create line contact with the workpiece. Due to the larger cross section, these filaments are used in deburring applications where larger burrs need attention. |

# Power brushes

## Stainless steel (INOX) overview

Due to its resistance against corrosion, good forming and welding qualities, and its attractive appearance, stainless steel (INOX) is becoming increasingly popular for various products. These properties also place special requirements and demands on the stainless steel (INOX) wire brush used.

### PFERD brush wire qualities

In order to fulfill the particular requirements for brushing stainless steel (INOX), PFERD produces all stainless steel (INOX) brushes using 302 stainless steel wire. Practical experience gained from industrial use confirms that this wire quality achieves excellent corrosion resistance with optimum brush life.

### Magnetism of stainless steel (INOX)

The wire found in stainless steel (INOX) brushes tends to become magnetic after cold working. The reason for this is a change in the microstructure caused through deformation (e.g. in wire drawing process). This change in microstructure and the resulting magnetic qualities have no influence on the quality and corrosion resistance of the stainless steel (INOX) wire. It retains its corrosion resistant properties.



#### Note

To avoid possible contamination problems, it makes sense to run preliminary tests to check the corrosion resistance of the workpiece.

#### Finishing

General cleaning of the workpieces after brushing is recommended to prevent loose particles sticking to the workpiece.

For workpieces that are used in a heavily corrosive environment, processing with grinding tools or etching or passivation is recommended. This also applies when not only stainless steels (INOX), but also non-alloyed steels are processed and it cannot be completely ruled out that particles will land on the stainless steel. For detailed information and ordering data on grinding and polishing products please refer to our "Fine grinding and finishing products" catalogue (section 204).

All PFERD brush products with stainless steel wire (INOX) are colour-coded blue in this catalogue. All of these brushes are recommended for use on all stainless steels (INOX), such as 316.

### Stainless steel (INOX) processing expertise

The PFERD TOOL MANUAL provides a comprehensive range of solutions which meet the demands for work on stainless steel. We are happy to help find solutions to your application problems. The PRAXIS "PFERD tools for the use on stainless steel" contains many valuable recommendations.



Our experienced sales advisors are happy to answer your questions. Please contact us.

**Canada Phone:** (905) 501-1555  
**Toll-Free:** (866) 245-1555  
**USA Phone:** (262) 255-3200  
**Toll-Free:** (800) 342-9015  
[www.pferd.com](http://www.pferd.com)



### Avoiding corrosion when brushing stainless steel (INOX) components

| Cause of corrosion   | Solution   |
|--|--|
| Microstructure changes through heat build-up.  | Avoid heat build-up through: <ul style="list-style-type: none"> <li>■ Use of a lower brush speed.</li> <li>■ Reduction in brushing pressure.</li> <li>■ Oscillation brushing.</li> </ul>   |
| Apart from the filament material all other wire brush parts are generally made of steel. Corrosion can occur through contact between these parts with the workpiece. | <ul style="list-style-type: none"> <li>■ Avoid contact between the faceplates and workpiece.</li> <li>■ Use end brushes with plastic coatings.</li> </ul>  |
| Using the same brush for work on steel and stainless steel workpieces (INOX).  | <ul style="list-style-type: none"> <li>■ Do not use stainless steel brushes on stainless steel workpieces which have already been used on steel, copper or other metals.</li> <li>■ Do not process steel near stainless steel (INOX).</li> </ul> |
| Wire particle residues embedded in surface imperfections (crevice corrosion).  | <ul style="list-style-type: none"> <li>■ Avoid high brushing pressure.</li> <li>■ Select a low speed.</li> </ul>   |



#### PFERDMEDIA

For more information on working with stainless steel, visit [pferdusa.com/px-inox](http://pferdusa.com/px-inox)

Power brushes are designed, tested, manufactured, and inspected to assure quality with a particular concern for safety considerations. To promote safety, users must be aware of potential hazards and their responsibilities for safe and proper operation of power brushes.

Warnings, safety requirements, and product limitations and application suggestions are printed in this catalogue and in other literature, marked on brushes (when feasible), and/or supplied on or in the product container. These warnings and requirements must be observed by all power brush operators. Failure to do so may endanger the brush operator and others in the area of the brushing operation.

### Personal protection

In normal power brushing operations, the material being removed, such as burrs, scale, dirt, weld slag, or other residue, will fly off the brush with considerable force along with the brush filaments, which break off due to fatigue.

The potential of serious injury exists for both the brush operator and others in the work area (possibly 50 feet or more from the brush). To protect against this hazard, operators and others in the area must wear SAFETY GOGGLES WITH SIDE SHIELDS or FULL FACE SHIELDS OVER SAFETY GLASSES WITH SIDE SHIELDS, along with PROTECTIVE CLOTHING such as GLOVES, MASKS, and PROPER FOOTWEAR.

### Safety requirements summary

- 1. Protective goggles:** Safety goggles or full face shields worn over safety glasses with side shields **MUST BE WORN BY ALL OPERATORS AND OTHERS IN THE AREA OF POWER BRUSH OPERATIONS.** Comply with the requirements of ANSI Z87.1 "Occupational Eye and Face Protection".
- 2. Guards:** Keep all machine guards in place.
- 3. Speeds:** Observe all speed restrictions indicated on the brushes, containers, labels, or printed in pertinent literature. "MSFS" means Maximum Safe Free Speed [RPM] – spinning free with no work applied. For reasons of safety, the "MSFS" should not be exceeded under any circumstances.
- 4. Safety standards:** Comply with the safety standards of the American Brush Manufacturers' Association and the American National Standards Institute standard ANSI B165.1, "Safety Requirements – Power Brushes".
- 5. Protective equipment:** Appropriate protective clothing and equipment must be used where a possibility of injury exists that can be prevented by such clothing or equipment.

**6. Dust warning:** Use of the products in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material. **PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES.** Always use our products in a well-ventilated workspace.

### Safety recommendations



= Wear protective goggles!



= Wear protective gloves!



= Wear dust respirator!



= Observe safety recommendations!



Read the Safety Data Sheets (SDS) = before using any materials! ([www.pferdusa.com](http://www.pferdusa.com)).

### Warning!

**Failure to observe safety precautions may result in injury.**



### Read all safety information and follow all instructions on packaging

You must follow all operator and safety instructions, as well as common safety practices which will reduce the likelihood or severity of physical injury.

Many brush manufacturers mark some safety warnings, recommendations, and usage restrictions directly on the product. It is not always practical to include even the most limited safety information on the brush itself. Therefore, the operator **MUST READ and FOLLOW** all instructions supplied in or on the product container as well as those marked on the product itself. The operator should also refer to the safety and operating information printed in the brush manufacturer's catalogue and other literature.

### Availability of ANSI standards

In this catalogue, reference is made to these ANSI standards: ANSI B-165.1, ANSI Z87.1. Copies of these standards are available at public libraries and from the American Brush Manufacturers' Association, 736 Main Ave., Suite 7, Durango, CO 81301, Tel: (720) 392-ABMA (2262), Fax: (866) 837-8450, email: [info@ABMA.org](mailto:info@ABMA.org); or American National Standards Institute, Inc. (ANSI), 1900 Arch Street, Philadelphia, PA 19103 (B165.1 only).

### ANSI standard B165.1 arbor holes

ANSI standard B165.1-2013 dictates maximum face widths and minimum arbor hole sizes allowable. All brushes listed in this catalogue conform to all ANSI standards.

If you require a brush that does not conform to these standards, please contact your distributor for assistance.

#### Note:

The maximum face width listed in this table refers to shafts that are supported by one end only, such as angle and bench grinders. It does not apply to shafts that are supported by bearings at both ends.

| Wheel diameter | Minimum arbor hole | Maximum face width |
|----------------|--------------------|--------------------|
| 2              | 1/4                | 3/4                |
| 3              | 1/4                | 3/4                |
| 4              | 3/8                | 1                  |
| 6              | 1/2                | 1-1/4              |
| 8              | 5/8                | 1-1/4              |
| 10             | 3/4                | 2                  |
| 12             | 1                  | 3                  |
| 14             | 1-1/4              | 3                  |
| 15             | 2                  | 3                  |
| 16             | 2                  | 3                  |

### Prevent problems due to mechanical failure

Do not allow unsafe conditions to continue. Occasionally, due to worn bearings, a bent spindle, an unusual application, operator abuse or inappropriate use, a brush may fail. A brush which is not received in acceptable condition for trouble-free operation may also fail. Do not use or continue to use a failed brush, or one which is functioning improperly (i.e., throwing filaments, out-of-balance, etc.), as this increases the possibility for further brush failure and hazard of injury. The cause of the failure should be evaluated and corrected immediately.

# Power brushes

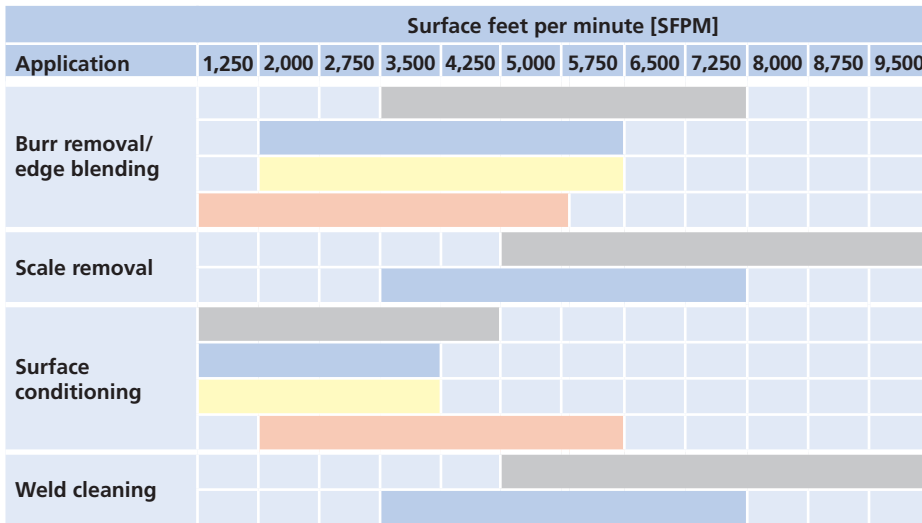
## Operating procedures, problems and solutions

### Determining the recommended speed

- 1 Select brush type.
- 2 Read recommended surface speed.
- 3 Determine the speed using the brush diameter and surface speed.

| 1                                 | 2                   | Key to the colour bars on the chart below: |
|-----------------------------------|---------------------|--|
| End brushes                       | 2,500 - 4,000 SFPM  | <b>Carbon steel wire</b> – grey            |
| Cup brushes                       | 8,000 - 10,000 SFPM | <b>Stainless steel wire (INOX)</b> – blue  |
| Wheel brushes / bevel cup brushes | see chart below     | <b>Brass wire/bronze wire</b> – yellow     |
|                                   |                     | <b>M-BRAD® abrasive filament</b> – red     |

### 2 Recommended surface speeds for brushing applications



### 3 Surface speeds in surface feet per minute [SFPM]

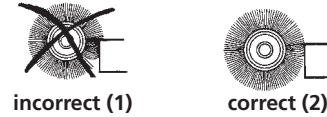
| RPM    | Brush diameter [Inches] |        |        |        |       |        |        |        |        |        |
|--------|-------------------------|--------|--------|--------|-------|--------|--------|--------|--------|--------|
|        | 2                       | 3      | 4      | 5      | 6     | 8      | 10     | 12     | 14     | 15     |
| 800    | 400                     | 600    | 800    | 1,000  | 1,250 | 1,650  | 2,050  | 2,500  | 2,900  | 3,100  |
| 1,150  | 600                     | 900    | 1,200  | 1,500  | 1,800 | 2,400  | 3,000  | 3,600  | 4,200  | 4,500  |
| 1,200  | 600                     | 900    | 1,250  | 1,550  | 1,850 | 2,500  | 3,100  | 3,750  | 4,350  | 4,700  |
| 1,750  | 900                     | 1,350  | 1,800  | 2,250  | 2,700 | 3,650  | 4,550  | 5,450  | 6,400  | 6,850  |
| 2,000  | 1,000                   | 1,550  | 2,050  | 2,600  | 3,100 | 4,150  | 5,200  | 6,250  | 7,300  | 7,850  |
| 2,400  | 1,250                   | 1,850  | 2,500  | 3,100  | 3,750 | 5,000  | 6,250  | 7,500  | 8,750  | 9,400  |
| 3,000  | 1,550                   | 2,350  | 3,100  | 3,900  | 4,700 | 6,250  | 7,850  | 9,400  | 10,950 | 11,750 |
| 3,450  | 1,800                   | 2,700  | 3,600  | 4,500  | 5,400 | 7,200  | 9,000  | 10,800 | 12,600 | 13,500 |
| 3,750  | 1,950                   | 2,900  | 3,900  | 4,900  | 5,850 | 7,850  | 9,800  | 11,750 |        |        |
| 4,000  | 2,050                   | 3,100  | 4,150  | 5,200  | 6,250 | 8,350  | 10,450 | 12,550 |        |        |
| 4,500  | 2,350                   | 3,500  | 4,700  | 5,850  | 7,050 | 9,400  | 11,750 | 14,100 |        |        |
| 5,000  | 2,600                   | 3,900  | 5,200  | 6,500  | 7,850 | 10,450 | 13,050 |        |        |        |
| 5,400  | 2,800                   | 4,200  | 5,650  | 7,050  | 8,450 | 11,300 |        |        |        |        |
| 6,000  | 3,100                   | 4,700  | 6,250  | 7,850  | 9,400 |        |        |        |        |        |
| 8,500  | 4,400                   | 6,650  | 8,850  | 11,100 |       |        |        |        |        |        |
| 9,000  | 4,700                   | 7,050  | 9,400  | 11,750 |       |        |        |        |        |        |
| 10,000 | 5,200                   | 7,850  | 10,450 | 13,050 |       |        |        |        |        |        |
| 12,000 | 6,250                   | 9,400  | 12,550 | 15,700 |       |        |        |        |        |        |
| 15,000 | 7,850                   | 11,750 | 15,700 | 19,600 |       |        |        |        |        |        |
| 18,000 | 9,400                   | 14,100 | 18,800 |        |       |        |        |        |        |        |
| 20,000 | 10,450                  | 15,700 | 16,400 |        |       |        |        |        |        |        |

**Example:**  
Crimped wire wheel, 6" diameter  
burr removal  
Surface speed: 5,400 SFPM  
Rotational speed: 3,450 RPM

$$\text{SFPM} = \frac{\pi \times \text{Diameter [Inches]} \times \text{RPM}}{12}$$

### Recommendations for use

#### Brushing pressure and work position



Only use the filament tips (Fig. 2).

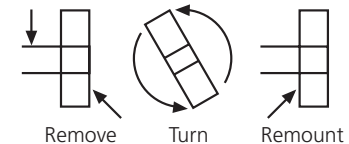
Wire brushes work when the tips of the filament come into contact with the workpiece. The tips are the only sharp point on the filament. Avoid applying excessive pressure. Excessive pressure causes overbending of the filaments and heat build-up resulting in filament breakage, rapid dulling, and reduced brush life.

Apply work to brush, or vice versa, in such a way that as much of the brush face as possible is in full contact with the workpiece. Applying the work to the side or edge of the brush will result in wire breakage and reduce brush life.

#### Self-sharpening effect

The self-sharpening effect can be improved by changing the brush operating direction.

Spindle



The patented PFERD TWIN-NUT stringer bead wheels are designed to be reversed on a threaded spindle without interfering with the tool guard. This also takes advantage of the self-sharpening action of the wire. See page 32 for additional information.

### Solutions to problems

| Problem   | Solution   |
|---|--|
| Inadequate brushing action                            | <ul style="list-style-type: none"> <li>■ Increase RPM or use larger brush diameter at same RPM.</li> <li>■ Use a brush with shorter trim.</li> <li>■ Select a brush with thicker filaments.</li> </ul>                                     |
| Excessively strong brushing action                    | <ul style="list-style-type: none"> <li>■ Reduce RPM or use a smaller brush diameter at same RPM.</li> <li>■ Reduce contact pressure.</li> <li>■ Use a brush with longer trim.</li> <li>■ Select a brush with thinner filaments.</li> </ul> |
| Surface is too rough and irregular                    | <ul style="list-style-type: none"> <li>■ Use a wider brush or a longer trim length.</li> <li>■ Select a brush with thinner filaments.</li> <li>■ Increase RPM.</li> </ul>  |
| Excessively fine finish/ surface appears too polished | <ul style="list-style-type: none"> <li>■ Select a brush with thicker filaments.</li> <li>■ Use a brush with shorter trim.</li> <li>■ Reduce RPM.</li> </ul>  |
| Secondary burr formation                              | <ul style="list-style-type: none"> <li>■ Change brush-to-workpiece operating angle.</li> <li>■ Use a brush with shorter trim.</li> <li>■ Select a brush with thicker filaments.</li> </ul>   |



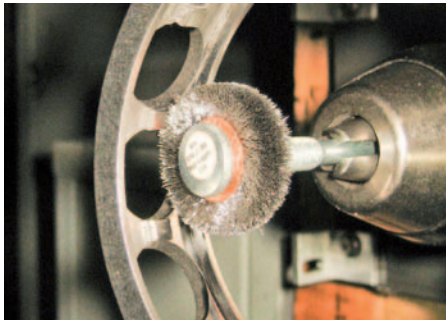
The range of PFERD crimped wire wheel brushes includes small diameter copper centre brushes, narrow, medium and wide face wheels as well as bench and pedestal grinder brushes in carbon steel, stainless steel (INOX) and brass filaments.

### Crimped wire wheels

- Heavy fill density for more wire points, which means more brushing action and longer life.
- Designed for seamless gang mounting without parting lines.
- Uniform wire distribution for optimal balance and finish.
- Standard and long trim options on popular diameters as catalogue items.

### Application guidelines

- Using as fine a wire as will perform the job satisfactorily will result in longer brush life. Greater wire fatigue and breakage is more likely to occur when coarser wire is used.
- Longer trim length increases brush flexibility.
- Use the appropriate adapter style to achieve the desired arbor hole size (see page 66).
- Small diameter copper centre wheels can be gang-mounted on drive arbors (see page 67) to achieve a wider brush face.
- For additional operating guidelines, please see page 15-16.



These small diameter wire wheel brushes are designed for use in restricted or hard-to-reach areas. They are excellent brushes for deburring, blending, and cleaning of surfaces and cavities.

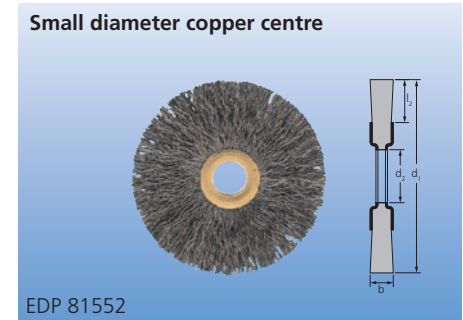
### Recommendation for use


Suitable tool drives: straight grinders, flexible shafts, power drills.

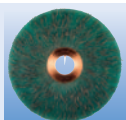
### Ordering note

For drive arbors and adapters, please refer to pages 66-67.

Made in the USA.



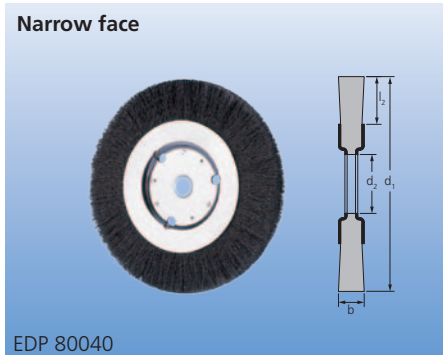
| Dia.<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Included adapter<br>[Inches] | Wire diameter and EDP number |       |       |       |       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|------------------------------------|--|---|-----------------------------|----------------------------|------------------------------|------------------------------|-------|-------|-------|-------|-----------------------|--------------------|---------------|---|
|                                    |  |   |                             |                            |                              | .006                         | .008  | .010  | .012  | .014  |                       |                    |               |   |
| <b>Carbon steel wire</b>           |  |   |                             |                            |                              |                              |       |       |       |       |                       |                    |               |   |
| 1                                  | 1/4                                      | 1/4                                       | 3/16                        | 7/32                       | -                            | 81500                        | -     | -     | -     | -     | 10,000 - 15,000       | 20,000             | F             | 10  |
| 1-1/4                              | 1/4                                      | 3/8                                       | 1/4                         | 7/32                       | -                            | 81503                        | 81504 | -     | -     | -     | 10,000 - 15,000       | 20,000             | F             | 10  |
| 1-1/2                              | 3/8                                      | 7/16                                      | 1/4                         | 7/32                       | -                            | 81514                        | 81515 | -     | 81517 | 81518 | 10,000 - 15,000       | 20,000             | F             | 10  |
| 2                                  | 1/2                                      | 1/2                                       | 3/8                         | 7/32                       | 3/8                          | 81526                        | 81527 | -     | 81529 | 81530 | 10,000 - 15,000       | 20,000             | F             | 10  |
| 2-1/2                              | 1/2                                      | 3/4                                       | 1/2                         | 5/16                       | 3/8                          | -                            | -     | -     | 81534 | 81535 | 10,000 - 15,000       | 20,000             | F             | 10  |
| 3                                  | 1/2                                      | 1   | 5/8                         | 5/16                       | 3/8                          | 81542                        | 81543 | 81544 | 81545 | 81546 | 10,000 - 15,000       | 20,000             | F             | 10  |
| 3                                  | 5/8                                      | 15/16                                     | 5/8                         | 5/16                       | -                            | -                            | 81549 | -     | -     | 81552 | 10,000 - 15,000       | 20,000             | F             | 10  |
| 4                                  | 5/8                                      | 1-1/2                                     | 1/2                         | 5/16                       | -                            | -                            | 81553 | -     | -     | 81554 | 5,000 - 7,500         | 10,000             | F             | 10  |
| <b>Stainless steel wire (INOX)</b> |  |   |                             |                            |                              |                              |       |       |       |       |                       |                    |               |   |
| 1-1/2                              | 3/8                                      | 7/16                                      | 1/4                         | 7/32                       | -                            | 81568                        | -     | -     | -     | -     | 8,000 - 13,000        | 20,000             | F             | 10  |
| 2                                  | 1/2                                      | 1/2                                       | 3/8                         | 7/32                       | 3/8                          | 81575                        | -     | 81577 | 81578 | 81579 | 8,000 - 13,000        | 20,000             | F             | 10  |
| 3                                  | 1/2                                      | 1   | 5/8                         | 5/16                       | 3/8                          | 81586                        | 81587 | 81588 | 81589 | 81590 | 8,000 - 13,000        | 20,000             | F             | 10  |



ECAP® encapsulated copper centre brushes offer more aggressive brushing. See page 21.

# Power wire brushes

## Unthreaded crimped wheel brushes




Used for light to medium duty brushing action, these wheels are designed for individual use in confined areas, or in assemblies mounted on a shaft. They are best suited for brushing uneven surfaces and areas inaccessible to wider brushes. Ideal for removal of light scale, dirt, rust, corrosion and light burrs.

### Ordering note

All wheels with 1-1/4" arbor hole are provided with 1/4" x 1/8" keyways. See page 66 for listing of adapters.

Made in the USA.



| Dia.<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Included adapter<br>[Inches] | Wire diameter and EDP number |         |       |       |         | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|------------------------------------|--|---|-----------------------------|----------------------------|------------------------------|------------------------------|---------|-------|-------|---------|-----------------------|--------------------|---------------|---|
|                                    |  |   |                             |                            |                              | .006                         | .008    | .010  | .012  | .014    |                       |                    |               |   |
| <b>Carbon steel wire</b>           |  |   |                             |                            |                              |                              |         |       |       |         |                       |                    |               |   |
| 3                                  | 1/2                                      | 3/4                                       | 9/16                        | 7/16                       | 3/8                          | -                            | -       | -     | -     | 80003   | 5,000 - 7,500         | 10,000             | D             | 2   |
| 4                                  | 5/8                                      | 3/4                                       | 1/2                         | 7/16                       | 1/2                          | -                            | 81442   | -     | 80017 | 80018   | 6,000 - 9,000         | 12,500             | D             | 2   |
| 6                                  | 5/8                                      | 1-1/8                                     | 5/8                         | 7/16                       | 1/2                          | 80038                        | 80039 P | 80040 | 80041 | 80042 P | 4,000 - 6,000         | 8,000              | D             | 10/5  |
| 8                                  | 5/8                                      | 1-1/2                                     | 5/8                         | 5/8                        | -                            | 80158                        | 80159   | 80160 | 80161 | 80162   | 3,000 - 4,500         | 6,000              | -             | 2   |
| 8                                  | 1-1/4                                    | 1-1/2                                     | 3/4                         | 1/2                        | -                            | -                            | -       | 80166 | 80167 | 81449 P | 3,000 - 4,500         | 6,000              | A             | 2/5   |
| 10                                 | 1-1/4                                    | 1-7/8                                     | 1                           | 1/2                        | -                            | -                            | 80225   | 80226 | -     | 80228   | 2,000 - 3,000         | 4,200              | A             | 2   |
| 12                                 | 1-1/4                                    | 2-7/8                                     | 1-1/4                       | 11/16                      | -                            | -                            | -       | -     | 80283 | 80284   | 1,500 - 2,500         | 3,400              | A             | 2   |
| <b>Stainless steel wire (INOX)</b> |  |   |                             |                            |                              |                              |         |       |       |         |                       |                    |               |   |
| 3                                  | 1/2                                      | 3/4                                       | 9/16                        | 7/16                       | 3/8                          | -                            | -       | 80332 | -     | -       | 4,000 - 6,500         | 10,000             | D             | 2   |
| 4                                  | 5/8                                      | 3/4                                       | 1/2                         | 7/16                       | 1/2, 3/8                     | 80344                        | -       | -     | 80347 | -       | 5,000 - 8,000         | 12,500             | D             | 2   |
| 6                                  | 5/8                                      | 1-1/8                                     | 5/8                         | 7/16                       | 1/2                          | 80368                        | 80369   | 80370 | 80371 | 80372   | 3,000 - 5,000         | 8,000              | D             | 2   |
| 8                                  | 5/8                                      | 1-1/2                                     | 5/8                         | 5/8                        | -                            | -                            | -       | -     | 80491 | -       | 2,000 - 4,000         | 6,000              | -             | 2   |
| 8                                  | 5/8                                      | 2-1/8                                     | 3/4                         | 1/2                        | -                            | 80518                        | -       | -     | -     | -       | 2,000 - 4,000         | 6,000              | -             | 2   |
| 8                                  | 1-1/4                                    | 1-1/2                                     | 3/4                         | 1/2                        | -                            | -                            | -       | -     | 80497 | -       | 2,000 - 4,000         | 6,000              | A             | 2   |
| 10                                 | 1-1/4                                    | 1-7/8                                     | 1                           | 1/2                        | -                            | -                            | -       | -     | 80557 | -       | 1,500 - 2,500         | 4,200              | A             | 2   |
| 12                                 | 1-1/4                                    | 2-7/8                                     | 1-1/4                       | 11/16                      | -                            | -                            | -       | -     | 80613 | -       | 1,300 - 2,000         | 3,400              | A             | 2   |
| <b>Brass wire</b>                  |  |   |                             |                            |                              |                              |         |       |       |         |                       |                    |               |   |
| 6                                  | 5/8                                      | 1-1/8                                     | 5/8                         | 7/16                       | 1/2                          | -                            | 80666   | -     | -     | 80667   | 3,000 - 5,000         | 8,000              | D             | 2   |
| 8                                  | 1-1/4                                    | 1-1/2                                     | 3/4                         | 1/2                        | -                            | -                            | 80682   | -     | -     | -       | 2,000 - 4,000         | 6,000              | A             | 2   |



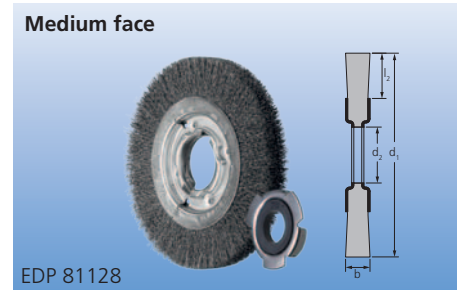
Medium face brushes are designed for medium to heavy duty use either individually or gang mounted. As with all PFERD crimped wire wheel brushes, the metal components and adapters are designed for a flush fit when gang-mounted. This design ensures a consistent, seamless surface finish. Also recommended for bench/pedestal grinders.


### Ordering note

All medium face crimped wire wheel brushes are supplied with metal adapters that reduce the 2" AH to 1-1/4". In addition, a selection of metric and imperial plastic reducing adapters are also included in every box.

Please refer to ANSI minimum shaft size standards page 15 for appropriate adapters. See page 66 for listing of adapters.

Made in the USA.



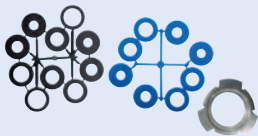
| Diameter<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Wire diameter and EDP number |       |       |       |         |       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|--|--|---|-----------------------------|----------------------------|------------------------------|-------|-------|-------|---------|-------|-----------------------|--------------------|---------------|---|
|  |  |   |                             |                            | .006                         | .008  | .010  | .012  | .014    | .020  |                       |                    |               |   |
| <b>Carbon steel wire</b>               |  |   |                             |                            |                              |       |       |       |         |       |                       |                    |               |   |
| 6                                      | 2  | 1-1/8                                     | 1-1/16                      | 13/16                      | 81112                        | 81113 | 81114 | 81115 | 81116 P | -     | 3,000 - 4,500         | 6,000              | C, K          | 1/5   |
| 7                                      | 2  | 1-5/16                                    | 1                           | 7/8                        | -                            | -     | 81120 | 81121 | 81122 P | -     | 3,000 - 4,500         | 6,000              | C, K          | 1/5   |
| 8                                      | 2  | 1-1/2                                     | 1                           | 7/8                        | -                            | -     | 81126 | 81127 | 81128 P | 81129 | 2,300 - 3,400         | 4,500              | C             | 1/5   |
| 10                                     | 2  | 1-7/8                                     | 1-1/4                       | 15/16                      | -                            | -     | -     | 81133 | 81134   | 81135 | 1,800 - 2,700         | 3,600              | C             | 1   |
| 12                                     | 2  | 2-7/8                                     | 1-1/2                       | 15/16                      | -                            | -     | -     | 81138 | 81139   | 81140 | 1,500 - 2,500         | 3,000              | C             | 1   |

### Stainless steel wire (INOX)

All stainless steel (INOX) brushes are degreased.

|    |   |       |        |        |       |   |       |       |       |   |               |       |      |   |
|----|---|-------|--------|--------|-------|---|-------|-------|-------|---|---------------|-------|------|---|
| 6  | 2 | 1-1/8 | 1-1/16 | 13/16  | 81157 | - | 81159 | 81160 | -     | - | 2,400 - 3,900 | 6,000 | C, K | 1 |
| 8  | 2 | 1-1/2 | 1      | 7/8    | 81169 | - | -     | 81172 | 81173 | - | 1,800 - 2,900 | 4,500 | C    | 1 |
| 10 | 2 | 1-7/8 | 1-1/4  | 15/16  | -     | - | -     | 81178 | -     | - | 1,400 - 2,300 | 3,600 | C    | 1 |
| 12 | 2 | 2-7/8 | 1-3/4  | 1-5/16 | -     | - | -     | -     | 81184 | - | 1,200 - 1,900 | 3,000 | C    | 1 |

### Included adapters



Each medium face wheel brush includes the following adapter sizes:  
1-1/4", 1", 7/8", 3/4", 5/8", 1/2", 20 mm, 18 mm, 14 mm, 12 mm



Brushes available in POP packaging are marked with a "P" in this catalogue. To order brushes in POP versions, please add a "P" to the end of the EDP number.

The minimum order quantity of POP items is printed in "blue" accordingly.

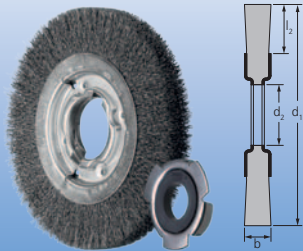


See page 66 for additional adapters.

# Power wire brushes

## Unthreaded crimped wheel brushes

### Wide face



EDP 81248


Wide face, multi-section brushes for all purpose portable or stationary brushing are designed for maximum productivity. Engineered for professional use, the wide face brushes feature precision balance, high quality tempered wire, and dense wire fill for fast brushing action, superior surface finish and long service life.

Available in a wide product range to fit most applications, including: refining metal surfaces, preparing rubber in vulcanizing, blending surfaces, and removing light burrs, paint and corrosion.

### Ordering note

All wide face crimped wire wheel brushes are supplied with metal adapters that reduce the 2" AH to 1-1/4". In addition, a selection of metric and imperial plastic reducing adapters are also included in every box. Please refer to ANSI minimum shaft size standards page 15 for appropriate adapters. See page 66 for listing of adapters.

Made in the USA.

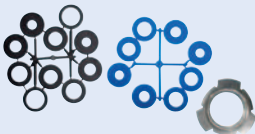
| Diameter<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Wire diameter and EDP number |       |       |       |       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|--|--|---|-----------------------------|----------------------------|------------------------------|-------|-------|-------|-------|-----------------------|--------------------|---------------|---|
|  |  |   |                             |                            | .006                         | .010  | .012  | .014  | .020  |                       |                    |               |   |
| <b>Carbon steel wire</b>               |  |   |                             |                            |                              |       |       |       |       |                       |                    |               |   |
| 6                                      | 2  | 1-1/8                                     | 1-1/8                       | 1-3/32                     | 81232                        | -     | 81235 | 81236 | -     | 3,000 - 4,500         | 6,000              | C, K          | 1   |
| 7                                      | 2  | 1-5/16                                    | 1-7/16                      | 1-3/8                      | -                            | -     | 81241 | 81242 | -     | 3,000 - 4,500         | 6,000              | C, K          | 1   |
| 8                                      | 2  | 1-1/2                                     | 1-3/8                       | 1-1/4                      | 81244                        | -     | 81247 | 81248 | 81249 | 2,300 - 3,400         | 4,500              | C             | 1   |
| 10                                     | 2  | 1-7/8                                     | 2                           | 1-3/8                      | -                            | 81252 | 81253 | 81254 | 81255 | 1,800 - 2,700         | 3,600              | C             | 1   |
| 12                                     | 2  | 2-7/8                                     | 2-1/4                       | 1-3/8                      | -                            | -     | 81257 | 81258 | 81259 | 1,500 - 2,500         | 3,000              | C             | 1   |
| 15                                     | 2  | 3-1/8                                     | 2-1/2                       | 1-3/4                      | -                            | -     | 81261 | -     | -     | 1,000 - 1,800         | 2,400              | C             | 1   |

### Stainless steel wire (INOX)

All stainless steel (INOX) brushes are degreased.

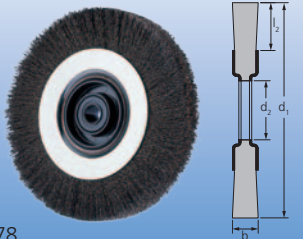
|    |   |       |       |        |       |   |       |       |   |               |       |      |   |
|----|---|-------|-------|--------|-------|---|-------|-------|---|---------------|-------|------|---|
| 6  | 2 | 1-1/8 | 1-1/8 | 1-3/32 | 81276 | - | 81279 | 81280 | - | 2,400 - 3,900 | 6,000 | C, K | 1 |
| 8  | 2 | 1-1/2 | 1-3/8 | 1-1/4  | -     | - | 81291 | -     | - | 1,800 - 2,900 | 4,500 | C    | 1 |
| 10 | 2 | 1-7/8 | 2     | 1-3/8  | -     | - | 81297 | 81298 | - | 1,400 - 2,300 | 3,600 | C    | 1 |
| 12 | 2 | 2-7/8 | 2-1/4 | 1-3/8  | -     | - | -     | 81302 | - | 1,200 - 1,900 | 3,000 | C    | 1 |

### Included adapters



Each wide face wheel brush includes the following adapter sizes:  
1-1/4", 1", 7/8", 3/4", 5/8", 1/2", 20 mm, 18 mm, 14 mm, 12 mm

### EZmount® bench/pedestal wheels



EDP 81478

EZmount® crimped wire wheel eliminates mounting problems commonly found with other bench brushes. It's designed with a flat side profile that matches all mounting flanges on pedestal and bench grinders for a correct fit. Easy installation takes seconds. The telescoping bushing is self-sizing and makes full width contact to prevent the brush from falling into spindle threads.


### Recommendation for use

For use on bench/pedestal grinders.

### Ordering note

Includes adapter style "E".  
See page 66 for adapter information.

Made in the USA.

| Diameter<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Included adapter<br>[Inches] | Wire diameter and EDP number |       |   | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|--|--|---|-----------------------------|----------------------------|------------------------------|------------------------------|-------|---|-----------------------|--------------------|---------------|---|
|  |  |   |                             |                            |                              | .014                         |       |   |                       |                    |               |   |
| <b>Carbon steel wire</b>               |  |   |                             |                            |                              |                              |       |   |                       |                    |               |   |
| 6                                      | 2  | 7/8                                       | 7/8                         | 3/4                        | 1, 3/4, 5/8, 1/2             |                              | 81474 | P | 3,000 - 4,500         | 6,000              | E             | 1/5   |
| 8                                      | 2  | 7/8                                       | 7/8                         | 3/4                        | 1, 3/4, 5/8                  |                              | 81478 | P | 2,000 - 3,000         | 4,500              | E             | 1/5   |
| 10                                     | 2  | 2-1/4                                     | 7/8                         | 3/4                        | 1, 3/4                       |                              | 81480 |   | 1,500 - 2,500         | 3,600              | E             | 1   |





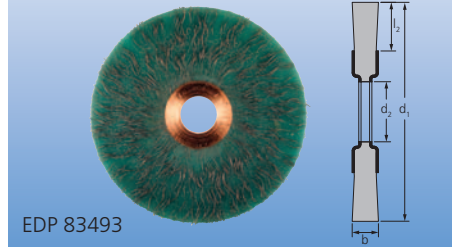
Encapsulated small-diameter wheel brush offers aggressive brushing performance, longer service life, and controlled surface contact area.

**Ordering note**


See drive arbors and adapters on pages 66-67. For additional information on ECAP® encapsulation, see page 13.

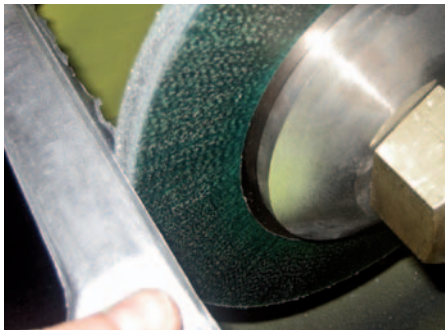
Made in the USA.

**Small diameter copper centre, ECAP® encapsulated**



EDP 83493

| Diameter<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | ECAP® grade | Wire diameter and EDP number | Recom. speed [RPM] | MSFS max. [RPM] | Adapter style |  |
|--|--|---|-----------------------------|-------------|------------------------------|--------------------|-----------------|---------------|---|
|  |  |   |                             |             | .012                         |                    |                 |               |   |
| <b>Carbon steel wire</b>               |  |   |                             |             |                              |                    |                 |               |   |
| 1-1/2                                  | 3/8                                      | 3/8                                       | 1/4                         | E3          | 83488                        | 10,000-15,000      | 20,000          | F             | 10  |
| 2                                      | 1/2                                      | 1/2                                       | 1/4                         | E3          | 83493                        | 10,000-15,000      | 20,000          | F             | 10  |
| 3                                      | 1/2                                      | 1   | 1/4                         | E3          | 83500                        | 10,000-15,000      | 20,000          | F             | 10  |



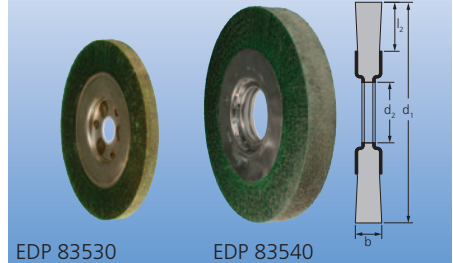
Encapsulation material gradually wears away to consistently maintain a short trim length for more aggressive brushing and long service life. Elastomer provides precision control of contact area on workpiece.

**Ordering note**

All wheels with 1-1/4" arbor hole include 1/4" x 1/8" keyways. All wheels with 2" arbor hole include 1/2" x 1/4" keyways. See page 66 for listing of adapters. For additional information on ECAP® encapsulation, see page 13.


Made in the USA.

**Narrow, medium face, ECAP® encapsulated**



EDP 83530

EDP 83540

| Dia.<br>d <sub>1</sub><br>[Inches]     | Arbor hole<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | ECAP® grade | Included adapter<br>[Inches] | Wire diameter and EDP number |       |       |       | Recom. speed [RPM] | MSFS max. [RPM] | Adapter style |  |
|--|--|---|-----------------------------|-------------|------------------------------|------------------------------|-------|-------|-------|--------------------|-----------------|---------------|---|
|  |  |   |                             |             |                              | .006                         | .008  | .010  | .012  |                    |                 |               |   |
| <b>Carbon steel wire – narrow face</b> |  |   |                             |             |                              |                              |       |       |       |                    |                 |               |   |
| 6                                      | 1-1/4                                    | 1-1/8                                     | 7/16                        | E3          | -                            | 83528                        | -     | -     | -     | 4,000 - 6,000      | 6,000           | A             | 1   |
| 6                                      | 5/8                                      | 1-1/8                                     | 7/16                        | E3          | 1/2                          | -                            | -     | 83530 | -     | 4,000 - 6,000      | 6,000           | D             | 1   |
| 8                                      | 1-1/4                                    | 1-1/2                                     | 15/32                       | E3          | -                            | -                            | 83534 | -     | -     | 4,000 - 6,000      | 6,000           | A             | 1   |
| 8                                      | 1-1/4                                    | 1-1/2                                     | 15/32                       | E3          | 5/8                          | -                            | -     | 83535 | -     | 4,000 - 6,000      | 6,000           | H             | 1   |
| <b>Carbon steel wire – medium face</b> |  |   |                             |             |                              |                              |       |       |       |                    |                 |               |   |
| 8                                      | 2  | 1-1/2                                     | 1                           | E3          | -                            | -                            | -     | -     | 83540 | 2,000 - 3,000      | 4,500           | C             | 1   |
| 10                                     | 2  | 1-7/8                                     | 1                           | E3          | -                            | -                            | -     | -     | 83542 | 2,000 - 3,000      | 3,600           | C             | 1   |



Brushes available in POP packaging are marked with a "P" in this catalogue. To order brushes in POP versions, please add a "P" to the end of the EDP number.

The minimum order quantity of POP items is printed in "blue" accordingly.

# Power wire brushes

## Unthreaded knot wheel brushes



PFERD offers a range of unthreaded and threaded knot wheel brushes for use in all industries. We also offer a wide range of stringer bead wheels specially designed for use in the pipeline industry.

### Knot wheel brushes

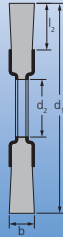
- COMBITWIST® alternating-knot style available for most efficient brushing action.
- Superior rotational balance reduces operator fatigue and improves brush life.
- Patented TWIN-NUT style stringer bead wheels available for aggressive brushing and longer tool life.

- J-BEVEL encapsulated stringer bead wheels available for use with automatic welding equipment.

### Application guidelines

- The tighter the knot, the more aggressive the brushing action. See page 13 for detailed information on various knot styles.
- Recommended for bench/pedestal grinders
- For additional operating guidelines, please see page 15-16.

### Standard twist, single row, standard flag



EDP 81666


Standard twist knot wheel brushes feature knots that are twisted approximately 75% of the length of the trim. The loosely-twisted knots cover a larger surface area and are ideal for heavy-duty cleaning and surface conditioning. For weld cleaning, weld spatter removal, scale removal, cleaning, deburring, and flash removal.

### Ordering note

All wheels with 1-1/4" arbor holes include 1/4" x 1/8" keyways. All wheels with 2" arbor hole include 1/2" x 1/4" keyways.

Made in the USA.



| Dia.<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | No. of knots | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Incl. adapter<br>[Inches] | Wire diameter and EDP number |                |                |       |       | Recom. speed [RPM] | MSFS max. [RPM] | Adapter style |  |  |
|------------------------------------|--|--------------|---|-----------------------------|----------------------------|---------------------------|------------------------------|----------------|----------------|-------|-------|--------------------|-----------------|---------------|---|--|
|                                    |  |              |   |                             |                            |                           | .012                         | .014           | .016           | .020  | .023  |                    |                 |               |   |  |
| <b>Carbon steel wire</b>           |  |              |   |                             |                            |                           |                              |                |                |       |       |                    |                 |               |   |  |
| 3                                  | 1/2                                      | 18           | 5/8                                       | 1/2                         | 7/16                       | 3/8                       | 81650                        | 81651          | -              | 81652 | -     | 12,500 - 18,700    | 25,000          | F             | 10  |  |
| 3-1/4                              | 1/2                                      | 20           | 3/4                                       | 1/2                         | 7/16                       | 3/8                       | -                            | 81654          | -              | -     | -     | 12,500 - 18,700    | 25,000          | F             | 10  |  |
| 4                                  | 1/2                                      | 22           | 3/4                                       | 5/8                         | 7/16                       | 3/8                       | 81656                        | 81657 <b>P</b> | -              | 81658 | -     | 10,000 - 15,000    | 20,000          | F             | 10/5  |  |
| 4                                  | 5/8                                      | 22           | 3/4                                       | 5/8                         | 7/16                       | 1/2                       | -                            | 81660          | -              | -     | -     | 10,000 - 15,000    | 20,000          | F             | 10  |  |
| 6                                  | 5/8                                      | 32           | 1-1/8                                     | 5/8                         | 9/16                       | 1/2                       | 81665                        | 81666 <b>P</b> | 81667 <b>P</b> | -     | 81668 | 4,500 - 6,500      | 9,000           | F             | 10/5  |  |
| 7                                  | 5/8                                      | 32           | 1-5/8                                     | 5/8                         | 9/16                       | -                         | -                            | 81694          | -              | -     | -     | 4,500 - 6,500      | 9,000           | -             | 2   |  |
| 8                                  | 5/8                                      | 42           | 1-5/8                                     | 5/8                         | 5/8                        | -                         | 81702                        | 81703          | 81704 <b>P</b> | -     | 81706 | 3,500 - 5,000      | 7,000           | -             | 2/5   |  |
| 8                                  | 3/4                                      | 42           | 1-5/8                                     | 5/8                         | 5/8                        | -                         | -                            | 81698          | -              | -     | -     | 3,500 - 5,000      | 7,000           | -             | 2   |  |
| 8                                  | 1-1/4                                    | 42           | 1-1/8                                     | 5/8                         | 5/8                        | -                         | -                            | 81708          | -              | -     | 81711 | 3,500 - 5,000      | 7,000           | H             | 2   |  |
| 10                                 | 3/4                                      | 50           | 2-1/8                                     | 3/4                         | 5/8                        | -                         | -                            | 81723          | -              | -     | -     | 2,500 - 4,000      | 5,400           | -             | 2   |  |
| 10                                 | 1-1/4                                    | 50           | 2-1/8                                     | 3/4                         | 5/8                        | -                         | 81727                        | 81728          | 81729          | -     | -     | 2,500 - 4,000      | 5,400           | H             | 2   |  |
| 12                                 | 2  | 60           | 2   | 3/4                         | 5/8                        | -                         | -                            | -              | -              | -     | 81766 | 2,000 - 3,000      | 4,500           | -             | 2   |  |
| 15                                 | 1-1/4                                    | 60           | 3-1/2                                     | 7/8                         | 5/8                        | -                         | -                            | -              | 81773          | -     | -     | 1,500 - 2,500      | 3,600           | -             | 2   |  |
| <b>Stainless steel wire (INOX)</b> |  |              |   |                             |                            |                           |                              |                |                |       |       |                    |                 |               |   |  |
| 3                                  | 1/2                                      | 18           | 3/4                                       | 7/16                        | 7/16                       | 3/8                       | 81800                        | 81801          | -              | -     | -     | 10,000 - 16,000    | 25,000          | F             | 10  |  |
| 4                                  | 1/2                                      | 22           | 3/4                                       | 5/8                         | 7/16                       | 3/8                       | 81806                        | 81807 <b>P</b> | -              | 81808 | -     | 8,000 - 13,000     | 20,000          | F             | 10/5  |  |
| 4                                  | 5/8                                      | 22           | 3/4                                       | 5/8                         | 7/16                       | 1/2                       | -                            | 81810          | -              | -     | -     | 8,000 - 13,000     | 20,000          | F             | 10  |  |
| 6                                  | 5/8                                      | 32           | 1-1/8                                     | 5/8                         | 9/16                       | 1/2                       | -                            | -              | 81816          | -     | -     | 3,500 - 5,500      | 9,000           | F             | 10  |  |
| 8                                  | 5/8                                      | 42           | 1-5/8                                     | 5/8                         | 5/8                        | -                         | 81829                        | -              | 81830          | -     | -     | 2,500 - 4,500      | 7,000           | -             | 2   |  |



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The minimum order quantity of POP items is printed in "blue" accordingly.



Extended flag length provides a better surface finish than standard twist knot brushes, while brushing more aggressively than crimped wire wheels.

**Ordering note**


All wheels with 1-1/4" arbor holes include 1/4" x 1/8" keyways.

Made in the USA.

**Standard twist, single row, long flag**



EDP 81881

| Dia.<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | No. of knots | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Included adapter<br>[Inches] | Wire diameter and EDP number |       |       |       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|------------------------------------|--|--------------|---|-----------------------------|----------------------------|------------------------------|------------------------------|-------|-------|-------|-----------------------|--------------------|---------------|---|
|                                    |  |              |   |                             |                            |                              | .012                         | .014  | .016  | .020  |                       |                    |               |   |
| <b>Carbon steel wire</b>           |  |              |   |                             |                            |                              |                              |       |       |       |                       |                    |               |   |
| 6                                  | 5/8                                      | 32           | 1-1/8                                     | 5/8                         | 9/16                       | 1/2                          | 81880                        | 81881 | -     | -     | 4,500 - 6,500         | 9,000              | F             | 10  |
| 8                                  | 5/8                                      | 42           | 1-5/8                                     | 5/8                         | 5/8                        | -                            | -                            | 81889 | -     | -     | 3,500 - 5,000         | 7,000              | -             | 2   |
| 10                                 | 1-1/4                                    | 50           | 2-1/8                                     | 3/4                         | 5/8                        | -                            | -                            | -     | 81904 | -     | 2,500 - 4,000         | 5,400              | H             | 2   |
| 12                                 | 1-1/4                                    | 60           | 2   | 3/4                         | 5/8                        | -                            | -                            | -     | -     | 81930 | 2,000 - 3,500         | 4,500              | H             | 2   |




For deflashing/cleaning of insert molded rubber parts, removing heavy surface contamination, and heavy deburring of machine parts.

Made in the USA.

**Heavy duty, standard twist, double row, long flag**



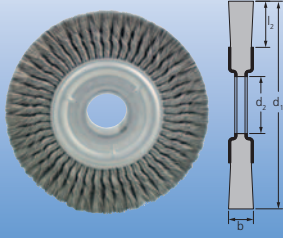
EDP 82036

| Dia.<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | No. of knots | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Included adapter<br>[Inches] | Wire diameter and EDP number |       |       |       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|------------------------------------|--|--------------|---|-----------------------------|----------------------------|------------------------------|------------------------------|-------|-------|-------|-----------------------|--------------------|---------------|---|
|                                    |  |              |   |                             |                            |                              | .012                         | .014  | .016  | .023  |                       |                    |               |   |
| <b>Carbon steel wire</b>           |  |              |   |                             |                            |                              |                              |       |       |       |                       |                    |               |   |
| 4                                  | 5/8                                      | 44           | 3/4                                       | 1                           | 1-1/8                      | 1/2                          | -                            | 82032 | -     | -     | 6,000 - 12,000        | 20,000             | D             | 5   |
| 6                                  | 2  | 60           | 1-1/8                                     | 1                           | 1-1/8                      | -                            | 82033                        | -     | 82034 | -     | 4,000 - 6,000         | 7,800              | C             | 5   |
| 8                                  | 2  | 72           | 1-5/8                                     | 1-1/8                       | 1-1/8                      | -                            | 82035                        | -     | 82036 | 82037 | 3,000 - 4,500         | 6,000              | C             | 1   |
| 10                                 | 2  | 100          | 2-1/8                                     | 1-1/4                       | 1-1/4                      | -                            | 82038                        | -     | 82039 | 82040 | 2,500 - 3,500         | 4,800              | C             | 1   |
| 12                                 | 2  | 120          | 2   | 1-5/8                       | 1-1/4                      | -                            | 82041                        | -     | 82042 | 82043 | 2,000 - 3,000         | 4,000              | C             | 1   |

# Power wire brushes

## Unthreaded knot wheel brushes

### Pipe cleaning brushes, standard twist




EDP 82084

Knotted, long-lasting, aggressive multi-section wheel is easy to install. Ideal for removing rust and protective coating from pipe ends, before beveling or welding.

Available in single section or multisection.

Made in the USA.

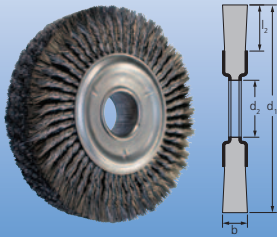


| Diameter<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | No. of knots | No. of rows | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Keyway dimensions<br>[Inches] | Wire diameter and EDP number<br>.020 | Recom. speed [RPM] | MSFS max. [RPM] | Adapter style |  |
|--|--|--------------|-------------|---|-----------------------------|----------------------------|-------------------------------|--------------------------------------|--------------------|-----------------|---------------|---|
|--|--|--------------|-------------|---|-----------------------------|----------------------------|-------------------------------|--------------------------------------|--------------------|-----------------|---------------|---|

#### Carbon steel wire

|    |   |     |   |       |       |     |           |       |               |       |   |   |
|----|---|-----|---|-------|-------|-----|-----------|-------|---------------|-------|---|---|
| 10 | 2 | 50  | 1 | 2-1/4 | 3/4   | 3/4 | 1/2 x 1/4 | 82083 | 2,500 - 4,000 | 5,400 | C | 1 |
| 10 | 2 | 200 | 4 | 2-1/4 | 2-1/8 | 2   | -         | 82084 | 2,500 - 3,500 | 4,800 | C | 1 |

### Pipe cleaning brushes, multi-section, full cable twist, COMBITWIST®



EDP 82094

#### COMBITWIST® advantages

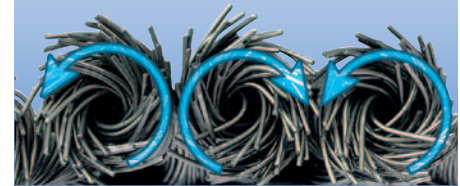
- More aggressive brushing
- Longer brush life
- Superior rotational balance
- Faster stock removal
- Reduced operator fatigue
- Better surface finish


Made in the USA.

#### PFERDERGONOMICS®



## COMBITWIST®



| Diameter<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | No. of knots | No. of rows | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Wire diameter and EDP number<br>.020 | Recom. speed [RPM] | MSFS max. [RPM] | Adapter style |  |
|--|--|--------------|-------------|---|-----------------------------|----------------------------|--------------------------------------|--------------------|-----------------|---------------|---|
|--|--|--------------|-------------|---|-----------------------------|----------------------------|--------------------------------------|--------------------|-----------------|---------------|---|

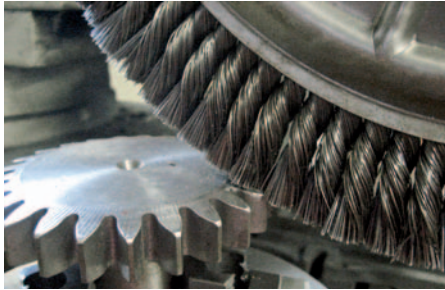
#### Carbon steel wire

|    |   |     |   |       |       |   |       |               |       |   |   |
|----|---|-----|---|-------|-------|---|-------|---------------|-------|---|---|
| 10 | 2 | 200 | 4 | 2-1/4 | 2-1/8 | 2 | 82094 | 2,500 - 3,500 | 4,800 | C | 1 |
|----|---|-----|---|-------|-------|---|-------|---------------|-------|---|---|



#### PFERDMEDIA

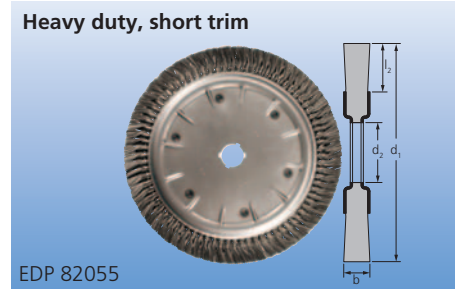
For more information and to see a product video, visit [pferdusa.com/vcombitwist](http://pferdusa.com/vcombitwist)



These short trim very aggressive wheel brushes are ideal for heavy cleaning and burr removal.

Extremely heavy duty removal.  
Maximum brushing action.

Made in the USA.



| Diameter<br>$d_1$<br>[Inches] | Arbor hole<br>$d_2$<br>[Inches] | No. of knots | Trim length<br>$l_2$<br>[Inches] | Face width<br>$b$<br>[Inches] | Width on arbor<br>[Inches] | Keyway dimensions<br>[Inches] | Wire diameter and EDP number |      |  | Recom. speed [RPM] | MSFS max. [RPM] | Adapter style |  |
|-------------------------------|---------------------------------|--------------|----------------------------------|-------------------------------|----------------------------|-------------------------------|------------------------------|------|--|--------------------|-----------------|---------------|---|
|                               |                                 |              |                                  |                               |                            |                               | .014                         | .020 |  |                    |                 |               |   |

**Carbon steel wire**

|        |       |    |       |     |     |           |       |       |   |               |       |   |   |
|--------|-------|----|-------|-----|-----|-----------|-------|-------|---|---------------|-------|---|---|
| 10     | 2     | 60 | 1-1/8 | 3/4 | 1/2 | -         | -     | 82053 | - | 2,500 - 4,000 | 5,400 | C | 2 |
| 12-1/2 | 1-1/4 | 80 | 1-1/2 | 1/2 | 1/2 | 1/4 x 1/8 | 82055 | -     | - | 2,000 - 3,000 | 4,300 | H | 2 |
| 14     | 2     | 90 | 1-1/2 | 1/2 | 1/2 | 1/2 x 1/4 | 82062 | -     | - | 700 - 2,500   | 3,850 | C | 2 |



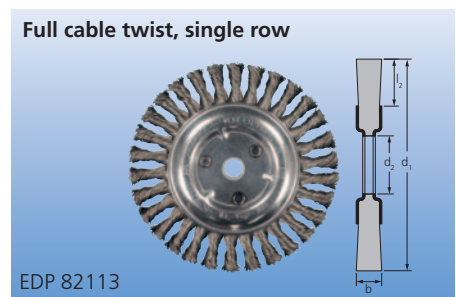
Full cable twist knot wheel brushes feature tightly twisted knots for low flex, high impact brushing action. Narrow face allows better control of surface contact area. Full cable twist is ideal for the toughest brushing applications where surface finish is a low priority.


For weld cleaning, weld spatter removal, scale removal, cleaning, deburring, and flash removal.

**Recommendation for use**

For optimal performance, use on angle grinders.

Made in the USA.



| Diameter<br>$d_1$<br>[Inches] | Arbor hole<br>$d_2$<br>[Inches] | No. of knots | Trim length<br>$l_2$<br>[Inches] | Face width<br>$b$<br>[Inches] | Width on arbor<br>[Inches] | Included adapter<br>[Inches] | Wire diameter and EDP number |      |      | Recom. speed [RPM] | MSFS max. [RPM] | Adapter style |  |
|-------------------------------|---------------------------------|--------------|----------------------------------|-------------------------------|----------------------------|------------------------------|------------------------------|------|------|--------------------|-----------------|---------------|---|
|                               |                                 |              |                                  |                               |                            |                              | .014                         | .020 | .023 |                    |                 |               |   |

**Carbon steel wire**

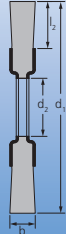
|       |     |    |       |     |      |     |       |       |       |                 |        |   |    |
|-------|-----|----|-------|-----|------|-----|-------|-------|-------|-----------------|--------|---|----|
| 4     | 1/2 | 22 | 3/4   | 3/8 | 7/16 | 3/8 | -     | 82101 | -     | 10,000 - 15,000 | 20,000 | F | 10 |
| 4     | 5/8 | 22 | 3/4   | 3/8 | 7/16 | 1/2 | 82102 | -     | -     | 10,000 - 15,000 | 20,000 | F | 10 |
| 4-1/2 | 7/8 | 24 | 13/16 | 1/2 | 7/16 | -   | -     | 82452 | -     | 6,000 - 9,000   | 12,500 | F | 10 |
| 6     | 5/8 | 30 | 1-1/4 | 1/2 | 9/16 | 1/2 | -     | -     | 82113 | 5,000 - 7,500   | 10,000 | F | 10 |
| 8     | 5/8 | 42 | 1-5/8 | 3/8 | 5/8  | -   | -     | -     | 82118 | 3,500 - 5,000   | 7,000  | - | 2  |
| 10    | 3/4 | 36 | 2-5/8 | 3/8 | 5/8  | -   | -     | -     | 82120 | 2,500 - 4,000   | 5,400  | - | 2  |

# Power wire brushes

## Unthreaded knot wheel brushes

Full cable twist, single row,  
COMBITWIST®

**NEW**



EDP 82020

### COMBITWIST® advantages

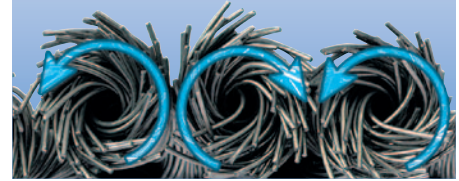
- More aggressive brushing
- Longer brush life
- Superior rotational balance
- Faster stock removal
- Reduced operator fatigue
- Better surface finish


Made in the USA.

### PFERDERGONOMICS®



## COMBITWIST®



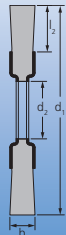
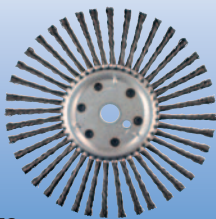
| Diameter<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | No. of knots | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Keyway dimensions<br>[Inches] | Wire diameter and EDP number<br>.020 | Recom. speed [RPM] | MSFS max. [RPM] | Adapter style |  |
|--|--|--------------|---|-----------------------------|----------------------------|-------------------------------|--------------------------------------|--------------------|-----------------|---------------|---|
| <b>Carbon steel wire</b>               |  |              |   |                             |                            |                               |                                      |                    |                 |               |   |
| 15                                     | 2  | 80           | 2-5/8                                     | 3/4                         | 3/4                        | 1/2 x 1/4                     | 82020                                | 700 - 3,000        | 3,600           | C             | 1   |



### PFERDMEDIA

For more information and to see a product video, visit [pferdusa.com/vcombitwist](http://pferdusa.com/vcombitwist)

### Expansion joint cleaning brushes



EDP 82078


Long trim for joint penetration, and finer wire for extended life. Used for removing road joint material. Features 3/8" drive pin hole.

### Recommendation for use

Used on walk-behind and portable machines.

Made in the USA.



| Diameter<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | No. of knots | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Wire diameter and EDP number<br>.028   .035 | Recom. speed [RPM] | MSFS max. [RPM] |  |
|--|--|--------------|---|-----------------------------|----------------------------|---|--------------------|-----------------|---|
| <b>Carbon steel wire</b>               |  |              |   |                             |                            |   |                    |                 |   |
| 10                                     | 1  | 40           | 2-1/4                                     | 3/8                         | 1/2                        | 82075   82076                               | 2,000 - 3,000      | 6,000           | 2   |
| 12                                     | 1  | 40           | 3   | 3/8                         | 1/2                        | 82077   82078                               | 2,000 - 3,000      | 6,000           | 2   |
| 12                                     | 20 mm                                    | 40           | 3   | 3/8                         | 1/2                        | 82085   82086                               | 2,000 - 3,000      | 6,000           | 2   |



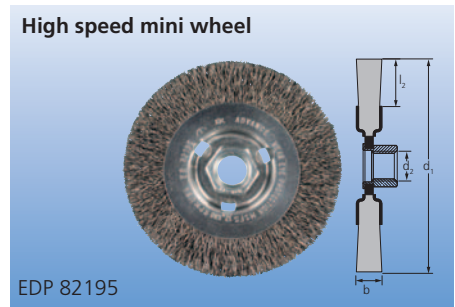
Crimped wire wheel brushes are less aggressive than knot wire type for lighter-duty applications. Crimped wire is more flexible, and leaves a superior surface finish.


For weld cleaning, rust, paint, adhesive and oxidation removal, cleaning, light deburring, and flash removal.



**Recommendation for use**  
Recommended for use on angle grinders.

**Ordering note**  
Please see below for thread adapters.

Made in the USA.



| Diameter<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Wire diameter and EDP number<br>.014 | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|--|---|---|-----------------------------|--------------------------------------|--------------------------|-----------------------|---|
| <b>Carbon steel wire</b>               |   |   |                             |                                      |                          |                       |   |
| 4                                      | 5/8-11                                    | 11/16                                     | 1/2                         | 82195 <b>P</b>                       | 6,000 - 12,500           | 12,500                | 5/5   |
| 4-1/2                                  | 5/8-11                                    | 15/16                                     | 1/2                         | 80024                                | 6,000 - 12,500           | 12,500                | 5   |
| 5                                      | 5/8-11                                    | 1-1/8                                     | 1/2                         | 80036                                | 6,000 - 12,500           | 10,000                | 5   |
| <b>Stainless steel wire (INOX)</b>     |   |   |                             |                                      |                          |                       |   |
| 4                                      | 5/8-11                                    | 11/16                                     | 1/2                         | 82316                                | 5,000 - 6,000            | 12,500                | 5   |
| 4-1/2                                  | 5/8-11                                    | 15/16                                     | 1/2                         | 80354                                | 5,000 - 6,000            | 12,500                | 5   |
| 5                                      | 5/8-11                                    | 1-1/8                                     | 1/2                         | 80366                                | 5,000 - 6,000            | 10,000                | 5   |
| <b>Brass wire</b>                      |   |   |                             |                                      |                          |                       |   |
| 4                                      | 5/8-11                                    | 11/16                                     | 1/2                         | 82367                                | 5,000 - 6,000            | 12,500                | 5   |

| Minigrinder<br>adapter insert  | Fits brush thread | Fits tool spindle thread | EDP number     |  |
|--|-------------------|--------------------------|----------------|---|
| <br>EDP 84646 | 5/8-11            | M10x1.25                 | 84645 <b>P</b> | 5/5   |
|  | 5/8-11            | M10x1.50                 | 84646 <b>P</b> | 5/5   |
|  | 5/8-11            | 3/8-24                   | 84647 <b>P</b> | 5/5   |



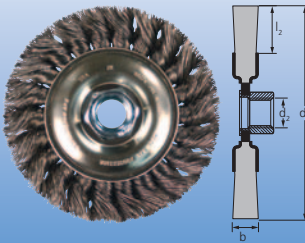
Brushes available in POP packaging are marked with a "P" in this catalogue. To order brushes in POP versions, please add a "P" to the end of the EDP number.

The minimum order quantity of POP items is printed in "blue" accordingly.

# Power wire brushes

## Threaded knot wheel brushes

### Standard twist



EDP 82153

Standard twist knot wheel brushes with a threaded nut for easy change out. Features loosely twisted knots for aggressive brushing action with a good surface finish. They are ideal when heavy-duty or severe cleaning is required.


For weld cleaning, weld spatter removal, scale removal, cleaning, deburring, and flash removal.

#### Recommendation for use

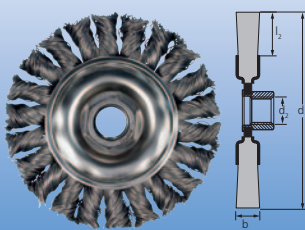
For optimal performance, use on angle grinders.

Made in the USA.



| Diameter<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub><br>[Inches] | No. of<br>knots | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Wire diameter and EDP number |       |       |       | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|--|---|-----------------|---|-----------------------------|------------------------------|-------|-------|-------|--------------------------|-----------------------|---|
|  |   |                 |   |                             | .014                         | .016  | .020  | .023  |                          |                       |   |
| <b>Carbon steel wire</b>               |   |                 |   |                             |                              |       |       |       |                          |                       |   |
| 4                                      | 5/8-11                                    | 22              | 7/8                                       | 5/8                         | 82153 P                      | -     | 82154 | -     | 10,000 - 15,000          | 20,000                | 10/5  |
| 4                                      | 3/8-24                                    | 22              | 7/8                                       | 5/8                         | -                            | -     | 82158 | -     | 10,000 - 15,000          | 20,000                | 10  |
| 5                                      | 5/8-11                                    | 24              | 5/8                                       | 5/8                         | -                            | -     | 82470 | -     | 7,500 - 15,000           | 15,000                | 10  |
| 6                                      | 5/8-11                                    | 32              | 1-1/8                                     | 5/8                         | 82471                        | 82472 | -     | 82473 | 4,500 - 9,000            | 9,000                 | 10  |
| <b>Stainless steel wire (INOX)</b>     |   |                 |   |                             |                              |       |       |       |                          |                       |   |
| 4                                      | 5/8-11                                    | 22              | 7/8                                       | 5/8                         | 82283 P                      | -     | 82284 | -     | 8,000 - 15,000           | 20,000                | 10/5  |
| 4                                      | 3/8-24                                    | 22              | 7/8                                       | 5/8                         | -                            | -     | 82288 | -     | 8,000 - 15,000           | 20,000                | 10  |
| 5                                      | 5/8-11                                    | 24              | 5/8                                       | 5/8                         | -                            | -     | 82596 | -     | 6,000 - 15,000           | 15,000                | 10  |
| 6                                      | 5/8-11                                    | 32              | 1-1/8                                     | 5/8                         | -                            | 82597 | -     | 82598 | 3,500 - 9,000            | 9,000                 | 10  |
| <b>Brass wire</b>                      |   |                 |   |                             |                              |       |       |       |                          |                       |   |
| 4                                      | 5/8-11                                    | 22              | 7/8                                       | 5/8                         | 82366                        | -     | -     | -     | 8,000 - 15,000           | 20,000                | 10  |

### Standard twist, COMBITWIST®



EDP 82383

#### COMBITWIST® advantages

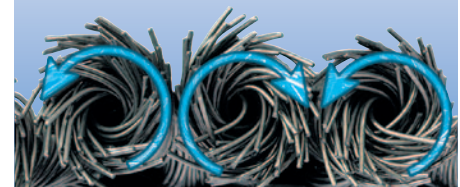
- More aggressive brushing
- Longer brush life
- Superior rotational balance
- Faster stock removal
- Reduced operator fatigue
- Better surface finish


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#### PFERDERGONOMICS®



### COMBITWIST®



| Diameter<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub><br>[Inches] | No. of<br>knots | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Wire diameter and EDP number |       |       |       | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|--|---|-----------------|---|-----------------------------|------------------------------|-------|-------|-------|--------------------------|-----------------------|---|
|  |   |                 |   |                             | .014                         | .016  | .020  | .023  |                          |                       |   |
| <b>Carbon steel wire</b>               |   |                 |   |                             |                              |       |       |       |                          |                       |   |
| 4                                      | 5/8-11                                    | 22              | 7/8                                       | 5/8                         | 82383                        | -     | 82384 | -     | 10,000 - 15,000          | 20,000                | 10  |
| 5                                      | 5/8-11                                    | 24              | 5/8                                       | 5/8                         | -                            | -     | 82680 | -     | 7,500 - 15,000           | 15,000                | 10  |
| 6                                      | 5/8-11                                    | 32              | 1-1/8                                     | 5/8                         | 82681                        | 82682 | -     | 82683 | 4,500 - 9,000            | 9,000                 | 10  |
| <b>Stainless steel wire (INOX)</b>     |   |                 |   |                             |                              |       |       |       |                          |                       |   |
| 4                                      | 5/8-11                                    | 22              | 7/8                                       | 5/8                         | 82412                        | -     | 82413 | -     | 8,000 - 15,000           | 20,000                | 10  |
| 5                                      | 5/8-11                                    | 24              | 5/8                                       | 5/8                         | -                            | -     | 82749 | -     | 6,000 - 15,000           | 15,000                | 10  |
| 6                                      | 5/8-11                                    | 32              | 1-1/8                                     | 5/8                         | -                            | 82752 | -     | 82753 | 3,500 - 9,000            | 9,000                 | 10  |



#### PFERDMEDIA

For more information and to see a product video, visit [pferdusa.com/vcombitwist](http://pferdusa.com/vcombitwist)



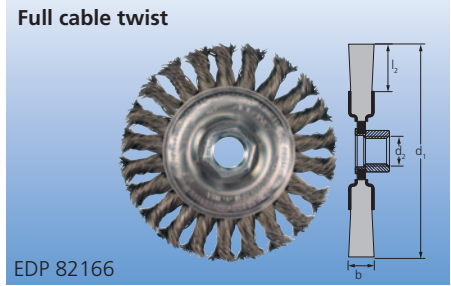


Narrow face allows better control of surface contact area. Full cable twist is ideal for the tough brushing applications where surface finish is a low priority.

### Recommendation for use

For optimal performance, use on angle grinders.

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| Diameter<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub><br>[Inches] | No. of<br>knots | Trim length<br>L <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Wire diameter and EDP number |         |         |         | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |      |
|--|---|-----------------|---|-----------------------------|------------------------------|---------|---------|---------|--------------------------|-----------------------|------|
|  |   |                 |   |                             | .014                         | .016    | .020    | .023    |                          |                       |      |
| <b>Carbon steel wire</b>               |   |                 |   |                             |                              |         |         |         |                          |                       |      |
| 4                                      | 5/8-11                                    | 22              | 3/4                                       | 1/2                         | 82165 P                      | -       | 82166 P | -       | 10,000 - 15,000          | 20,000                | 10/5 |
| 4                                      | 1/2-13                                    | 22              | 3/4                                       | 1/2                         | -                            | -       | 82168   | -       | 10,000 - 15,000          | 20,000                | 10   |
| 4                                      | 3/8-24                                    | 22              | 3/4                                       | 1/2                         | -                            | -       | 82170   | -       | 10,000 - 15,000          | 20,000                | 10   |
| 5                                      | 5/8-11                                    | 24              | 3/4                                       | 1/2                         | -                            | -       | -       | 82474 P | 7,500 - 15,000           | 15,000                | 10/5 |
| 6                                      | 5/8-11                                    | 24              | 1-1/4                                     | 1/2                         | -                            | -       | -       | 82477 P | 5,000 - 10,000           | 10,000                | 10/5 |
| 6                                      | 5/8-11                                    | 30              | 1-1/4                                     | 1/2                         | -                            | 82476 P | -       | 82478 P | 5,000 - 10,000           | 10,000                | 10/5 |
| <b>Stainless steel wire (INOX)</b>     |   |                 |   |                             |                              |         |         |         |                          |                       |      |
| 4                                      | 5/8-11                                    | 22              | 3/4                                       | 1/2                         | 82295 P                      | -       | 82296   | -       | 8,000 - 15,000           | 20,000                | 10/5 |
| 5                                      | 5/8-11                                    | 24              | 3/4                                       | 1/2                         | -                            | -       | -       | 82599   | 6,000 - 15,000           | 15,000                | 10   |
| 6                                      | 5/8-11                                    | 24              | 1-1/4                                     | 1/2                         | -                            | -       | -       | 82602   | 4,000 - 10,000           | 10,000                | 10   |
| 6                                      | 5/8-11                                    | 30              | 1-1/4                                     | 1/2                         | -                            | -       | -       | 82603   | 4,000 - 10,000           | 10,000                | 10   |

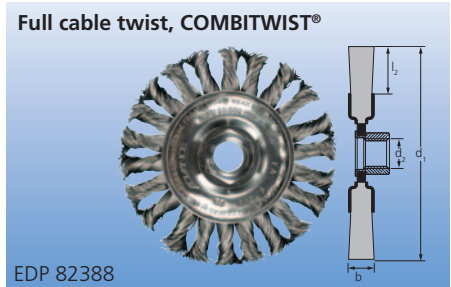


### COMBITWIST® advantages

- More aggressive brushing
- Longer brush life
- Superior rotational balance
- Faster stock removal
- Reduced operator fatigue
- Better surface finish

Made in the USA.

### PFERDERGONOMICS®



| Dia.<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub><br>[Inches] | No. of<br>knots | Trim length<br>L <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Wire diameter and EDP number |         |       | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |      |
|------------------------------------|---|-----------------|---|-----------------------------|------------------------------|---------|-------|--------------------------|-----------------------|------|
|                                    |   |                 |   |                             | .014                         | .020    | .023  |                          |                       |      |
| <b>Carbon steel wire</b>           |   |                 |   |                             |                              |         |       |                          |                       |      |
| 4                                  | 5/8-11                                    | 22              | 3/4                                       | 1/2                         | 82387                        | 82388 P | -     | 10,000 - 15,000          | 20,000                | 10/5 |
| 5                                  | 5/8-11                                    | 24              | 3/4                                       | 1/2                         | -                            | -       | 82684 | 7,500 - 15,000           | 15,000                | 10   |
| 6                                  | 5/8-11                                    | 30              | 1-1/4                                     | 1/2                         | -                            | -       | 82688 | 5,000 - 10,000           | 10,000                | 10   |
| <b>Stainless steel wire (INOX)</b> |   |                 |   |                             |                              |         |       |                          |                       |      |
| 4                                  | 5/8-11                                    | 22              | 3/4                                       | 1/2                         | 82416                        | 82417   | -     | 8,000 - 15,000           | 20,000                | 10   |
| 6                                  | 5/8-11                                    | 30              | 1-1/4                                     | 1/2                         | -                            | -       | 82758 | 4,000 - 10,000           | 10,000                | 10   |



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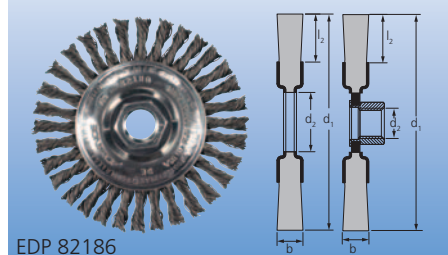
### PFERDMEDIA

For more information and to see a product video, visit [pferdusa.com/vcombitwist](http://pferdusa.com/vcombitwist)

# Power wire brushes

## Threaded knot wheel brushes

### Stringer bead twist



EDP 82186

Stringer bead knot wheel brushes are tightly twisted for low flex, high impact brushing action. Designed for root and hot pass weld cleaning in pipe joining applications. Also for general use where a narrow face, aggressive brush is desired for controlled, confined surface contact area.


Designed for applications requiring aggressive brushing action.

#### Recommendation for use

For optimal performance, use on angle grinders.

Made in the USA.





| Diameter<br>$d_1$<br>[Inches] | Bore/thread size<br>$d_2$ | No. of<br>knots | Trim length<br>$l_2$<br>[Inches] | Face width<br>$b$<br>[Inches] | Wire diameter and EDP number<br><br>.020 | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|-------------------------------|---------------------------|-----------------|----------------------------------|-------------------------------|--|--------------------------|-----------------------|---|
|-------------------------------|---------------------------|-----------------|----------------------------------|-------------------------------|--|--------------------------|-----------------------|---|

#### Carbon steel wire

|       |          |    |       |      |                |                 |        |      |
|-------|----------|----|-------|------|----------------|-----------------|--------|------|
| 4     | 5/8-11   | 32 | 3/4   | 3/16 | 82186 <b>P</b> | 10,000 - 15,000 | 20,000 | 10/5 |
| 4     | 1/2-13   | 32 | 3/4   | 3/16 | 82187 <b>P</b> | 10,000 - 15,000 | 20,000 | 10/5 |
| 4     | 3/8-24   | 32 | 3/4   | 3/16 | 82188          | 10,000 - 15,000 | 20,000 | 10   |
| 4     | M10x1.50 | 32 | 3/4   | 3/16 | 82189          | 10,000 - 15,000 | 20,000 | 10   |
| 4     | M10x1.25 | 32 | 3/4   | 3/16 | 82190 <b>P</b> | 10,000 - 15,000 | 20,000 | 10/5 |
| 4     | 5/8      | 32 | 3/4   | 3/16 | 82192          | 10,000 - 15,000 | 20,000 | 10   |
| 4     | 1/2-3/8  | 32 | 3/4   | 3/16 | 82193          | 10,000 - 15,000 | 20,000 | 10   |
| 4-1/2 | 5/8-11   | 32 | 1     | 3/16 | 82194 <b>P</b> | 10,000 - 15,000 | 20,000 | 10/5 |
| 4-7/8 | 5/8-11   | 38 | 3/4   | 3/16 | 82479          | 7,500 - 15,000  | 15,000 | 10   |
| 4-7/8 | 5/8-11   | 48 | 3/4   | 3/16 | 82483 <b>P</b> | 7,500 - 15,000  | 15,000 | 10/5 |
| 6     | 5/8-11   | 40 | 1-1/8 | 3/16 | 82486          | 6,000 - 12,500  | 12,500 | 10   |
| 6     | 5/8-11   | 48 | 1-1/8 | 3/16 | 82487 <b>P</b> | 6,000 - 12,500  | 12,500 | 10/5 |
| 6     | 5/8-11   | 56 | 1-1/8 | 3/16 | 82488 <b>P</b> | 6,000 - 12,500  | 12,500 | 10/5 |
| 6     | 5/8-11   | 64 | 1-1/8 | 1/8  | 82489          | 6,000 - 12,500  | 12,500 | 10   |
| 6-7/8 | 5/8-11   | 56 | 1-1/8 | 3/16 | 82494 <b>P</b> | 4,500 - 9,000   | 9,000  | 10/5 |
| 6-7/8 | 5/8-11   | 72 | 1-1/8 | 3/16 | 82495          | 4,500 - 9,000   | 9,000  | 10   |

#### Stainless steel wire (INOX)

|       |        |    |       |      |                |                |        |      |
|-------|--------|----|-------|------|----------------|----------------|--------|------|
| 4     | 5/8-11 | 32 | 3/4   | 3/16 | 82307 <b>P</b> | 8,000 - 15,000 | 20,000 | 10/5 |
| 4     | 3/8-24 | 32 | 3/4   | 3/16 | 82309          | 8,000 - 15,000 | 20,000 | 10   |
| 4-1/2 | 5/8-11 | 32 | 1     | 3/16 | 82315          | 8,000 - 15,000 | 20,000 | 10   |
| 4-7/8 | 5/8-11 | 38 | 3/4   | 3/16 | 82604          | 6,000 - 15,000 | 15,000 | 10   |
| 4-7/8 | 5/8-11 | 48 | 3/4   | 3/16 | 82608 <b>P</b> | 6,000 - 15,000 | 15,000 | 10/5 |
| 6     | 5/8-11 | 40 | 1-1/8 | 3/16 | 82611          | 5,000 - 12,500 | 12,500 | 10   |
| 6     | 5/8-11 | 48 | 1-1/8 | 3/16 | 82612 <b>P</b> | 5,000 - 12,500 | 12,500 | 10/5 |
| 6     | 5/8-11 | 56 | 1-1/8 | 3/16 | 82613          | 5,000 - 12,500 | 12,500 | 10   |
| 6     | 5/8-11 | 64 | 1-1/8 | 1/8  | 82614          | 5,000 - 12,500 | 12,500 | 10   |
| 6-7/8 | 5/8-11 | 56 | 1-1/8 | 3/16 | 82619          | 3,500 - 9,000  | 9,000  | 10   |

| Minigrinder<br>adapter insert   | Fits brush thread | Fits tool spindle thread | EDP number     |  |
|---|-------------------|--------------------------|----------------|---|
|  | 5/8-11            | M10x1.25                 | 84645 <b>P</b> | 5/5   |
|   | 5/8-11            | M10x1.50                 | 84646 <b>P</b> | 5/5   |
|   | 5/8-11            | 3/8-24                   | 84647 <b>P</b> | 5/5   |

EDP 84646



### COMBITWIST® advantages

- More aggressive brushing
- Longer brush life
- Superior rotational balance
- Faster stock removal
- Reduced operator fatigue
- Better surface finish

### Recommendation for use

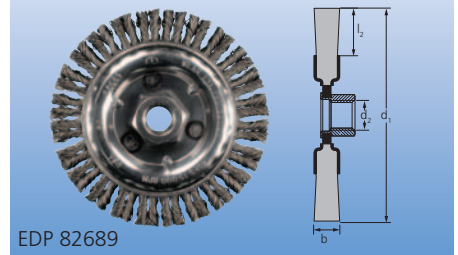
For optimal performance, use on angle grinders.


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### PFERDERGONOMICS®



### Stringer bead twist, COMBITWIST®



| Diameter d <sub>1</sub> [Inches]   | Thread size d <sub>2</sub> [Inches] | No. of knots | Trim length l <sub>2</sub> [Inches] | Face width b [Inches] | Wire diameter and EDP number | Recom. speed [RPM] | MSFS max. [RPM] |  |  |
|------------------------------------|-------------------------------------|--------------|-------------------------------------|-----------------------|------------------------------|--------------------|-----------------|---|--|
|                                    |                                     |              |                                     |                       | .020                         |                    |                 |   |  |
| <b>Carbon steel wire</b>           |                                     |              |                                     |                       |                              |                    |                 |   |  |
| 4                                  | 5/8-11                              | 32           | 3/4                                 | 3/16                  | 82391 <b>P</b>               | 10,000 - 15,000    | 20,000          | 10/5  |  |
| 4-1/2                              | 5/8-11                              | 32           | 1                                   | 3/16                  | 82392 <b>P</b>               | 10,000 - 15,000    | 20,000          | 10/5  |  |
| 4-7/8                              | 5/8-11                              | 48           | 3/4                                 | 3/16                  | 82689                        | 7,500 - 15,000     | 15,000          | 10  |  |
| 6                                  | 5/8-11                              | 48           | 1-1/8                               | 3/16                  | 82693                        | 6,000 - 12,500     | 12,500          | 10  |  |
| 6                                  | 5/8-11                              | 56           | 1-1/8                               | 3/16                  | 82694                        | 6,000 - 12,500     | 12,500          | 10  |  |
| 6                                  | 5/8-11                              | 64           | 1-1/8                               | 1/8                   | 82695                        | 6,000 - 12,500     | 12,500          | 10  |  |
| 6-7/8                              | 5/8-11                              | 56           | 1-1/8                               | 3/16                  | 82700                        | 4,500 - 9,000      | 9,000           | 10  |  |
| 6-7/8                              | 5/8-11                              | 72           | 1-1/8                               | 3/16                  | 82701                        | 4,500 - 9,000      | 9,000           | 10  |  |
| <b>Stainless steel wire (INOX)</b> |                                     |              |                                     |                       |                              |                    |                 |   |  |
| 4                                  | 5/8-11                              | 32           | 3/4                                 | 3/16                  | 82420                        | 8,000 - 15,000     | 20,000          | 10  |  |
| 4-1/2                              | 5/8-11                              | 32           | 1                                   | 3/16                  | 82421                        | 8,000 - 15,000     | 20,000          | 10  |  |
| 4-7/8                              | 5/8-11                              | 48           | 3/4                                 | 3/16                  | 82759                        | 7,000 - 15,000     | 15,000          | 10  |  |
| 6                                  | 5/8-11                              | 48           | 1-1/8                               | 3/16                  | 82763                        | 5,000 - 12,500     | 12,500          | 10  |  |
| 6                                  | 5/8-11                              | 56           | 1-1/8                               | 3/16                  | 82764                        | 5,000 - 12,500     | 12,500          | 10  |  |
| 6                                  | 5/8-11                              | 64           | 1-1/8                               | 1/8                   | 82765                        | 5,000 - 12,500     | 12,500          | 10  |  |



### PFERDMEDIA

For more information and to see a product video, visit [pferdusa.com/vcombitwist](http://pferdusa.com/vcombitwist)



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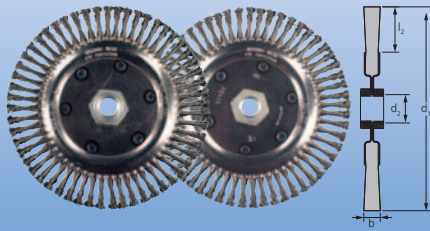


PFERD products are engineered for optimal use in the pipeline industry. Please request our Pipeline catalogue for more information!

# Power wire brushes

## Threaded knot wheel brushes

### TWIN-NUT, stringer bead twist



EDP 88032

This unique patented nut design solves the problem of brush interference with the guard when changing the mounting position of the brush, resulting in increased user safety.

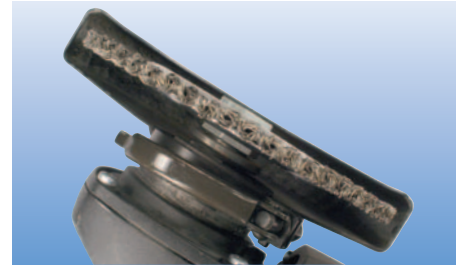
Reversing the mounting position of the brush takes advantage of the self-sharpening effect of the wire, resulting in longer service life, and improved brush performance.


#### Recommendation for use

For optimal performance, use on angle grinders.

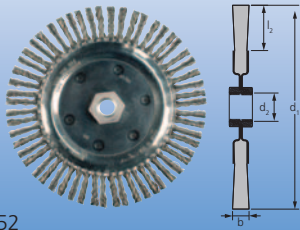
**TWIN-NUT U.S. Patent No. 8425282**

Made in the USA.



| Diameter<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub><br>[Inches] | No. of<br>knots | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Wire diameter and EDP number<br><br>.020 | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|--|---|-----------------|---|-----------------------------|--|--------------------------|-----------------------|---|
| <b>Carbon steel wire</b>               |   |                 |   |                             |  |                          |                       |   |
| 6                                      | 5/8-11                                    | 48              | 1-1/8                                     | 3/16                        | 88028                                    | 6,000 - 12,500           | 12,500                | 10  |
| 6                                      | 5/8-11                                    | 56              | 1-1/8                                     | 3/16                        | 88029                                    | 6,000 - 12,500           | 12,500                | 10  |
| 6-7/8                                  | 5/8-11                                    | 56              | 1-1/8                                     | 3/16                        | 88032                                    | 4,500 - 9,000            | 9,000                 | 10  |
| <b>Stainless steel wire (INOX)</b>     |   |                 |   |                             |  |                          |                       |   |
| 6                                      | 5/8-11                                    | 48              | 1-1/8                                     | 3/16                        | 88041                                    | 5,000 - 12,500           | 12,500                | 10  |
| 6                                      | 5/8-11                                    | 56              | 1-1/8                                     | 3/16                        | 88042                                    | 5,000 - 12,500           | 12,500                | 10  |
| 6-7/8                                  | 5/8-11                                    | 56              | 1-1/8                                     | 3/16                        | 88044                                    | 3,500 - 9,000            | 9,000                 | 10  |

### TWIN-NUT, stringer bead twist, COMBITWIST®



EDP 88052

#### COMBITWIST® advantages

- More aggressive brushing
- Longer brush life
- Superior rotational balance
- Faster stock removal
- Reduced operator fatigue
- Better surface finish

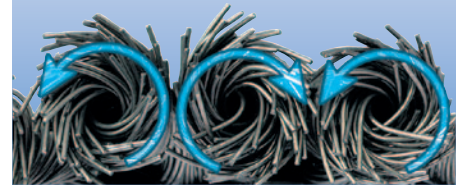
**TWIN-NUT U.S. Patent No. 8425282**


Made in the USA.

**PFERDERGONOMICS®**



## COMBITWIST®



| Diameter<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub><br>[Inches] | No. of<br>knots | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Wire diameter and EDP number<br><br>.020 | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|--|---|-----------------|---|-----------------------------|--|--------------------------|-----------------------|---|
| <b>Carbon steel wire</b>               |   |                 |   |                             |  |                          |                       |   |
| 6                                      | 5/8-11                                    | 56              | 1-1/8                                     | 3/16                        | 88050                                    | 6,000 - 12,500           | 12,500                | 10  |
| 6-7/8                                  | 5/8-11                                    | 56              | 1-1/8                                     | 3/16                        | 88052                                    | 4,500 - 9,000            | 9,000                 | 10  |



**PFERDMEDIA**

For more information, visit  
[pferdusa.com/twin](http://pferdusa.com/twin)



Encapsulation material gradually wears away to consistently maintain a short trim length for most aggressive brushing and long service life. Elastomer provides precision control of contact area on workpiece.

### Ordering note

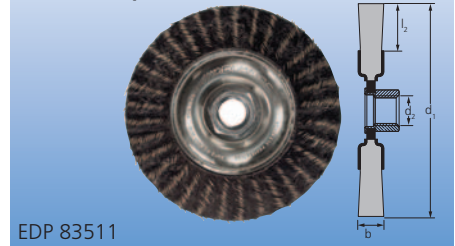
For additional information on ECAP® encapsulation, please see page 13.

### Recommendation for use


For optimal performance, use on angle grinders.

Made in the USA.

### Stringer bead twist, ECAP® encapsulated



EDP 83511

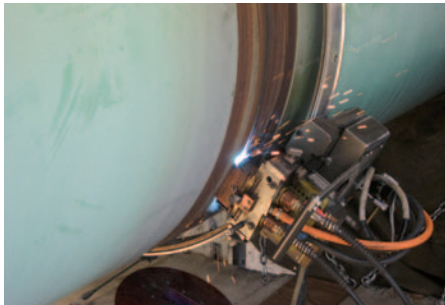
| Diameter<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | ECAP®<br>grade | Wire diameter and EDP number |      | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|--|---|---|-----------------------------|----------------|------------------------------|------|--------------------------|-----------------------|---|
|  |   |   |                             |                | .014                         | .020 |                          |                       |   |

#### Carbon steel – crimped wire

|   |        |        |      |    |       |   |               |       |    |
|---|--------|--------|------|----|-------|---|---------------|-------|----|
| 6 | 5/8-11 | 1-1/16 | 3/16 | E4 | 83507 | - | 4,500 - 9,000 | 9,000 | 10 |
| 7 | 5/8-11 | 1-9/16 | 3/16 | E4 | 83509 | - | 4,500 - 9,000 | 9,000 | 10 |
| 7 | 5/8-11 | 1-9/16 | 3/16 | E5 | 83517 | - | 4,500 - 9,000 | 9,000 | 10 |

#### Carbon steel – knot wire

|       |        |        |      |    |   |       |                 |        |    |
|-------|--------|--------|------|----|---|-------|-----------------|--------|----|
| 4     | 5/8-11 | 7/8    | 3/16 | E4 | - | 83511 | 10,000 - 15,000 | 20,000 | 10 |
| 6-7/8 | 5/8-11 | 1-9/16 | 3/16 | E4 | - | 83513 | 4,500 - 9,000   | 9,000  | 10 |



Automatic welding machine

This 5" diameter encapsulated stringer bead wheel is ideal for cleaning welds and bevels created by automatic orbital welding equipment. Features extra-long 1-1/4" trim length, allowing the brush to reach into tight bevels used by automatic welders, even on heavy wall pipe.

For additional information on ECAP® encapsulation, please see page 13.

### Recommendation for use

For use with automatic orbital welding equipment.

Made in the USA.

### J-BEVEL brush, stringer bead twist, ECAP® encapsulated





EDP 83515

| Diameter<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | ECAP®<br>grade | Wire diameter and EDP number |  | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|--|---|---|-----------------------------|----------------|------------------------------|--|--------------------------|-----------------------|---|
|  |   |   |                             |                | .014                         |  |                          |                       |   |

#### Carbon steel wire

|   |        |       |      |    |       |  |                |        |   |
|---|--------|-------|------|----|-------|--|----------------|--------|---|
| 5 | 5/8-11 | 1-1/4 | 3/16 | E4 | 83515 |  | 7,500 - 15,000 | 15,000 | 5 |
|---|--------|-------|------|----|-------|--|----------------|--------|---|

| Minigrinder<br>adapter insert   | Fits brush thread | Fits tool spindle thread | EDP number     |  |
|---|-------------------|--------------------------|----------------|---|
|  | 5/8-11            | M10x1.25                 | 84645 <b>P</b> | 5/5   |
|   | 5/8-11            | M10x1.50                 | 84646 <b>P</b> | 5/5   |
|   | 5/8-11            | 3/8-24                   | 84647 <b>P</b> | 5/5   |

EDP 84646



Brushes available in POP packaging are marked with a "P" in this catalogue. To order brushes in POP versions, please add a "P" to the end of the EDP number.

The minimum order quantity of POP items is printed in "blue" accordingly.



PFERD products are engineered for optimal use in the pipeline industry. Please request our Pipeline catalogue for more information!

# Power wire brushes

## Cup and bevel brushes



PFERD cup brushes are available in a large variety of diameters and types including internal and external threads, crimped and knot wire types, and ECAP® encapsulation for aggressive brushing.

Our cup brushes are built with high quality components that are designed to perform in welding and industrial applications.

### Cup and bevel brushes

- Great cutting action and flexibility, excelling on large flat and curved surfaces.
- Crimped and knot bevel brushes for cleaning hard-to-reach areas.
- Double-row cup brushes (available in 4" and 6" OD) for extremely aggressive brushing.

### Application guidelines

- For optimal brushing action, tilt the brush between 15 and 30 degrees off of the workpiece surface.
- For use on vertical surfaces. The internal nut cup brushes will reduce operator fatigue.
- The tighter the knot, the more aggressive the brushing action. See page 13 for detailed information on various knot styles.
- Manipulating the brush speed will drastically affect the filament flare. See side-by-side photos below.
- For additional operating guidelines, please see page 15-16.



| Knot cup brush, single row   | Knot cup brush, double row   | External retaining nut  | Internal retaining nut  |
|--|--|---|---|
|    |   |   |    |
| <ul style="list-style-type: none"> <li>■ Lighter weight</li> <li>■ Less aggressive</li> <li>■ Hand-held applications</li> <li>■ Less surface area covered</li> <li>■ More brush flare</li> </ul> | <ul style="list-style-type: none"> <li>■ Heavier weight</li> <li>■ More aggressive</li> <li>■ Automated applications</li> <li>■ More surface area covered</li> <li>■ Less brush flare</li> </ul> | <ul style="list-style-type: none"> <li>■ Reduced chance for guard interference</li> <li>■ Longer overall brush height</li> <li>■ Easy to access with open end wrench</li> <li>■ Available in all brush diameters</li> </ul> | <ul style="list-style-type: none"> <li>■ Brush weight is closer to machine spindle therefore easier to handle</li> <li>■ Shorter overall brush height</li> <li>■ Easily accessible with socket wrench</li> <li>■ Generally available on larger brush diameters</li> </ul> |



For light duty application and surface cleaning, flat brushing and flash removal.

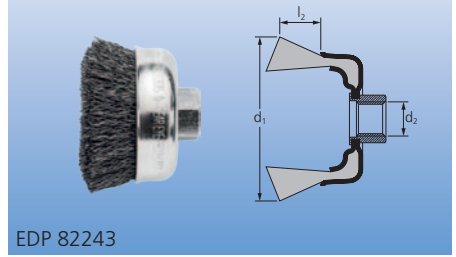
Recommended for use on portable power tools to remove paint, burrs, and corrosion.

**Recommendation for use**


Suitable tool drives: stationary machines, and angle grinders. When using angle grinders, please observe maximum safe free speed (MSFS).

Made in the USA.

**External nut**



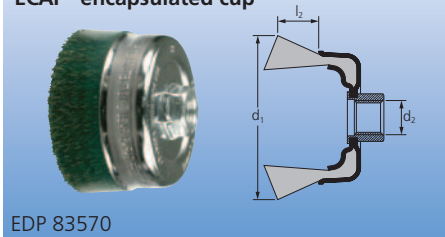
EDP 82243

| Diameter<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub> | Trim length<br>l <sub>2</sub><br>[Inches] | Wire diameter and EDP number |                | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|--|-------------------------------|---|------------------------------|----------------|--------------------------|-----------------------|---|
|  |                               |   | .014                         | .020           |                          |                       |   |
| <b>Carbon steel wire</b>               |                               |   |                              |                |                          |                       |   |
| 2-3/4                                  | 5/8-11                        | 7/8                                       | 82243 <b>P</b>               | -              | 7,000 - 14,000           | 14,000                | 5/5   |
| 2-3/4                                  | M10x1.50                      | 7/8                                       | 82246 <b>P</b>               | -              | 7,000 - 14,000           | 14,000                | 5   |
| 2-3/4                                  | M10x1.25                      | 7/8                                       | 82247 <b>P</b>               | -              | 7,000 - 14,000           | 14,000                | 5   |
| 3-1/2                                  | 5/8-11                        | 7/8                                       | 82249 <b>P</b>               | 82255          | 6,000 - 12,500           | 12,500                | 1/5   |
| 4                                      | 5/8-11                        | 1-1/4                                     | 82510 <b>P</b>               | 82511 <b>P</b> | 4,500 - 9,000            | 9,000                 | 1/2   |
| 5                                      | 5/8-11                        | 1-1/4                                     | 82514                        | 82515 <b>P</b> | 4,000 - 8,000            | 8,000                 | 1/2   |
| 6                                      | 5/8-11                        | 1-3/8                                     | 82516 <b>P</b>               | 82517 <b>P</b> | 3,000 - 6,000            | 6,000                 | 1/2   |

**Stainless steel wire (INOX)**

|       |        |       |                |       |                |        |     |
|-------|--------|-------|----------------|-------|----------------|--------|-----|
| 2-3/4 | 5/8-11 | 7/8   | 82353 <b>P</b> | -     | 5,500 - 14,000 | 14,000 | 5/5 |
| 3-1/2 | 5/8-11 | 7/8   | 82359          | 82365 | 5,000 - 12,500 | 12,500 | 1   |
| 4     | 5/8-11 | 1-1/4 | -              | 82635 | 3,500 - 9,000  | 9,000  | 1   |
| 5     | 5/8-11 | 1-1/4 | -              | 82637 | 3,000 - 8,000  | 8,000  | 1   |
| 6     | 5/8-11 | 1-3/8 | -              | 82638 | 2,000 - 6,000  | 6,000  | 1   |

**External nut  
ECAP® encapsulated cup**



EDP 83570

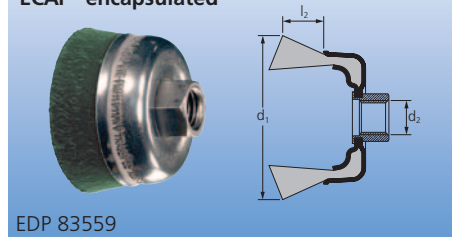
Encapsulated cups offer more productive cleaning action due to the short trim effect of encapsulation. Used for removing weld slags and scale in pipeline fabrication.

**Ordering note**


For additional information on ECAP® encapsulation, please see page 13.

Made in the USA.

**Mini cup, external nut,  
ECAP® encapsulated**



EDP 83559

| Diameter<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | ECAP®<br>grade | Wire diameter and EDP number |       | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|--|---|---|----------------|------------------------------|-------|--------------------------|-----------------------|---|
|  |   |   |                | .014                         | .020  |                          |                       |   |
| <b>Carbon steel wire</b>               |   |   |                |                              |       |                          |                       |   |
| 3-1/2                                  | 5/8-11                                    | 7/8                                       | E3             | 83559                        | -     | 4,000 - 10,000           | 10,000                | 1   |
| 4                                      | 5/8-11                                    | 1-1/8                                     | E4             | -                            | 83570 | 3,500 - 7,000            | 7,000                 | 1   |
| 6                                      | 5/8-11                                    | 1-1/4                                     | E3             | -                            | 83566 | 3,000 - 6,000            | 6,000                 | 1   |
| 6                                      | 5/8-11                                    | 1-1/4                                     | E4             | -                            | 83571 | 3,000 - 6,000            | 6,000                 | 1   |



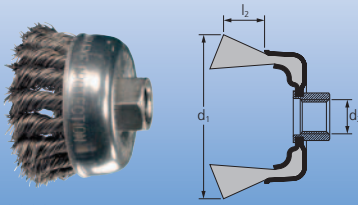
Brushes available in POP packaging are marked with a "P" in this catalogue. To order brushes in POP versions, please add a "P" to the end of the EDP number.

The minimum order quantity of POP items is printed in "blue" accordingly.

# Power wire brushes

## Knot cup brushes

External nut, single row, standard twist



EDP 82232

For use on large surfaces where a great deal of brushing is required. Good for corners and angles, and removal of contaminants such as scale, concrete, slag, and marine growth.


### Recommendation for use



Suitable tool drives: stationary machines, and angle grinders. When using angle grinders, please observe maximum safe free speed (MSFS).

Please see below for thread adapters.

Made in the USA.



| Diameter<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub> | No. of<br>knots | Trim length<br>l <sub>2</sub><br>[Inches] | Wire diameter and EDP number |                |         |       | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|--|-------------------------------|-----------------|---|------------------------------|----------------|---------|-------|--------------------------|-----------------------|---|
|  |                               |                 |   | .014                         | .020           | .023    | .035  |                          |                       |   |
| <b>Carbon steel wire</b>               |                               |                 |   |                              |                |         |       |                          |                       |   |
| 2-3/4                                  | 5/8-11                        | 18              | 7/8                                       | 82219 P                      | 82220 P        | -       | -     | 7,000 - 14,000           | 14,000                | 5/5   |
| 2-3/4                                  | 3/8-24                        | 18              | 7/8                                       | 82223                        | 82224          | -       | -     | 7,000 - 14,000           | 14,000                | 5   |
| 2-3/4                                  | M10x1.50                      | 18              | 7/8                                       | -                            | <b>82226 P</b> | -       | -     | 7,000 - 14,000           | 14,000                | <b>5</b>  |
| 2-3/4                                  | M10x1.25                      | 18              | 7/8                                       | -                            | 82228 P        | -       | -     | 7,000 - 14,000           | 14,000                | 5/5   |
| 2-3/4                                  | M14x2.0                       | 18              | 7/8                                       | -                            | <b>82230 P</b> | -       | -     | 7,000 - 14,000           | 14,000                | <b>5</b>  |
| 3-1/2                                  | 5/8-11                        | 20              | 7/8                                       | 82231 P                      | 82232 P        | -       | -     | 6,000 - 12,500           | 12,500                | 1/2   |
| 3-1/2                                  | 3/8-24                        | 20              | 7/8                                       | -                            | 82236          | -       | -     | 6,000 - 12,500           | 12,500                | 1   |
| 4                                      | 5/8-11                        | 24              | 1-1/4                                     | 82522 P                      | -              | 82523 P | 82524 | 4,500 - 9,000            | 9,000                 | 1/2   |
| 5                                      | 5/8-11                        | 30              | 1-3/8                                     | -                            | -              | 82529   | -     | 3,500 - 7,000            | 7,000                 | 1   |
| 6                                      | 5/8-11                        | 36              | 1-1/2                                     | 82530                        | -              | 82531 P | 82532 | 3,000 - 6,000            | 6,000                 | 1/2   |
| <b>Stainless steel wire (INOX)</b>     |                               |                 |   |                              |                |         |       |                          |                       |   |
| 2-3/4                                  | 5/8-11                        | 18              | 7/8                                       | 82329 P                      | 82330 P        | -       | -     | 5,500 - 14,000           | 14,000                | 5/5   |
| 2-3/4                                  | 3/8-24                        | 18              | 7/8                                       | -                            | 82334          | -       | -     | 5,500 - 14,000           | 14,000                | 5   |
| 3-1/2                                  | 5/8-11                        | 20              | 7/8                                       | -                            | 82342 P        | -       | -     | 5,000 - 12,500           | 12,500                | 1/2   |
| 4                                      | 5/8-11                        | 24              | 1-1/4                                     | 82647                        | -              | 82648   | -     | 3,500 - 9,000            | 9,000                 | 1   |
| 5                                      | 5/8-11                        | 30              | 1-3/8                                     | -                            | -              | 82652   | -     | 2,500 - 7,000            | 7,000                 | 1   |
| 6                                      | 5/8-11                        | 36              | 1-1/2                                     | 82653                        | -              | 82654   | -     | 2,000 - 6,000            | 6,000                 | 1   |

| Minigrinder<br>adapter insert   | Fits brush thread | Fits tool spindle thread | EDP number |  |
|---|-------------------|--------------------------|------------|---|
|  | 5/8-11            | M10x1.25                 | 84645 P    | 5/5   |
|   | 5/8-11            | M10x1.50                 | 84646 P    | 5/5   |
|   | 5/8-11            | 3/8-24                   | 84647 P    | 5/5   |

EDP 84646





### COMBITWIST® advantages

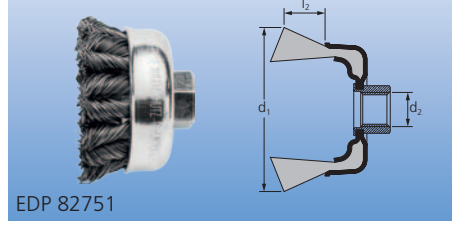
- More aggressive brushing
- Longer brush life
- Superior rotational balance
- Faster stock removal
- Reduced operator fatigue
- Better surface finish

Made in the USA.

### PFERDERGONOMICS®



### External nut, single row, standard twist, COMBITWIST®



EDP 82751

| Diameter<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub><br>[Inches] | No. of<br>knots | Trim length<br>l <sub>2</sub><br>[Inches] | Wire diameter and EDP number |                |       | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |     |
|--|---|-----------------|---|------------------------------|----------------|-------|--------------------------|-----------------------|-----|
|  |   |                 |   | .014                         | .020           | .023  |                          |                       |     |
| <b>Carbon steel wire</b>               |   |                 |   |                              |                |       |                          |                       |     |
| 2-3/4                                  | 5/8-11                                    | 18              | 7/8                                       | 82750 <b>P</b>               | 82751 <b>P</b> | -     | 7,000 - 14,000           | 14,000                | 5/5 |
| 3-1/2                                  | 5/8-11                                    | 20              | 7/8                                       | 82401                        | 82402          | -     | 6,000 - 12,500           | 12,500                | 1   |
| 4                                      | 5/8-11                                    | 24              | 1-1/4                                     | 82716                        | -              | 82717 | 4,500 - 9,000            | 9,000                 | 1   |
| 5                                      | 5/8-11                                    | 30              | 1-3/8                                     | -                            | -              | 82723 | 3,500 - 7,000            | 7,000                 | 1   |
| 6                                      | 5/8-11                                    | 36              | 1-1/2                                     | -                            | -              | 82725 | 3,000 - 6,000            | 6,000                 | 1   |
| <b>Stainless steel wire (INOX)</b>     |   |                 |   |                              |                |       |                          |                       |     |
| 2-3/4                                  | 5/8-11                                    | 18              | 7/8                                       | 82855 <b>P</b>               | 82856          | -     | 5,500 - 14,000           | 14,000                | 5/5 |
| 3-1/2                                  | 5/8-11                                    | 20              | 7/8                                       | -                            | 82431          | -     | 4,000 - 9,000            | 12,500                | 5   |
| 4                                      | 5/8-11                                    | 24              | 1-1/4                                     | 82789                        | -              | 82790 | 3,500 - 9,000            | 9,000                 | 5   |
| 5                                      | 5/8-11                                    | 30              | 1-3/8                                     | -                            | -              | 82794 | 2,500 - 7,000            | 7,000                 | 5   |
| <b>Brass wire</b>                      |   |                 |   |                              |                |       |                          |                       |     |
| 3-1/2                                  | 5/8-11                                    | 20              | 7/8                                       | 82368                        | -              | -     | 5,000 - 12,000           | 12,500                | 1   |



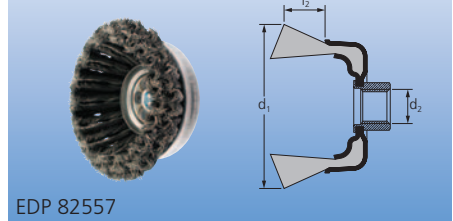
Choose these double row knot cups for the most severe applications. Very aggressive, high impact brushing action. Optimal removal rates and service life.

### COMBITWIST® advantages

- More aggressive brushing
- Longer brush life
- Superior rotational balance
- Faster stock removal
- Reduced operator fatigue
- Better surface finish

Made in the USA.

### External nut, double row, standard twist, COMBITWIST®



EDP 82557

### PFERDERGONOMICS®



| Diameter<br>d <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub><br>[Inches] | No. of<br>knots | Trim length<br>l <sub>2</sub><br>[Inches] | Wire diameter and EDP number |       |       | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |   |
|--|---|-----------------|---|------------------------------|-------|-------|--------------------------|-----------------------|---|
|  |   |                 |   | .014                         | .023  | .035  |                          |                       |   |
| <b>Carbon steel wire</b>               |   |                 |   |                              |       |       |                          |                       |   |
| 4                                      | 5/8-11                                    | 48              | 1-3/8                                     | 82552                        | 82553 | -     | 3,500 - 7,000            | 7,000                 | 1 |
| 6                                      | 5/8-11                                    | 66              | 1-1/2                                     | 82556                        | 82557 | 82558 | 3,000 - 6,000            | 6,000                 | 1 |
| <b>Stainless steel wire (INOX)</b>     |   |                 |   |                              |       |       |                          |                       |   |
| 4                                      | 5/8-11                                    | 48              | 1-3/8                                     | -                            | 82657 | -     | 2,500 - 7,000            | 7,000                 | 1 |



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The minimum order quantity of POP items is printed in "blue" accordingly.



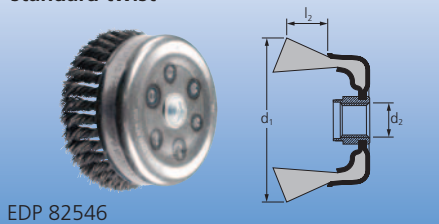
### PFERDMEDIA

For more information and to see a product video, visit [pferdusa.com/vcombitwist](http://pferdusa.com/vcombitwist)

# Power wire brushes

## Knot cup brushes

### Internal nut, single row, standard twist



EDP 82546

Recommended for mounting on production equipment or angle grinders.


Used for deburring and surface cleaning.

#### Recommendation for use

Suitable tool drives: stationary machines, angle grinders. When using angle grinders, please observe maximum safe free speed (MSFS).

Made in the USA.

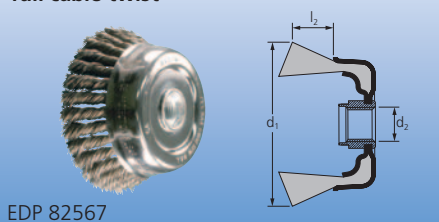


| Diameter<br>$d_1$<br>[Inches] | Thread size<br>$d_2$<br>[Inches] | No. of knots | Trim length<br>$l_2$<br>[Inches] | Wire diameter and EDP number |      |      | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] |  |
|-------------------------------|----------------------------------|--------------|----------------------------------|------------------------------|------|------|-----------------------|--------------------|---|
|                               |                                  |              |                                  | .014                         | .020 | .023 |                       |                    |   |

#### Carbon steel wire

|       |        |    |       |         |       |         |                |        |     |
|-------|--------|----|-------|---------|-------|---------|----------------|--------|-----|
| 3-1/2 | 5/8-11 | 20 | 7/8   | -       | 82538 | -       | 6,000 - 12,500 | 12,500 | 1   |
| 4     | 5/8-11 | 24 | 1-1/2 | 82539   | -     | 82540   | 3,500 - 7,000  | 7,000  | 1   |
| 5     | 5/8-11 | 30 | 1-1/2 | -       | -     | 82544   | 3,500 - 7,000  | 7,000  | 1   |
| 6     | 5/8-11 | 36 | 1-5/8 | 82545 P | -     | 82546 P | 3,000 - 6,000  | 6,000  | 1/2 |

### Internal nut, single row, full cable twist




EDP 82567

Designed for the most aggressive brushing action on large, rough surfaces where heavy removal is desired.

Solid construction is beneficial in removing surface contaminants such as weld scale, concrete, and slag.

Made in the USA.



| Diameter<br>$d_1$<br>[Inches] | Thread size<br>$d_2$<br>[Inches] | No. of knots | Trim length<br>$l_2$<br>[Inches] | Wire diameter and EDP number |      | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] |  |
|-------------------------------|----------------------------------|--------------|----------------------------------|------------------------------|------|-----------------------|--------------------|---|
|                               |                                  |              |                                  | .020                         | .023 |                       |                    |   |

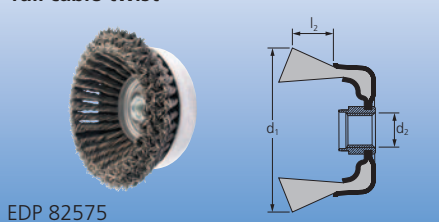
#### Carbon steel wire

|   |        |    |       |       |       |               |       |   |
|---|--------|----|-------|-------|-------|---------------|-------|---|
| 4 | 5/8-11 | 24 | 1-3/8 | 82567 | -     | 3,500 - 7,000 | 7,000 | 1 |
| 6 | 5/8-11 | 36 | 1-1/2 | -     | 82571 | 3,000 - 6,000 | 6,000 | 1 |

#### Stainless steel wire (INOX)

|   |        |    |       |       |   |               |       |   |
|---|--------|----|-------|-------|---|---------------|-------|---|
| 4 | 5/8-11 | 24 | 1-3/8 | 82664 | - | 2,500 - 7,000 | 7,000 | 1 |
|---|--------|----|-------|-------|---|---------------|-------|---|


### Internal nut, double row, full cable twist



EDP 82575

High-impact full cable twist cup brush with two rows of knots. Achieves the most aggressive brushing action with longest service life.

Made in the USA.

| Diameter<br>$d_1$<br>[Inches] | Thread size<br>$d_2$<br>[Inches] | No. of knots | Trim length<br>$l_2$<br>[Inches] | Wire diameter and EDP number |      | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] |  |
|-------------------------------|----------------------------------|--------------|----------------------------------|------------------------------|------|-----------------------|--------------------|---|
|                               |                                  |              |                                  | .023                         | .035 |                       |                    |   |

#### Carbon steel wire

|   |        |    |       |       |       |               |       |   |
|---|--------|----|-------|-------|-------|---------------|-------|---|
| 6 | 5/8-11 | 66 | 1-1/2 | 82574 | 82575 | 3,000 - 6,000 | 6,000 | 1 |
|---|--------|----|-------|-------|-------|---------------|-------|---|



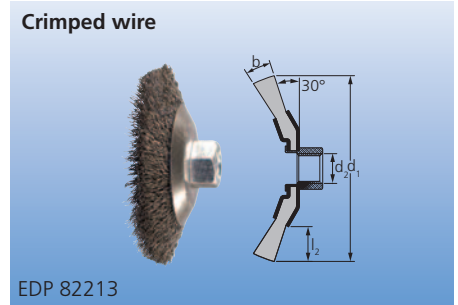
Crimped wire bevel brushes are less aggressive than knot wire type for lighter-duty applications. Crimped wire is more flexible, and leaves a superior surface finish.


For weld cleaning, scale, rust, paint, adhesive and oxidation removal, cleaning, light deburring, and flash removal, especially on fillets, grooves and inside edges.

### Recommendation for use

Suitable tool drives: designed for use on angle grinders.

Made in the USA.



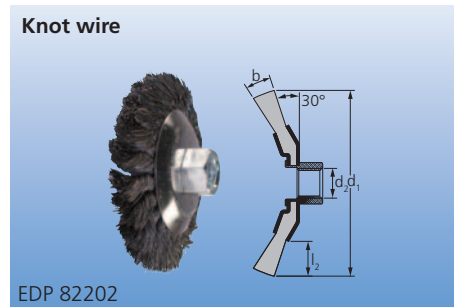
| Diameter d <sub>1</sub> [Inches]   | Thread size d <sub>2</sub> [Inches] | Trim length l <sub>2</sub> [Inches] | Face width b [Inches] | Wire diameter and EDP number | Recom. speed [RPM] | MSFS max. [RPM] |  |
|------------------------------------|-------------------------------------|-------------------------------------|-----------------------|------------------------------|--------------------|-----------------|---|
|                                    |                                     |                                     |                       | <b>.014</b>                  |                    |                 |   |
| <b>Carbon steel wire</b>           |                                     |                                     |                       |                              |                    |                 |   |
| 4                                  | 5/8-11                              | 3/4                                 | 1/2                   | 82213 P                      | 6,000 - 12,500     | 12,500          | 5/5   |
| <b>Stainless steel wire (INOX)</b> |                                     |                                     |                       |                              |                    |                 |   |
| 4                                  | 5/8-11                              | 3/4                                 | 1/2                   | 82370 P                      | 5,000 - 12,500     | 12,500          | 5/5   |






Ideal for working in hard-to-reach areas. Knot wire provides a more aggressive brushing action than crimped wire.

For deburring, weld scale removal, and edge blending of fillets, grooves and inside edges.

Made in the USA, Germany.



| Diameter d <sub>1</sub> [Inches]   | Thread size d <sub>2</sub> [Inches] | No. of knots | Trim length l <sub>2</sub> [Inches] | Face width b [Inches] | Wire diameter and EDP number | Recom. speed [RPM] | MSFS max. [RPM] |  |     |
|------------------------------------|-------------------------------------|--------------|-------------------------------------|-----------------------|------------------------------|--------------------|-----------------|---|-----|
|                                    |                                     |              |                                     |                       | <b>.014</b>                  | <b>.020</b>        |                 |   |     |
| <b>Carbon steel wire</b>           |                                     |              |                                     |                       |                              |                    |                 |   |     |
| 4                                  | 5/8-11                              | 22           | 3/4                                 | 1/2                   | 82201 P                      | 82202 P            | 10,000 - 15,000 | 20,000  | 5/5 |
| 4-1/2                              | 5/8-11                              | 24           | 1                                   | 1/2                   | 82500                        | 82501              | 7,500 - 15,000  | 15,000  | 1   |
| 5                                  | 5/8-11                              | 28           | 3/4                                 | 1/2                   | -                            | 82505              | 7,500 - 15,000  | 15,000  | 1   |
| 7                                  | 5/8-11                              | 28           | 1-1/8                               | 1/2                   | -                            | 82509              | 5,000 - 9,000   | 9,000   | 1   |
| <b>Stainless steel wire (INOX)</b> |                                     |              |                                     |                       |                              |                    |                 |   |     |
| 4                                  | 5/8-11                              | 22           | 3/4                                 | 1/2                   | 82317                        | 82318              | 8,000 - 15,000  | 20,000  | 5   |
| 4-1/2                              | 5/8-11                              | 24           | 1                                   | 1/2                   | 82625                        | 82626              | 6,000 - 15,000  | 15,000  | 1   |
| 5                                  | 5/8-11                              | 28           | 3/4                                 | 1/2                   | 82629                        | -                  | 6,000 - 15,000  | 15,000  | 1   |

| Minigrinder adapter insert  | Fits brush thread | Fits tool spindle thread | EDP number |  |
|---|-------------------|--------------------------|------------|---|
|  | 5/8-11            | M10x1.25                 | 84645 P    | 5/5   |
|   | 5/8-11            | M10x1.50                 | 84646 P    | 5/5   |
|   | 5/8-11            | 3/8-24                   | 84647 P    | 5/5   |

EDP 84646

# Power wire brushes

## Stem mounted brushes



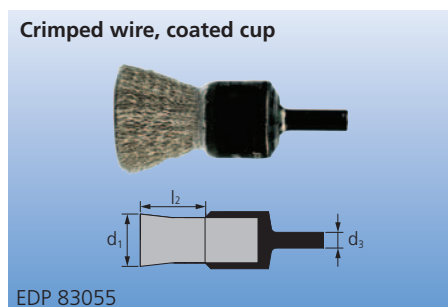
The PFERD range of stem-mounted products includes a wide variety of brushes for use in specialized applications, such as pilot bonding brushes, miniature brushes, and coil spring brushes.

### Stem mounted brushes

- Industrial-grade brushes recommended for use on high-speed power tools such as flexible shaft machines, straight grinders, and power drills.
- Uniform filament composition and density provides optimal balance and finish.
- A variety of stem-mounted brushes with M-BRAD® abrasive filament is also available in the power non-wire section of this catalogue (page 62).
- SINGLETWIST® single-knot end brushes are ideal for working in tight corners and confined spaces.
- All stainless steel wire (INOX) end brushes are degreased.

### Application guidelines

- Please do not insert the entire stem of a brush into the chuck. Per ANSI B165.1-2013, 6.7: The shank shall be inserted into the chuck or collet as far as possible on the uniform diameter of the shank with minimum possible overhang of the brush.
- Manipulating the brush speed will drastically affect the filament flare. See chart on pg 42.
- Straight cup knot end brushes flare less than flared cup versions.
- For optimal corrosion resistance when working on stainless steel (INOX), PFERD stem-mounted end brushes with stainless steel filament include elastomer coatings on the cup.
- For additional operating guidelines, please see pages 15-16.
- For spindle extensions for stem mounted brushes, see "Power tools" catalogue (section 209).

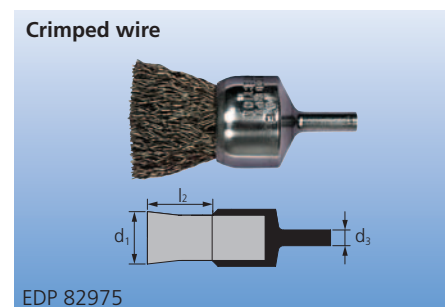



General purpose for working hard-to-reach places. For use on portable air and electric tools. Used for rubber and plastic flash removal, paint and rust removal, die, mold and tool polishing. Coated cup version features elastomer sleeve to protect against contamination.

### Recommendation for use

Suitable tool drives: straight grinders, flexible shafts, power drills.

Made in the USA.



| Diameter<br>[Inches] | Outside dia.<br>d <sub>1</sub><br>[Inches] | Shank dia.<br>d <sub>3</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Wire diameter and EDP number |      |      |      | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|----------------------|--|--|---|------------------------------|------|------|------|--------------------------|-----------------------|---|
|                      |  |  |   | .006                         | .010 | .014 | .020 |                          |                       |   |

### Carbon steel wire

|     |       |     |   |         |         |         |         |                 |        |      |
|-----|-------|-----|---|---------|---------|---------|---------|-----------------|--------|------|
| 1/2 | 3/4   | 1/4 | 1 | 82962   | 82964   | 82965   | 82966 P | 12,500 - 18,700 | 25,000 | 10/5 |
| 3/4 | 1     | 1/4 | 1 | 82967 P | 82969   | 82970   | 82971 P | 11,000 - 16,500 | 22,000 | 10/5 |
| 1   | 1-1/4 | 1/4 | 1 | 82972 P | 82974 P | 82975 P | 82976 P | 10,000 - 15,000 | 20,000 | 10/5 |

### Stainless steel wire (INOX)

All stainless steel (INOX) brushes are degreased.

|     |       |     |   |         |         |       |       |                 |        |      |
|-----|-------|-----|---|---------|---------|-------|-------|-----------------|--------|------|
| 1/2 | 3/4   | 1/4 | 1 | 82981   | 82983   | 82984 | 82985 | 10,000 - 16,000 | 25,000 | 10   |
| 3/4 | 1     | 1/4 | 1 | 82986 P | 82988 P | 82989 | 82990 | 8,500 - 14,000  | 22,000 | 10/5 |
| 1   | 1-1/4 | 1/4 | 1 | 82991 P | 82993 P | 82994 | -     | 8,000 - 13,000  | 20,000 | 10/5 |

### Stainless steel wire (INOX) – coated cup

All stainless steel (INOX) brushes are degreased.

|     |       |     |   |       |       |   |   |                 |        |    |
|-----|-------|-----|---|-------|-------|---|---|-----------------|--------|----|
| 1/2 | 3/4   | 1/4 | 1 | 83050 | 83052 | - | - | 10,000 - 16,000 | 25,000 | 10 |
| 3/4 | 1     | 1/4 | 1 | 83053 | 83055 | - | - | 8,500 - 14,000  | 22,000 | 10 |
| 1   | 1-1/4 | 1/4 | 1 | 83056 | 83058 | - | - | 8,000 - 13,000  | 20,000 | 10 |



Brushes available in POP packaging are marked with a "P" in this catalogue. To order brushes in POP versions, please add a "P" to the end of the EDP number.

The minimum order quantity of POP items is printed in "blue" accordingly.



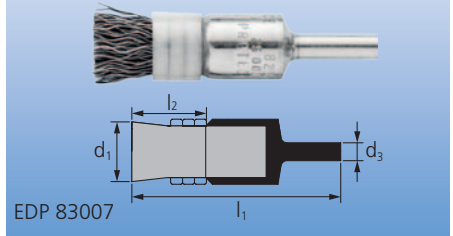
Bridle reduces wire filament flare and increases aggressiveness of brushing action.


### Ordering note

Trim length is 1/2" with bridle, 1" without bridle.

Made in the USA.

### Crimped wire, bridled



| Diameter<br>[Inches]     | Outside dia.<br>d <sub>1</sub><br>[Inches] | Shank dia.<br>d <sub>3</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Wire diameter and EDP number |       |       |       |       | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|--------------------------|--|--|---|------------------------------|-------|-------|-------|-------|--------------------------|-----------------------|---|
|                          |  |  |   | .006                         | .008  | .010  | .014  | .020  |                          |                       |   |
| <b>Carbon steel wire</b> |  |  |   |                              |       |       |       |       |                          |                       |   |
| 1/2                      | 5/8  | 1/4                                      | 1/2, 1                                    | 83005                        | -     | 83007 | -     | -     | 7,500 - 11,200           | 15,000                | 10  |
| 3/4                      | 7/8  | 1/4                                      | 1/2, 1                                    | 83010                        | -     | 83012 | -     | -     | 7,500 - 11,200           | 15,000                | 10  |
| 1                        | 1-1/8                                      | 1/4                                      | 1/2, 1                                    | 83015                        | 83016 | 83017 | 83018 | 83019 | 7,500 - 11,200           | 15,000                | 10  |

### Stainless steel wire (INOX)

All stainless steel (INOX) brushes are degreased.

|     |       |     |        |       |   |       |   |   |                |        |    |
|-----|-------|-----|--------|-------|---|-------|---|---|----------------|--------|----|
| 1/2 | 5/8   | 1/4 | 1/2, 1 | 83024 | - | 83026 | - | - | 6,000 - 10,000 | 15,000 | 10 |
| 3/4 | 7/8   | 1/4 | 1/2, 1 | 83027 | - | 83029 | - | - | 6,000 - 10,000 | 15,000 | 10 |
| 1   | 1-1/8 | 1/4 | 1/2, 1 | 83030 | - | 83032 | - | - | 6,000 - 10,000 | 15,000 | 10 |



Encapsulation provides excellent tip control, reduced flare, and aggressive brushing action. Ideal for removal of rubber flashing.

### Ordering note

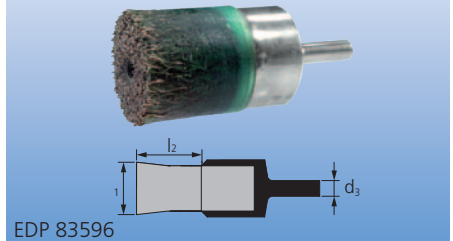
For additional information on ECAP® encapsulation, please see page 13.


### Recommendation for use

Suitable tool drives: straight grinders, flexible shafts.

Made in the USA.

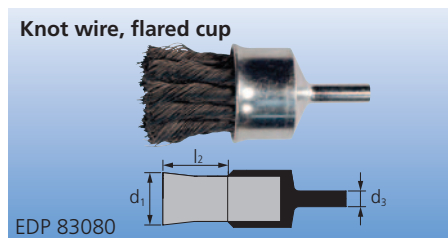
### Crimped wire, hollow centre, ECAP® encapsulated



| Diameter<br>[Inches]               | Outside dia.<br>d <sub>1</sub><br>[Inches] | Shank dia.<br>d <sub>3</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | ECAP®<br>grade | Wire diameter and EDP number | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|------------------------------------|--|--|---|----------------|------------------------------|--------------------------|-----------------------|---|
|                                    |  |  |   |                | .010                         |                          |                       |   |
| <b>Carbon steel wire</b>           |  |  |   |                |                              |                          |                       |   |
| 1/2                                | 5/8  | 1/4                                      | 7/8                                       | E3             | 83580                        | 9,000 - 13,500           | 18,000                | 10  |
| 3/4                                | 7/8  | 1/4                                      | 7/8                                       | E3             | 83583                        | 7,500 - 11,200           | 15,000                | 10  |
| 1                                  | 1-1/8                                      | 1/4                                      | 7/8                                       | E4             | 83596                        | 6,500 - 10,000           | 13,000                | 10  |
| <b>Stainless steel wire (INOX)</b> |  |  |   |                |                              |                          |                       |   |
| 3/4                                | 7/8  | 1/4                                      | 7/8                                       | E3             | 83591                        | 6,000 - 10,000           | 15,000                | 10  |

# Power wire brushes

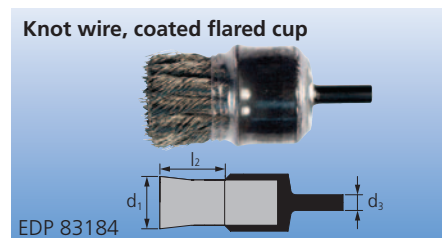
## Stem mounted end brushes




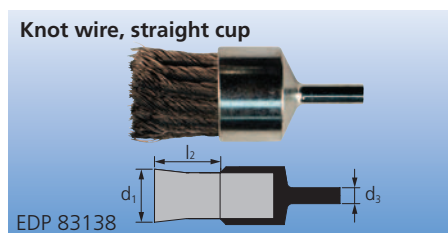
For heavy-duty and severe applications, recessed areas and corners such as weld and mold cleaning.

Suitable tool drives: straight grinders, flexible shafts. Recommended for use on variable speed tools. Available with coated cup to prevent damage to workpiece.

Made in the USA.




| Diameter<br>[Inches]                              | Outside dia.<br>d <sub>1</sub><br>[Inches] | Shank dia.<br>d <sub>3</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | No. of<br>knots | Wire diameter and EDP number |       |         |         | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|---|--|--|---|-----------------|------------------------------|-------|---------|---------|--------------------------|-----------------------|---|
|   |  |  |   |                 | .006                         | .010  | .014    | .020    |                          |                       |   |
| <b>Carbon steel wire</b>                          |  |  |   |                 |                              |       |         |         |                          |                       |   |
| 1/2   | 5/8  | 1/4                                      | 1   | 6               | 83063                        | 83064 | 83065   | -       | 10,000 - 15,000          | 20,000                | 10  |
| 3/4   | 7/8  | 1/4                                      | 1   | 8               | 83070                        | 83071 | 83072 P | 83073 P | 10,000 - 15,000          | 20,000                | 10/5  |
| 1   | 1-1/8                                      | 1/4                                      | 1   | 12              | 83077                        | 83078 | 83079 P | 83080 P | 10,000 - 15,000          | 20,000                | 10/5  |
| <b>Stainless steel wire (INOX)</b>                |  |  |   |                 |                              |       |         |         |                          |                       |   |
| All stainless steel (INOX) brushes are degreased. |  |  |   |                 |                              |       |         |         |                          |                       |   |
| 1/2   | 5/8  | 1/4                                      | 1   | 6               | -                            | -     | 83087   | -       | 8,000 - 13,000           | 20,000                | 10  |
| 3/4   | 7/8  | 1/4                                      | 1   | 8               | 83090                        | 83091 | 83092 P | 83093   | 8,000 - 13,000           | 20,000                | 10/5  |
| 1   | 1-1/8                                      | 1/4                                      | 1   | 12              | 83096                        | 83097 | 83098 P | 83099   | 8,000 - 13,000           | 20,000                | 10/5  |
| <b>Stainless steel wire (INOX) – coated cup</b>   |  |  |   |                 |                              |       |         |         |                          |                       |   |
| All stainless steel (INOX) brushes are degreased. |  |  |   |                 |                              |       |         |         |                          |                       |   |
| 3/4   | 7/8  | 1/4                                      | 1   | 8               | 83178                        | -     | 83180   | -       | 8,000 - 13,000           | 20,000                | 10  |
| 1   | 1-1/8                                      | 1/4                                      | 1   | 12              | 83182                        | 83183 | 83184   | -       | 8,000 - 13,000           | 20,000                | 10  |
| <b>Brass wire</b>                                 |  |  |   |                 |                              |       |         |         |                          |                       |   |
| 1   | 1-1/8                                      | 1/4                                      | 1   | 12              | -                            | -     | 83104   | 83105   | 8,000 - 13,000           | 20,000                | 10  |



Straight cup reduces knot flare, making this brush ideal for reaching into holes and confined areas.

Made in the USA.



| Diameter<br>[Inches]                              | Outside dia.<br>d <sub>1</sub><br>[Inches] | Shank dia.<br>d <sub>3</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | No. of<br>knots | Wire diameter and EDP number |       |       | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|---|--|--|---|-----------------|------------------------------|-------|-------|--------------------------|-----------------------|---|
|   |  |  |   |                 | .010                         | .014  | .020  |                          |                       |   |
| <b>Carbon steel wire</b>                          |  |  |   |                 |                              |       |       |                          |                       |   |
| 1/2   | 5/8  | 1/4                                      | 1-1/8                                     | 6               | 83124                        | 83125 | -     | 10,000 - 15,000          | 20,000                | 10  |
| 3/4   | 7/8  | 1/4                                      | 1-1/8                                     | 8               | 83131                        | 83132 | 83133 | 10,000 - 15,000          | 20,000                | 10  |
| 1   | 1-1/8                                      | 1/4                                      | 1-1/8                                     | 12              | 83138 P                      | 83139 | 83140 | 10,000 - 15,000          | 20,000                | 10/5  |
| <b>Stainless steel wire (INOX)</b>                |  |  |   |                 |                              |       |       |                          |                       |   |
| All stainless steel (INOX) brushes are degreased. |  |  |   |                 |                              |       |       |                          |                       |   |
| 1/2   | 5/8  | 1/4                                      | 1-1/8                                     | 6               | -                            | 83147 | -     | 8,000 - 13,000           | 20,000                | 10  |
| 3/4   | 7/8  | 1/4                                      | 1-1/8                                     | 8               | 83151                        | 83152 | 83153 | 8,000 - 13,000           | 20,000                | 10  |
| 1   | 1-1/8                                      | 1/4                                      | 1-1/8                                     | 12              | 83157                        | 83158 | 83159 | 8,000 - 13,000           | 20,000                | 10  |
| <b>Brass wire</b>                                 |  |  |   |                 |                              |       |       |                          |                       |   |
| 1   | 1-1/8                                      | 1/4                                      | 1   | 12              | -                            | 83164 | -     | 8,000 - 13,000           | 20,000                | 10  |

| Diameter<br>[Inches] | Outside dia. at 0 RPM<br>[Inches] | Flared cup, outside dia.<br>at 20,000 RPM<br>[Inches] | Straight cup, outside dia.<br>at 20,000 RPM<br>[Inches] |
|----------------------|-----------------------------------|---|---|
| 1/2                  | 5/8                               | 2-7/8   | 2-3/4   |
| 3/4                  | 7/8                               | 2-7/8   | 2-3/4   |
| 1                    | 1-1/8                             | 3-1/4   | 3   |



**PFERDMEDIA**

For more information and to see a product video, visit [pferdusa.com/vendbrush](http://pferdusa.com/vendbrush)

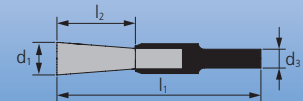


SINGLETWIST® end brushes are produced with a single, twisted wire knot, designed especially for brushing internal corners and edges where access is limited. Wire filament is with a left handed twist of the brush rotation, which prevents the knots from unravelling during use.


The stainless steel version includes a coated cup that prevents the workpiece from being damaged.

Made in the USA.

### Knot wire, SINGLETWIST®



EDP 83109

| Diameter<br>d <sub>1</sub><br>[Inches] | Shank dia.<br>d <sub>3</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Overall<br>length l <sub>1</sub><br>[Inches] | Wire diameter and EDP number |      |      | Recom. speed [RPM] |                | MSFS<br>max.<br>[RPM] |  |
|--|--|---|--|------------------------------|------|------|--------------------|----------------|-----------------------|---|
|  |  |   |  | .006                         | .014 | .020 | Open areas         | Confined areas |                       |   |

#### Carbon steel wire

|     |     |       |       |       |       |       |               |                |        |    |
|-----|-----|-------|-------|-------|-------|-------|---------------|----------------|--------|----|
| 1/4 | 1/4 | 1-1/8 | 2-3/4 | 83107 | 83108 | 83109 | 2,500 - 8,000 | 3,500 - 10,000 | 20,000 | 10 |
|-----|-----|-------|-------|-------|-------|-------|---------------|----------------|--------|----|

#### Stainless steel wire (INOX) – coated cup

All stainless steel (INOX) brushes are degreased.

|     |     |       |       |       |       |       |               |                |        |    |
|-----|-----|-------|-------|-------|-------|-------|---------------|----------------|--------|----|
| 1/4 | 1/4 | 1-1/8 | 2-3/4 | 83283 | 83284 | 83285 | 2,500 - 8,000 | 3,500 - 10,000 | 20,000 | 10 |
|-----|-----|-------|-------|-------|-------|-------|---------------|----------------|--------|----|



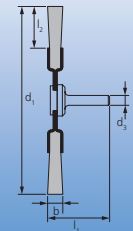
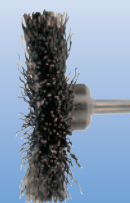
Crimped brushes provide lighter brushing action and superior finish when cleaning, removing rust and paint, smoothing, cleaning cast seams, light deburring.

#### Recommendation for use


Suitable tool drives: straight grinders, flexible shafts, power drills.

Made in the USA, Germany.

### Crimped wire



EDP 82900

| Diameter<br>d <sub>1</sub><br>[Inches] | Stem dia.<br>d <sub>3</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Wire diameter and EDP number |      |      |      |      | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|--|---|---|-----------------------------|------------------------------|------|------|------|------|--------------------------|-----------------------|---|
|  |   |   |                             | .006                         | .008 | .012 | .014 | .020 |                          |                       |   |

#### Carbon steel wire

|       |     |      |     |       |       |       |       |       |                 |        |    |
|-------|-----|------|-----|-------|-------|-------|-------|-------|-----------------|--------|----|
| 1-1/2 | 1/4 | 7/16 | 1/4 | 82890 | -     | 82892 | -     | 82889 | 10,000 - 15,000 | 20,000 | 10 |
| 2     | 1/4 | 1/2  | 3/8 | -     | 82893 | 82894 | -     | -     | 10,000 - 15,000 | 20,000 | 10 |
| 2     | 1/4 | 1/2  | 5/8 | -     | 82902 | -     | -     | -     | 10,000 - 15,000 | 20,000 | 10 |
| 2-1/2 | 1/4 | 3/4  | 1/2 | -     | 82895 | -     | 82896 | -     | 10,000 - 15,000 | 20,000 | 10 |
| 3     | 1/4 | 3/4  | 5/8 | -     | -     | 82903 | -     | -     | 10,000 - 15,000 | 20,000 | 10 |
| 3     | 1/4 | 1    | 5/8 | 82897 | 82898 | 82899 | 82900 | 82901 | 6,000 - 9,000   | 12,000 | 10 |

#### Stainless steel wire (INOX)

|       |     |      |     |       |       |       |       |   |                |        |    |
|-------|-----|------|-----|-------|-------|-------|-------|---|----------------|--------|----|
| 1-1/2 | 1/4 | 7/16 | 1/4 | 82905 | -     | 82906 | -     | - | 8,000 - 13,000 | 20,000 | 10 |
| 2     | 1/4 | 1/2  | 3/8 | -     | 82907 | 82908 | -     | - | 8,000 - 13,000 | 20,000 | 10 |
| 2     | 1/4 | 1/2  | 5/8 | -     | 82951 | -     | -     | - | 8,000 - 13,000 | 20,000 | 10 |
| 2-1/2 | 1/4 | 3/4  | 1/2 | -     | 82909 | 82910 | -     | - | 8,000 - 13,000 | 20,000 | 10 |
| 3     | 1/4 | 3/4  | 5/8 | -     | -     | 82952 | -     | - | 8,000 - 13,000 | 20,000 | 10 |
| 3     | 1/4 | 1    | 5/8 | 82911 | 82912 | -     | 82913 | - | 6,000 - 9,000  | 12,000 | 10 |

#### Brass wire

|   |     |     |     |   |       |       |       |   |                |        |    |
|---|-----|-----|-----|---|-------|-------|-------|---|----------------|--------|----|
| 2 | 1/4 | 1/2 | 5/8 | - | 82953 | -     | -     | - | 8,000 - 13,000 | 20,000 | 10 |
| 3 | 1/4 | 3/4 | 5/8 | - | -     | 82954 | -     | - | 8,000 - 13,000 | 20,000 | 10 |
| 3 | 1/4 | 1   | 5/8 | - | -     | -     | 82914 | - | 6,000 - 9,000  | 12,000 | 10 |



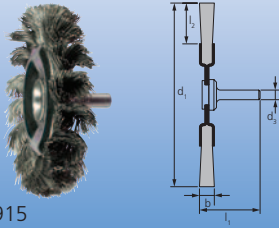
Brushes available in POP packaging are marked with a "P" in this catalogue. To order brushes in POP versions, please add a "P" to the end of the EDP number.

The minimum order quantity of POP items is printed in "blue" accordingly.

# Power wire brushes

## Stem mounted wheel brushes

### Knot wire, standard twist



EDP 82915


More aggressive brushing action than crimped wire for faster removal. For deburring, cleaning, rust removal, and weld seam conditioning.

#### Recommendation for use

Suitable tool drives: straight grinders, flexible shafts, power drills.

Made in the USA.



| Diameter<br>$d_1$<br>[Inches] | Stem dia.<br>$d_3$<br>[Inches] | No. of<br>knots | Trim length<br>$l_2$<br>[Inches] | Face width<br>$b$<br>[Inches] | Wire diameter and EDP number |      |      | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|-------------------------------|--------------------------------|-----------------|----------------------------------|-------------------------------|------------------------------|------|------|--------------------------|-----------------------|---|
|                               |                                |                 |                                  |                               | .012                         | .014 | .020 |                          |                       |   |

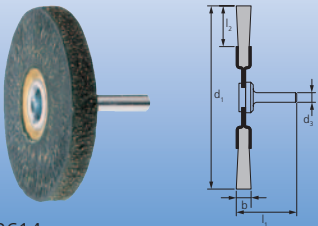
#### Carbon steel wire

|       |     |    |     |      |       |       |       |                 |        |    |
|-------|-----|----|-----|------|-------|-------|-------|-----------------|--------|----|
| 3     | 1/4 | 18 | 3/4 | 7/16 | 82915 | 82916 | 82917 | 12,500 - 18,700 | 25,000 | 10 |
| 3-1/4 | 1/4 | 20 | 3/4 | 1/2  | -     | 82946 | 82947 | 12,500 - 18,700 | 25,000 | 10 |
| 4     | 1/4 | 22 | 3/4 | 5/8  | -     | 82919 | 82920 | 12,500 - 18,700 | 25,000 | 10 |

#### Stainless steel wire (INOX)

|       |     |    |     |      |   |       |   |                 |        |    |
|-------|-----|----|-----|------|---|-------|---|-----------------|--------|----|
| 3     | 1/4 | 18 | 3/4 | 7/16 | - | 82921 | - | 10,000 - 16,000 | 25,000 | 10 |
| 3-1/4 | 1/4 | 20 | 3/4 | 1/2  | - | 82948 | - | 10,000 - 16,000 | 25,000 | 10 |
| 4     | 1/4 | 22 | 3/4 | 5/8  | - | 82922 | - | 10,000 - 16,000 | 25,000 | 10 |

### ECAP® encapsulated



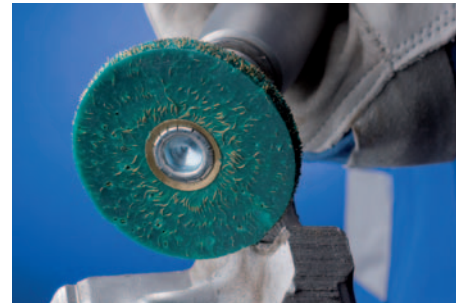
EDP 83614


Encapsulated for maximum brushing action.

#### Ordering note

For additional information on ECAP® encapsulation, please see page 13.

Made in the USA.

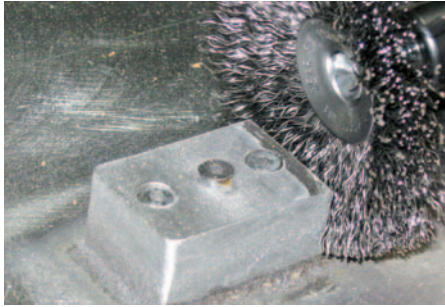


| Diameter<br>$d_1$<br>[Inches] | Stem dia.<br>$d_3$<br>[Inches] | Trim length<br>$l_2$<br>[Inches] | Face width<br>$b$<br>[Inches] | ECAP®<br>grade | Wire diameter and EDP number |      |      | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|-------------------------------|--------------------------------|----------------------------------|-------------------------------|----------------|------------------------------|------|------|--------------------------|-----------------------|---|
|                               |                                |                                  |                               |                | .008                         | .010 | .012 |                          |                       |   |

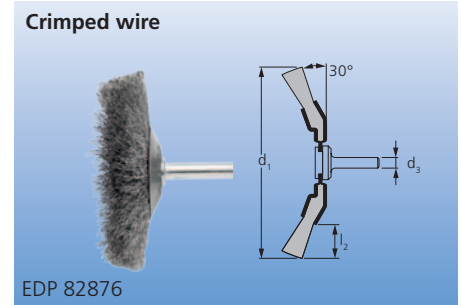
#### Carbon steel wire


|   |     |     |     |    |       |       |       |                 |        |    |
|---|-----|-----|-----|----|-------|-------|-------|-----------------|--------|----|
| 2 | 1/4 | 1/2 | 1/4 | E3 | -     | 83612 | -     | 10,000 - 15,000 | 20,000 | 10 |
| 3 | 1/4 | 1   | 1/4 | E3 | 83613 | -     | 83614 | 10,000 - 15,000 | 20,000 | 10 |





Concave shape provides effective side cleaning action and offers high flexibility to follow contours and intricate surface patterns. Use on inside edges, fillets and grooves without scoring bottom areas. Especially for light deburring, scale and rust removal, weld seam cleaning, etc.  
Made in the USA.



| Diameter<br>$d_1$<br>[Inches] | Stem dia.<br>$d_3$<br>[Inches] | Trim length<br>$l_2$<br>[Inches] | Wire diameter and EDP number |       |                |                |       | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|-------------------------------|--------------------------------|----------------------------------|------------------------------|-------|----------------|----------------|-------|--------------------------|-----------------------|---|
|                               |                                |                                  | .006                         | .008  | .012           | .014           | .020  |                          |                       |   |
| <b>Carbon steel wire</b>      |                                |                                  |                              |       |                |                |       |                          |                       |   |
| 1-1/2                         | 1/4                            | 5/16                             | 82850                        | -     | 82852 <b>P</b> | -              | -     | 10,000 - 15,000          | 20,000                | 10/5  |
| 2                             | 1/4                            | 7/16                             | -                            | 82854 | -              | 82878 <b>P</b> | 82879 | 10,000 - 15,000          | 20,000                | 10/5  |
| 2-1/2                         | 1/4                            | 11/16                            | 82857                        | -     | -              | 82859          | -     | 10,000 - 15,000          | 20,000                | 10  |
| 3                             | 1/4                            | 7/8                              | 82861                        | 82862 | -              | 82863 <b>P</b> | 82864 | 10,000 - 15,000          | 20,000                | 10/5  |
| 4                             | 1/4                            | 1-3/8                            | -                            | 82866 | -              | 82867          | -     | 10,000 - 15,000          | 20,000                | 10  |

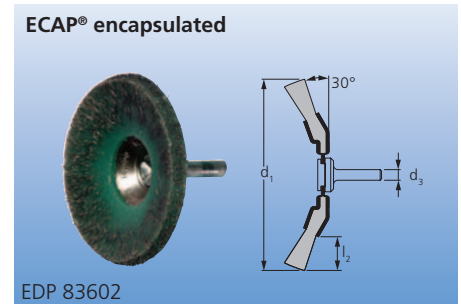
|                                    |     |       |       |   |       |       |   |                |        |    |
|------------------------------------|-----|-------|-------|---|-------|-------|---|----------------|--------|----|
| <b>Stainless steel wire (INOX)</b> |     |       |       |   |       |       |   |                |        |    |
| 1-1/2                              | 1/4 | 5/16  | 82870 | - | 82871 | -     | - | 8,000 - 13,000 | 20,000 | 10 |
| 2-1/2                              | 1/4 | 11/16 | -     | - | -     | 82875 | - | 8,000 - 13,000 | 20,000 | 10 |
| 3                                  | 1/4 | 7/8   | 82876 | - | -     | 82877 | - | 8,000 - 13,000 | 20,000 | 10 |




Concave shape provides effective side cleaning action without scoring bottom areas. Encapsulated for maximum aggression.

**Ordering note**  
For additional information on ECAP® encapsulation, please see page 13.

Made in the USA.



| Diameter<br>$d_1$<br>[Inches] | Stem dia.<br>$d_3$<br>[Inches] | Trim length<br>$l_2$<br>[Inches] | Face width<br>$b$<br>[Inches] | ECAP®<br>grade | Wire diameter and EDP number<br><br>.010 | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|-------------------------------|--------------------------------|----------------------------------|-------------------------------|----------------|--|--------------------------|-----------------------|---|
|                               |                                |                                  |                               |                |  |                          |                       |   |
| 2                             | 1/4                            | 7/16                             | 1/4                           | E3             | 83602                                    | 8,500 - 12,700           | 17,000                | 10  |



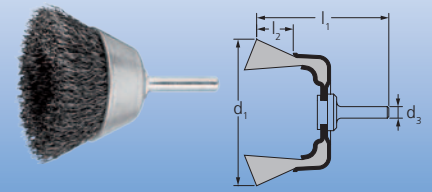
Brushes available in POP packaging are marked with a "P" in this catalogue. To order brushes in POP versions, please add a "P" to the end of the EDP number.

The minimum order quantity of POP items is printed in "blue" accordingly.

# Power wire brushes

## Stem mounted cup brushes

### Crimped wire




EDP 82823

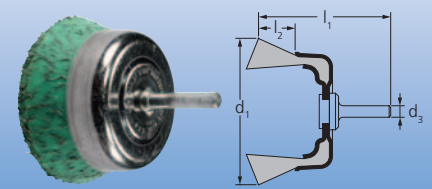
Designed for use on easily accessible, level surfaces. For weld and mold cleaning, light deburring, rust, paint and flash removal.

Made in the USA.



| Diameter<br>$d_1$<br>[Inches]      | Stem dia.<br>$d_3$<br>[Inches] | Trim length<br>$l_2$<br>[Inches] | Wire diameter and EDP number |       |       |         |       |       | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|------------------------------------|--------------------------------|----------------------------------|------------------------------|-------|-------|---------|-------|-------|--------------------------|-----------------------|---|
|                                    |                                |                                  | .006                         | .008  | .010  | .012    | .014  | .020  |                          |                       |   |
| <b>Carbon steel wire</b>           |                                |                                  |                              |       |       |         |       |       |                          |                       |   |
| 1-1/4                              | 1/4                            | 1                                | -                            | -     | -     | -       | 82820 | 82821 | 6,500 - 10,000           | 13,000                | 10  |
| 1-3/4                              | 1/4                            | 11/16                            | 82822                        | -     | -     | 82823 P | -     | -     | 6,500 - 10,000           | 13,000                | 10/5  |
| 2                                  | 1/4                            | 7/8                              | -                            | 82824 | -     | 82826 P | -     | -     | 6,500 - 10,000           | 13,000                | 10/5  |
| 2-1/2                              | 1/4                            | 7/8                              | -                            | 82828 | -     | 82830 P | -     | -     | 6,500 - 10,000           | 13,000                | 10/5  |
| <b>Stainless steel wire (INOX)</b> |                                |                                  |                              |       |       |         |       |       |                          |                       |   |
| 1-3/4                              | 1/4                            | 11/16                            | -                            | -     | -     | 82836   | -     | -     | 5,000 - 8,500            | 13,000                | 10  |
| 2                                  | 1/4                            | 7/8                              | -                            | -     | 82838 | -       | -     | -     | 5,000 - 8,500            | 13,000                | 10  |

### ECAP® encapsulated




EDP 83616

Encapsulated for maximum brushing action.

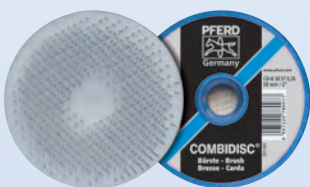
#### Ordering note

For additional information on ECAP® encapsulation, please see page 13.

Made in the USA.

| Diameter<br>$d_1$<br>[Inches] | Stem dia.<br>$d_3$<br>[Inches] | Trim length<br>$l_2$<br>[Inches] | ECAP®<br>grade | Wire diameter and EDP number |  |  |  |  |  | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|-------------------------------|--------------------------------|----------------------------------|----------------|------------------------------|--|--|--|--|--|--------------------------|-----------------------|---|
|                               |                                |                                  |                | .014                         |  |  |  |  |  |                          |                       |   |
| <b>Carbon steel wire</b>      |                                |                                  |                |                              |  |  |  |  |  |                          |                       |   |
| 2-1/2                         | 1/4                            | 3/4                              | E3             | 83616                        |  |  |  |  |  | 6,500 - 10,000           | 13,000                | 10  |

### COMBIDISC® brush



COMBIDISC® is a comprehensive range for surface machining. From rough stock removal and surface structuring right up to face-down mirror polishing, solutions can be found for the most complicated of machining problems.

The COMBIDISC® brush is perfectly suited for the removal of soft materials such as adhesive, underbody coatings and for cleaning contours and edges.

Please refer to our "Fine grinding and finishing products" catalogue (section 204) for detailed information and ordering data regarding COMBIDISC® brush.



PFERD stem-mounted miniature brushes are perfect for precision applications required in many industries including jewelry, electronics, medical and aerospace.


A wide selection of filaments includes: carbon steel wire, stainless steel wire (INOX) and brass wire, M-BRAD® aluminum oxide impregnated nylon filament, and a variety of natural bristles.

All brushes are mounted on 1/8" stems, and are recommended for use with flexible shaft tools and straight grinders.

### Contents listed by EDP (15 pc.) 1 each:

- 83202: 3/4" Carbon steel wire wheel brush
- 83221: 3/4" M-BRAD® filament wheel brush
- 83231: 3/4" Natural bristle wheel brush
- 83212: 1" Stainless steel wire wheel brush
- 83223: 1" M-BRAD® filament wheel brush
- 83213: 1-1/2" Stainless steel wire wheel brush
- 83257: 1/4" Carbon steel wire end brush
- 83272: 1/4" M-BRAD® filament end brush
- 83279: 1/4" Natural bristle end brush
- 83263: 5/16" Stainless steel wire end brush
- 83273: 5/16" M-BRAD® filament end brush
- 83236: 9/16" Carbon steel wire cup brush
- 83240: 9/16" Stainless steel wire cup brush
- 83247: 9/16" M-BRAD® filament cup brush
- 83250: 9/16" Natural bristle cup brush



| Miniature brush set   | Stem diameter [Inches] | EDP number |  |
|-----------------------|------------------------|------------|---|
| 15 pieces (see above) | 1/8                    | 82955      | 1   |



Precision miniature brushes in carbon steel, stainless steel (INOX), and brass, for cleaning and light deburring.

Made in Germany.



| Brush shape/form                   | Diameter [Inches] | Stem dia. [Inches] | Trim length [Inches] | Face width [Inches] | Wire diameter and EDP number |       | Recom. speed [RPM] | MSFS max. [RPM] |  |
|------------------------------------|-------------------|--------------------|----------------------|---------------------|------------------------------|-------|--------------------|-----------------|---|
|                                    |                   |                    |                      |                     | .003                         | .005  |                    |                 |   |
| <b>Carbon steel wire</b>           |                   |                    |                      |                     |                              |       |                    |                 |   |
| Wheel                              | 5/8               | 1/8                | 1/8                  | 1/16                | -                            | 83200 | 5,000 - 15,000     | 25,000          | 36  |
| Wheel                              | 3/4               | 1/8                | 3/16                 | 1/16                | 83201                        | 83202 | 5,000 - 15,000     | 25,000          | 36  |
| Wheel                              | 1                 | 1/8                | 1/4                  | 1/16                | 83203                        | 83204 | 5,000 - 15,000     | 25,000          | 36  |
| Wheel                              | 1-1/4             | 1/8                | 3/8                  | 1/16                | -                            | 83205 | 5,000 - 15,000     | 25,000          | 36  |
| Wheel                              | 1-1/2             | 1/8                | 1/2                  | 1/16                | -                            | 83206 | 5,000 - 15,000     | 25,000          | 36  |
| Cup                                | 9/16              | 1/8                | 1/4                  | -                   | 83235                        | 83236 | 5,000 - 15,000     | 25,000          | 36  |
| End                                | 3/16              | 1/8                | 5/16                 | -                   | 83256                        | -     | 5,000 - 15,000     | 25,000          | 36  |
| End                                | 1/4               | 1/8                | 7/16                 | -                   | -                            | 83257 | 5,000 - 15,000     | 25,000          | 36  |
| End                                | 5/16              | 1/8                | 1/2                  | -                   | -                            | 83258 | 5,000 - 15,000     | 25,000          | 36  |
| <b>Stainless steel wire (INOX)</b> |                   |                    |                      |                     |                              |       |                    |                 |   |
| Wheel                              | 5/8               | 1/8                | 1/8                  | 1/16                | -                            | 83209 | 4,500 - 12,500     | 25,000          | 36  |
| Wheel                              | 3/4               | 1/8                | 3/16                 | 1/16                | -                            | 83210 | 4,500 - 12,500     | 25,000          | 36  |
| Wheel                              | 1                 | 1/8                | 1/4                  | 1/16                | 83211                        | 83212 | 4,500 - 12,500     | 25,000          | 36  |
| Wheel                              | 1-1/2             | 1/8                | 1/2                  | 1/16                | -                            | 83213 | 4,500 - 12,500     | 25,000          | 36  |
| Cup                                | 9/16              | 1/8                | 1/4                  | -                   | -                            | 83240 | 4,500 - 12,500     | 25,000          | 36  |
| End                                | 3/16              | 1/8                | 5/16                 | -                   | 83261                        | -     | 4,500 - 12,500     | 25,000          | 36  |
| End                                | 1/4               | 1/8                | 7/16                 | -                   | -                            | 83262 | 4,500 - 12,500     | 25,000          | 36  |
| End                                | 5/16              | 1/8                | 1/2                  | -                   | -                            | 83263 | 4,500 - 12,500     | 25,000          | 36  |
| <b>Brass wire</b>                  |                   |                    |                      |                     |                              |       |                    |                 |   |
| Wheel                              | 3/4               | 1/8                | 3/16                 | 1/16                | 83216                        | -     | 3,000 - 10,000     | 25,000          | 36  |
| Wheel                              | 1                 | 1/8                | 1/4                  | 1/16                | 83217                        | 83218 | 3,000 - 10,000     | 25,000          | 36  |
| Cup                                | 9/16              | 1/8                | 1/4                  | -                   | 83243                        | -     | 3,000 - 10,000     | 25,000          | 36  |
| End                                | 3/16              | 1/8                | 5/16                 | -                   | 83266                        | -     | 3,000 - 10,000     | 25,000          | 36  |
| End                                | 1/4               | 1/8                | 7/16                 | -                   | -                            | 83267 | 3,000 - 10,000     | 25,000          | 36  |

# Power wire brushes

## Stem mounted miniature brushes




Precision miniature nylon filament brushes impregnated with aluminum oxide, for deburring and finishing.

For additional information on M-BRAD® abrasive nylon products, please see pages 12-13 and 54.

Made in Germany.




| Brush shape/form  | Diameter [Inches] | Stem dia. [Inches] | Trim length [Inches] | Face width [Inches] | Grit size and EDP number |       | Recom. speed [RPM] | MSFS max. [RPM] |  |
|---|-------------------|--------------------|----------------------|---------------------|--------------------------|-------|--------------------|-----------------|---|
|   |                   |                    |                      |                     | 600                      | 1000  |                    |                 |   |
| <b>M-BRAD® nylon abrasive filament – aluminum oxide grain (A)</b> |                   |                    |                      |                     |                          |       |                    |                 |   |
| Wheel   | 3/4               | 1/8                | 3/16                 | 1/16                | 83221                    | 83222 | 1,200 - 4,000      | 6,000           | 36  |
| Wheel   | 1                 | 1/8                | 1/4                  | 1/16                | 83223                    | 83224 | 1,200 - 4,000      | 6,000           | 36  |
| Wheel   | 1-1/4             | 1/8                | 3/8                  | 1/16                | 83225                    | 83226 | 1,200 - 4,000      | 6,000           | 36  |
| Wheel   | 1-1/2             | 1/8                | 1/2                  | 1/16                | 83227                    | 83228 | 1,200 - 4,000      | 6,000           | 36  |
| Cup   | 9/16              | 1/8                | 1/4                  | -                   | 83247                    | -     | 1,200 - 4,000      | 6,000           | 36  |
| End   | 3/16              | 1/8                | 5/16                 | -                   | 83270                    | -     | 1,200 - 5,000      | 6,000           | 36  |
| End   | 3/16              | 1/8                | 1/4                  | -                   | -                        | 83271 | 1,200 - 5,000      | 6,000           | 36  |
| End   | 1/4               | 1/8                | 7/16                 | -                   | 83272                    | -     | 1,200 - 5,000      | 6,000           | 36  |
| End   | 5/16              | 1/8                | 9/16                 | -                   | -                        | 83273 | 1,200 - 5,000      | 6,000           | 36  |
| End   | 5/16              | 1/8                | 1/2                  | -                   | 83274                    | -     | 1,200 - 5,000      | 6,000           | 36  |

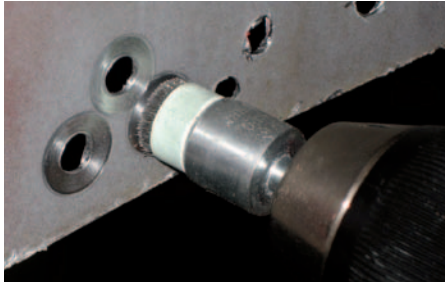


Precision miniature brush in soft and stiff natural bristle for light cleaning, and polishing. May be used with abrasive or polishing pastes.

Made in Germany.

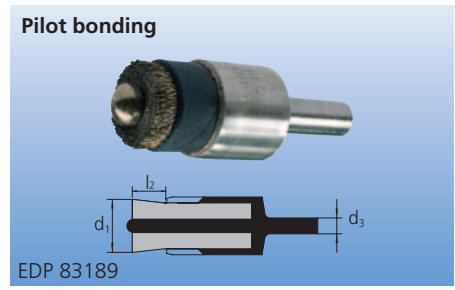



| Brush shape/form       | Diameter [Inches] | Stem dia. [Inches] | Trim length [Inches] | Face width [Inches] | Bristle type and EDP number |       | Recom. speed [RPM] | MSFS max. [RPM] |  |
|------------------------|-------------------|--------------------|----------------------|---------------------|-----------------------------|-------|--------------------|-----------------|---|
|                        |                   |                    |                      |                     | Stiff                       | Soft  |                    |                 |   |
| <b>Natural bristle</b> |                   |                    |                      |                     |                             |       |                    |                 |   |
| Wheel                  | 3/4               | 1/8                | 3/16                 | 1/16                | 83231                       | 83232 | 5,000 - 10,000     | 25,000          | 36  |
| Cup                    | 9/16              | 1/8                | 1/4                  | -                   | 83250                       | 83252 | 5,000 - 10,000     | 25,000          | 36  |
| End                    | 3/16              | 1/8                | 5/16                 | -                   | 83278                       | 83281 | 5,000 - 10,000     | 25,000          | 36  |
| End                    | 1/4               | 1/8                | 7/16                 | -                   | 83279                       | -     | 5,000 - 10,000     | 25,000          | 36  |



Essential for cleaning rivet holes in aircraft and aerospace industries.

**Ordering Note**  
Trim length measured from ring.  
Made in the USA.

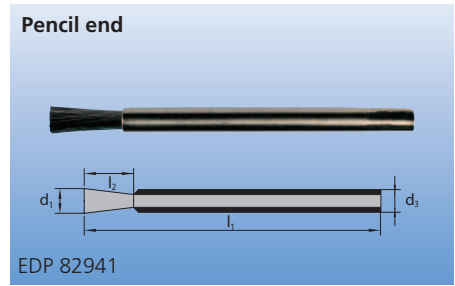



| Diameter<br>$d_1$<br>[Inches]      | Shank dia.<br>$d_3$<br>[Inches] | Trim length<br>$l_2$<br>[Inches] | Wire dia.<br>[Inches] | Pilot hole diameter and EDP number |       |       |       | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|------------------------------------|---------------------------------|----------------------------------|-----------------------|------------------------------------|-------|-------|-------|--------------------------|-----------------------|---|
|                                    |                                 |                                  |                       | 1/8"                               | 5/32" | 3/16" | 1/4"  |                          |                       |   |
| <b>Stainless steel wire (INOX)</b> |                                 |                                  |                       |                                    |       |       |       |                          |                       |   |
| 1/2                                | 1/4                             | 1/8                              | .005                  | 83188                              | 83189 | 83190 | 83191 | 10,000 - 15,000          | 20,000                | 10  |



Small brushes designed for cleaning blind holes and small crevices. Ideal for aircraft maintenance.

**Recommendation for use**  
The metal shank/tube of these brushes can be cut back to expose desired filament length.  
Made in the USA.



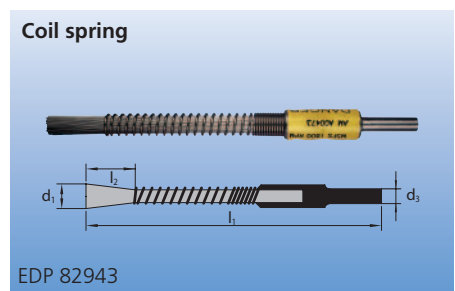
| Diameter<br>$d_1$<br>[Inches]      | Shank dia.<br>$d_3$<br>[Inches] | Trim length<br>$l_2$<br>[Inches] | Wire diameter and EDP number | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|------------------------------------|---------------------------------|----------------------------------|------------------------------|--------------------------|-----------------------|---|
|                                    |                                 |                                  |                              |                          |                       |   |
| <b>Carbon steel wire</b>           |                                 |                                  |                              |                          |                       |   |
| 3/16                               | 1/4                             | 3/8                              | 82941                        | 4,000 - 6,000            | 8,000                 | 10  |
| <b>Stainless steel wire (INOX)</b> |                                 |                                  |                              |                          |                       |   |
| 3/16                               | 1/4                             | 3/8                              | 82942                        | 3,000 - 5,000            | 8,000                 | 10  |


Flexible heavy cleaning action. Spring may be trimmed as brush wears. Ideal for cleaning deep cavities, tubing, and more.

**Warning:**  
Do not run the coil spring brush free of contact with the workpiece. Insert it into the workpiece before turning on power. If run free, the brush may whip, break, and fly off tooling, endangering personnel in the area.

Do not exceed MSFS of 1,800 RPM.

**Ordering note**  
Trim length measured from ring.  
Made in the USA.

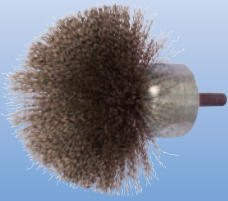


| Diameter<br>$d_1$<br>[Inches] | Shank dia.<br>$d_3$<br>[Inches] | Trim length<br>$l_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Wire diameter and EDP number | Recom.<br>speed<br>[RPM] | MSFS<br>max.<br>[RPM] |  |
|-------------------------------|---------------------------------|----------------------------------|-------------------------------------|------------------------------|--------------------------|-----------------------|---|
|                               |                                 |                                  |                                     |                              |                          |                       |   |
| <b>Carbon steel wire</b>      |                                 |                                  |                                     |                              |                          |                       |   |
| 3/8                           | 1/4                             | 1                                | 6-1/4                               | 82943                        | 700 - 1,000              | 1,800                 | 10  |
| 1/2                           | 1/4                             | 1                                | 6-1/4                               | 82944                        | 700 - 1,000              | 1,800                 | 10  |

# Power wire brushes

## Stem mounted specialty brushes

### Circular end




EDP 82932

Conforms to contours of the workpiece providing a light deburring or cleaning action. Used for scuffing rubber and cleaning plastic molds, light removal of flashing, carbon, rust and paint.

Made in the USA.



| Diameter [Inches]                  | Shank dia. [Inches] | Wire diameter and EDP number |       |       |       |       | Recom. speed [RPM] | MSFS max. [RPM] |  |
|------------------------------------|---------------------|------------------------------|-------|-------|-------|-------|--------------------|-----------------|---|
|                                    |                     | .006                         | .008  | .010  | .014  | .020  |                    |                 |   |
| <b>Carbon steel wire</b>           |                     |                              |       |       |       |       |                    |                 |   |
| 1-1/4                              | 1/4                 | 82925                        | 82926 | -     | -     | -     | 10,000 - 15,000    | 20,000          | 10  |
| 1-1/2                              | 1/4                 | -                            | 82927 | -     | -     | 82928 | 7,000 - 10,500     | 14,000          | 10  |
| 2                                  | 1/4                 | -                            | -     | 82929 | 82930 | -     | 7,000 - 10,500     | 14,000          | 10  |
| 3                                  | 1/4                 | 82931                        | 82932 | -     | 82933 | 82934 | 7,000 - 10,500     | 14,000          | 10  |
| 4                                  | 1/4                 | -                            | 82949 | -     | -     | -     | 7,000 - 10,500     | 14,000          | 10  |
| <b>Stainless steel wire (INOX)</b> |                     |                              |       |       |       |       |                    |                 |   |
| 1-1/2                              | 1/4                 | -                            | 82935 | -     | -     | -     | 5,500 - 9,000      | 14,000          | 10  |
| 2                                  | 1/4                 | -                            | -     | 82936 | -     | -     | 5,500 - 9,000      | 14,000          | 10  |
| 3                                  | 1/4                 | -                            | 82938 | -     | -     | -     | 5,500 - 9,000      | 14,000          | 10  |

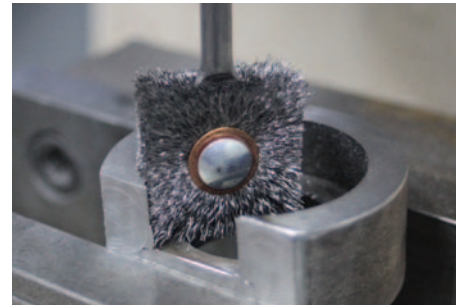
### Side and bottom cleaning




EDP 82883

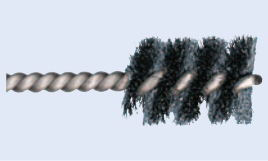
Side and bottom brushes are ideal for cleaning the side and bottom of blind holes. The brush face can also be turned 45 degrees to clean snap ring grooves and other recessed features. Mount in drill press or portable tool.

Made in the USA.

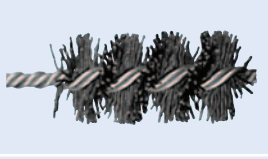


| Workpiece I.D. [Inches]  | Shank dia. [Inches] | Square trim length [Inches] | Face width [Inches] | Overall length [Inches] | Wire diameter and EDP number | Recom. speed [RPM] | MSFS max. [RPM] |  |
|--------------------------|---------------------|-----------------------------|---------------------|-------------------------|------------------------------|--------------------|-----------------|---|
|                          |                     |                             |                     |                         | .006                         |                    |                 |   |
| <b>Carbon steel wire</b> |                     |                             |                     |                         |                              |                    |                 |   |
| 1                        | 1/4                 | 1/4                         | 1/2                 | 3-5/8                   | 82880                        | 1,500 - 3,000      | 4,500           | 10  |
| 1-1/4                    | 1/4                 | 3/8                         | 1/2                 | 3-3/4                   | 82882                        | 1,500 - 3,000      | 4,500           | 10  |
| 1-1/2                    | 1/4                 | 1/2                         | 1/2                 | 4                       | 82883                        | 1,500 - 3,000      | 4,500           | 10  |
| 1-7/8                    | 1/4                 | 11/16                       | 1/2                 | 4-1/8                   | 82884                        | 1,500 - 3,000      | 4,500           | 10  |

Single stem/  
single spiral



Double stem/  
single spiral



Double stem/  
double spiral



PFERD offers a complete line of tube brushes designed for use in drill presses and power tools for internal cleaning. Power tube brushes are available in a variety of diameters, shapes, filament materials and filament diameters. Special orders, such as ECAP® encapsulated tube brushes can be made to order.

### Tube brushes

- Designed and manufactured with an interference fit.
- Tube brushes are available in single-stem/ single spiral construction with more wire points, and double-stem/double-spiral construction for better lateral filament support.
- Loop end of tube brush handle can be cut off for use in power tool.

### Application guidelines

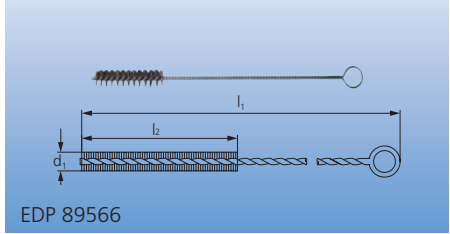
- Recommended operating speed is between 500 and 2,500 RPM.
- To ensure a safe working environment, spin the brush up to operating speed while the tip of the brush is already inserted into the workpiece.
- When cleaning threads, run the brush in the same direction as the threads to prolong brush life.
- Please do not insert the entire stem of a brush into the chuck. Per ANSI B165.1-2013, 6.7: The shank shall be inserted into the chuck or collet as far as possible on the uniform diameter of the shank with minimum possible overhang of the brush.
- For spindle extensions for stem mounted brushes, see our "Power tools" catalogue (section 209).



Wire tube and spout brushes are used for internal cleaning in industrial, dairy and laboratory applications.

Made in the USA.

### Hand tube brushes, wire fill



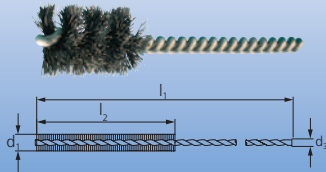
| Diameter<br>$d_1$<br>[Inches]      | Stem dia.<br>$d_3$<br>[Inches] | Brush part length<br>$l_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Wire diameter and EDP number |       |       |       |    |
|------------------------------------|--------------------------------|--|-------------------------------------|------------------------------|-------|-------|-------|----|
|                                    |                                |  |                                     | .003                         | .005  | .006  | .008  |    |
| <b>Carbon steel wire</b>           |                                |  |                                     |                              |       |       |       |    |
| 3/16                               | .09                            | 1-1/2                                  | 7                                   | 89560                        | 89561 | -     | -     | 12 |
| 1/4                                | .12                            | 1-1/2                                  | 7                                   | -                            | -     | 89564 | -     | 12 |
| 3/8                                | .12                            | 2                                      | 8                                   | -                            | -     | 89565 | -     | 12 |
| 1/2                                | .17                            | 2                                      | 8                                   | -                            | 89563 | 89566 | 89567 | 12 |
| <b>Stainless steel wire (INOX)</b> |                                |  |                                     |                              |       |       |       |    |
| 3/16                               | .09                            | 1-1/2                                  | 7                                   | -                            | -     | 89568 | -     | 12 |
| 1/4                                | .12                            | 1-1/2                                  | 8                                   | -                            | -     | 89569 | -     | 12 |
| 3/8                                | .12                            | 2                                      | 8                                   | -                            | -     | 89570 | -     | 12 |
| 1/2                                | .17                            | 2                                      | 8                                   | -                            | -     | 89571 | -     | 12 |



# Power wire brushes

## Tube brushes

### SpyraKleen, single stem, single spiral

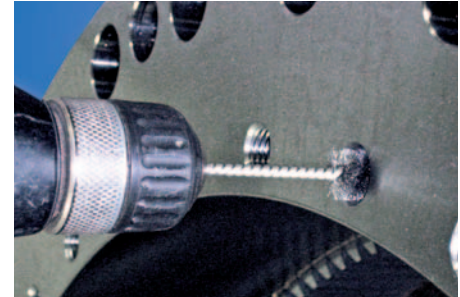



EDP 83367

Single stem, single spiral, light duty power tube brush for round, eccentric and rectangular holes. Achieves optimal performance when fully chucked in drill presses and collet-equipped portable tools. Flexible brushing action conforms well to threads and contours.

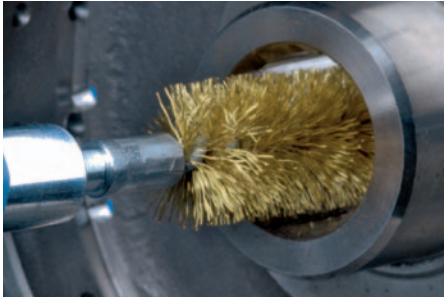
Features a stainless steel (INOX) stem for strength and stiffness.

Made in the USA.



| Diameter<br>$d_1$<br>[Inches]      | Stem dia.<br>$d_2$<br>[Inches] | Brush part length<br>$l_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Wire diameter and EDP number |       |       |       |       |  |
|------------------------------------|--------------------------------|--|-------------------------------------|------------------------------|-------|-------|-------|-------|---|
|                                    |                                |  |                                     | .004                         | .005  | .006  | .008  | .010  |   |
| <b>Carbon steel wire</b>           |                                |  |                                     |                              |       |       |       |       |   |
| 1/4                                | 1/8                            | 1                                      | 3-1/2                               | 83350                        | 83351 | -     | -     | -     | 36  |
| 5/16                               | 1/8                            | 1                                      | 3-1/2                               | -                            | 83352 | -     | -     | -     | 36  |
| 3/8                                | 5/32                           | 1                                      | 3-1/2                               | 83353                        | 83354 | -     | 83356 | -     | 36  |
| 1/2                                | 5/32                           | 1                                      | 3-1/2                               | -                            | 83358 | -     | -     | -     | 36  |
| 9/16                               | 5/32                           | 1                                      | 3-1/2                               | -                            | 83359 | -     | -     | -     | 36  |
| 5/8                                | 5/32                           | 1                                      | 3-1/2                               | -                            | 83360 | -     | 83361 | -     | 36  |
| 3/4                                | 1/4                            | 1                                      | 3-1/2                               | -                            | 83363 | -     | -     | -     | 36  |
| 13/16                              | 1/4                            | 1                                      | 3-1/2                               | -                            | 83366 | -     | -     | -     | 36  |
| 7/8                                | 1/4                            | 1                                      | 3-1/2                               | -                            | 83367 | -     | -     | -     | 36  |
| 1                                  | 1/4                            | 1                                      | 3-1/2                               | -                            | 83371 | -     | 83372 | -     | 36  |
| 1-1/8                              | 1/4                            | 1                                      | 3-1/2                               | -                            | 83373 | -     | 83374 | -     | 36  |
| 1-1/4                              | 1/4                            | 1                                      | 3-1/2                               | -                            | 83375 | -     | 83376 | -     | 36  |
| 1-1/2                              | 1/4                            | 1                                      | 3-1/2                               | -                            | -     | -     | 83377 | 83378 | 36  |
| 2-1/4                              | 1/4                            | 1                                      | 3-1/2                               | -                            | -     | -     | 83379 | -     | 36  |
| <b>Stainless steel wire (INOX)</b> |                                |  |                                     |                              |       |       |       |       |   |
| 1/4                                | 1/8                            | 1                                      | 3-1/2                               | -                            | 83387 | -     | -     | -     | 36  |
| 3/8                                | 5/32                           | 1                                      | 3-1/2                               | 83388                        | 83389 | -     | -     | -     | 36  |
| 7/16                               | 1/8                            | 1                                      | 3-1/2                               | -                            | 83391 | -     | -     | -     | 36  |
| 1/2                                | 5/32                           | 1                                      | 3-1/2                               | -                            | 83392 | -     | -     | -     | 36  |
| 9/16                               | 5/32                           | 1                                      | 3-1/2                               | -                            | 83393 | -     | -     | -     | 36  |
| 5/8                                | 5/32                           | 1                                      | 3-1/2                               | -                            | 83395 | -     | -     | -     | 36  |
| 11/16                              | 5/32                           | 1                                      | 3-1/2                               | -                            | 83396 | -     | -     | -     | 36  |
| 3/4                                | 1/4                            | 1                                      | 3-1/2                               | -                            | 83397 | -     | -     | -     | 36  |
| 13/16                              | 1/4                            | 1                                      | 3-1/2                               | -                            | 83399 | -     | -     | -     | 36  |
| 7/8                                | 1/4                            | 1                                      | 3-1/2                               | -                            | 83400 | -     | -     | -     | 36  |
| 1                                  | 1/4                            | 1                                      | 3-1/2                               | -                            | 83402 | -     | 83403 | -     | 36  |
| 1-1/8                              | 1/4                            | 1                                      | 3-1/2                               | -                            | -     | -     | 83405 | -     | 36  |
| 1-1/4                              | 1/4                            | 1                                      | 3-1/2                               | -                            | 83406 | -     | 83407 | -     | 36  |
| <b>Brass wire</b>                  |                                |  |                                     |                              |       |       |       |       |   |
| 1/4                                | 1/8                            | 1                                      | 3-1/2                               | 83411                        | -     | -     | -     | -     | 36  |
| 3/8                                | 5/32                           | 1                                      | 3-1/2                               | 83412                        | -     | -     | -     | -     | 36  |
| 1/2                                | 5/32                           | 1                                      | 3-1/2                               | -                            | 83413 | -     | -     | -     | 36  |
| 3/4                                | 1/4                            | 1                                      | 3-1/2                               | -                            | -     | 83415 | -     | -     | 36  |
| 1                                  | 1/4                            | 1                                      | 3-1/2                               | -                            | -     | -     | 83417 | -     | 36  |

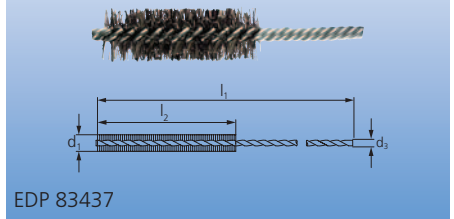




Double stem, double spiral power tube brushes for heavy-duty cleaning and deburring of I.D.'s: Threads, pipes, holes, keyways, etc. Heavy-duty construction offers long service life and most effective brushing action. Achieves optimal performance when fully chucked in drill presses and collet-equipped portable tools.

Made in the USA.

### SpyraKleen, double stem, double spiral



EDP 83437

| Diameter<br>$d_1$<br>[Inches] | Stem dia.<br>$d_3$<br>[Inches] | Brush part length<br>$l_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Wire diameter and EDP number |      |      |      |      |      |      |  |
|-------------------------------|--------------------------------|--|-------------------------------------|------------------------------|------|------|------|------|------|------|---|
|                               |                                |  |                                     | .003                         | .004 | .005 | .006 | .008 | .010 | .014 |   |

#### Carbon steel wire

|       |      |       |       |       |       |       |       |       |       |   |    |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|---|----|
| 1/4   | 5/32 | 2     | 6     | -     | -     | -     | 83420 | -     | -     | - | 10 |
| 3/8   | 5/32 | 2     | 6     | 83421 | -     | -     | 83422 | -     | -     | - | 10 |
| 1/2   | 5/32 | 2     | 6     | -     | 83423 | -     | 83424 | -     | 83425 | - | 10 |
| 5/8   | 5/32 | 2     | 6     | -     | -     | 83426 | -     | 83427 | 83428 | - | 10 |
| 3/4   | 1/4  | 2-1/2 | 5-1/2 | -     | -     | -     | 83430 | 83431 | 83432 | - | 10 |
| 7/8   | 1/4  | 2-1/2 | 5-1/2 | -     | -     | -     | 83434 | -     | 83435 | - | 10 |
| 1     | 1/4  | 2-1/2 | 5-1/2 | -     | -     | -     | 83436 | -     | 83437 | - | 10 |
| 1-1/4 | 1/4  | 2-1/2 | 5-1/2 | -     | -     | -     | 83438 | -     | 83439 | - | 10 |

#### Stainless steel wire (INOX)

|       |      |       |       |   |       |       |       |       |       |       |    |
|-------|------|-------|-------|---|-------|-------|-------|-------|-------|-------|----|
| 1/2   | 5/32 | 2     | 6     | - | 83440 | -     | 83441 | -     | -     | -     | 10 |
| 5/8   | 5/32 | 2     | 6     | - | -     | 83442 | -     | 83443 | -     | -     | 10 |
| 3/4   | 1/4  | 2-1/2 | 5-1/2 | - | -     | -     | 83445 | -     | 83446 | -     | 10 |
| 7/8   | 1/4  | 2-1/2 | 5-1/2 | - | -     | -     | 83447 | -     | 83448 | -     | 10 |
| 1     | 1/4  | 2-1/2 | 5-1/2 | - | -     | -     | 83449 | -     | 83450 | -     | 10 |
| 1-1/2 | 1/4  | 2-1/2 | 5-1/2 | - | -     | -     | -     | -     | -     | 83453 | 10 |

#### Brass wire

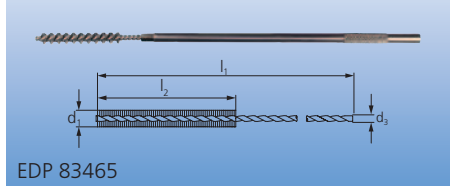
|     |      |       |       |   |   |       |       |       |   |   |    |
|-----|------|-------|-------|---|---|-------|-------|-------|---|---|----|
| 3/8 | 5/32 | 2     | 6     | - | - | 83456 | -     | -     | - | - | 10 |
| 1/2 | 5/32 | 2     | 6     | - | - | 83457 | -     | -     | - | - | 10 |
| 5/8 | 5/32 | 2     | 6     | - | - | -     | -     | 83460 | - | - | 10 |
| 3/4 | 1/4  | 2-1/2 | 5-1/2 | - | - | -     | 83461 | -     | - | - | 10 |
| 7/8 | 1/4  | 2-1/2 | 5-1/2 | - | - | -     | 83462 | -     | - | - | 10 |
| 1   | 1/4  | 2-1/2 | 5-1/2 | - | - | -     | 83463 | -     | - | - | 10 |




Single stem, single spiral tube brushes built to precision accuracy. Designed for use on drill presses and collet-equipped tools. Equipped with a knurled handle for hand use.

Made in the USA.

### Valve guide



EDP 83465

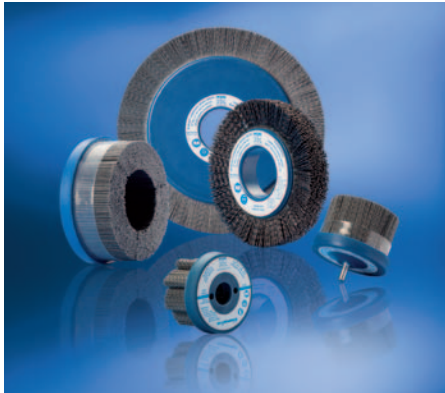
| Diameter<br>$d_1$<br>[Inches] | Stem dia.<br>$d_3$<br>[Inches] | Brush part length<br>$l_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Wire diameter and EDP number |  |  |
|-------------------------------|--------------------------------|--|-------------------------------------|------------------------------|--|---|
|                               |                                |  |                                     | .010                         |  |   |

#### Carbon steel wire

|       |     |   |    |  |       |    |
|-------|-----|---|----|--|-------|----|
| 1/4   | 1/4 | 2 | 10 |  | 83465 | 10 |
| 5/16  | 1/4 | 2 | 10 |  | 83466 | 10 |
| 11/32 | 1/4 | 2 | 10 |  | 83467 | 10 |
| 3/8   | 1/4 | 2 | 10 |  | 83468 | 10 |
| 7/16  | 1/4 | 2 | 10 |  | 83469 | 10 |
| 1/2   | 1/4 | 2 | 10 |  | 83470 | 10 |

# Power non-wire brushes

## M-BRAD® abrasive filament brushes



### Power non-wire brushes

Encompasses a broad range of M-BRAD® abrasive filament brushes, as well as tampico and nylon wheel brushes. Please consult page 55 for very important information regarding power non-wire brushes.

For easier recognition the filament materials are colour-coded.

|                                  |         |
|----------------------------------|---------|
| <b>M-BRAD® abrasive filament</b> | – red   |
| <b>Nylon/natural bristle</b>     | – brown |

Your quick product selection guide on pages 8-9 will help you to find the right brush for your application.

### Unique M-BRAD® filaments

M-BRAD® is a 6.12 nylon monofilament that evenly encapsulates various abrasive grit particles on the surface as well as throughout the nylon filament. The flexibility of strands flowing over, around and into contours makes it uniquely effective if deburring complex parts.

Consistent, gradual cutting action allows precise control from cosmetic surface preparation on brass or soft aluminum to edge-blending on materials as tough as titanium and carbide.

M-BRAD® brushes are ideal for surface conditioning applications on all materials including wood, glass, steel and nickel alloys.

### Nylon/natural bristle

Nylon and tampico wheel brushes are a good choice for cleaning and polishing applications with or without compounds.

These brushes are non abrasive and can be used effectively for light deburring applications on plastic and other delicate parts and can be used with or without coolant.

### Features and advantages

- PFERD offers a full line of high fill density composite disc and wheel brushes for more aggressive brushing.
- M-BRAD® filled brushes yield longer tool life than non-woven synthetic abrasive products
- Ceramic oxide grain (CO) for very aggressive brushing.
- This unique M-BRAD® filament is recommended for both wet and dry applications, although the use of coolant is recommended.
- M-BRAD® won't degrade the dimensions of the workpiece, which reduces scrap.






**PFERDMEDIA**



For more information, visit [pferdusa.com/mbrad](http://pferdusa.com/mbrad)

### M-BRAD® abrasive grain types

M-BRAD® is a 6.12 nylon monofilament that evenly encapsulates abrasive grit particles. M-BRAD® won't degrade the dimensions of the workpiece, which reduces scrap.

|                              |  |   |
|------------------------------|--|---|
| <b>Silicon carbide (SiC)</b> |   | Has a jagged crystal structure and is easily friable. It is the most common grain used on light to heavy deburring applications on ferrous and non-ferrous alloys.  |
| <b>Aluminum oxide (AO)</b>   |   | More rounded crystal structure. It is more commonly used for wood applications. Due to the flexible nylon filament carrier in most cases it is not as aggressive as silicon carbide brushes.  |
| <b>Ceramic oxide (CO)</b>    |  | Ceramic oxide is a more aggressive grain than silicon carbide. It is ideal for heavy deburring as well as for surface finishing applications where reduced cycle time is critical. During controlled testing, ceramic grain filled brushes outperformed silicon carbide filled brushes by 200-300%. It is highly effective on ferrous workpieces. |

### M-BRAD® filament geometries – power non-wire brushes

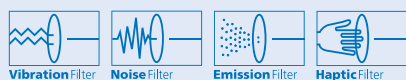
|                             |   |  |
|-----------------------------|---|--|
| <b>Round filament</b>       |  | Round filaments create point contact on the workpiece. They are the most popular filaments for general deburring and surface finishing applications.                                 |
| <b>Rectangular filament</b> |  | Rectangular filaments create line contact with the workpiece. Due to the larger cross section, these filaments are used in deburring applications where larger burrs need attention. |

### PFERDVALUE® – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD products offer measurable added value.

Discover **PFERDERGONOMICS®** and **PFERDEFFICIENCY®**

As part of **PFERDERGONOMICS®**, PFERD offers ergonomically optimized products and power tools that contribute to greater safety and working comfort, and thus to health protection.



As part of **PFERDEFFICIENCY®**, PFERD offers innovative, high-performance product solutions and power tools with outstanding added value.



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### PFERD PRAXIS

PFERD PRAXIS brochures contain valuable information on material properties, and technical tips on the use of PFERD products. Visit [pferdusa.com/info](http://pferdusa.com/info) to request a free copy or to download a pdf version.

### Brushing equipment considerations

#### Brush size

- Select a brush that can safely fit your specific equipment.

#### Brush adapters

- Please do not insert the entire stem of a brush into the chuck. Per ANSI B165.1-2013, 6.7: The shank shall be inserted into the chuck or collet as far as possible on the uniform diameter of the shank with minimum possible overhang of the brush.
- Various adapters and drive arbors are available to help secure brushes safely to machines (pages 66-67). Spindle extensions for stem mounted brushes are also available, see our "Power tools" catalogue (section 209).

### Application parameters

#### Brush speed

- As a good starting point have the brush run at about 3,000 SFPM (consult SFPM table on page 16).
- At higher speeds, the filaments of disc brushes tend to flare, reducing the overall height of the brush therefore decreasing penetration depth and creating a less aggressive brushing action. It is recommended that the penetration depth be set while the brush is running at the intended operating speed.

#### Brush penetration into workpiece

- Due to the even distribution of abrasive grain throughout the filament a greater degree of interference is recommended when using M-BRAD® brushes.
- A recommended starting depth or interference between brush and workpiece should be .060".

#### Direction of brush rotation

- On parts with complex features it is recommended the brush be run in both clockwise and counterclockwise directions.
- The brush filament should approach the workpiece as perpendicularly as possible.
- For deburring applications, the initial pass with the brush rotation should be opposite to the direction of the cutting tool rotation that created the burr.

#### Use of coolant

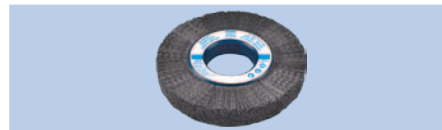
- The use of coolant is strongly recommended in cases where the workpiece is thin (less than ¼"), where excessive brush penetration is used (more than ½"), and in cases where poor thermal conducting materials are processed.
- The use of coolant will generate a better surface finish.
- Under certain application conditions M-BRAD® brush filaments will begin to melt and create nylon "smear" (gray film on workpiece).
- If nylon smear occurs, apply coolant immediately and continue running the brush normally. The cooler running brush will remove the smear.

### Abrasive grain and filament selection

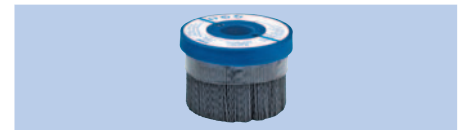
#### Grain type

- For demanding deburring applications on steel, choose coarse, ceramic filled M-BRAD® brushes.
- For processing workpieces used in the nuclear or aerospace industries choose ceramic filled brushes.
- For deburring applications on aluminum parts, silicon carbide filled brushes are recommended.
- For deburring and surface conditioning applications on plastic parts the best choice is nylon filled brushes.

### Operating speeds for wet and dry M-BRAD® applications



| Wheel dia. | Maximum speed [RPM] |                 |
|------------|---------------------|-----------------|
|            | Dry application     | Wet application |
| 3          | 3,000               | 5,500           |
| 4          | 2,000               | 2,400           |
| 6          | 1,200               | 1,440           |
| 8          | 1,000               | 1,200           |
| 10         | 900                 | 1,080           |
| 12         | 800                 | 960             |
| 14         | 700                 | 840             |



| Disc brush dia. | Maximum speed [RPM] |                 |
|-----------------|---------------------|-----------------|
|                 | Dry application     | Wet application |
| 3               | 2,500               | 3,000           |
| 4               | 2,000               | 2,400           |
| 5               | 1,600               | 2,000           |
| 6               | 1,400               | 1,600           |
| 8               | 1,000               | 1,200           |
| 9               | 800                 | 1,000           |
| 10              | 300                 | 800             |

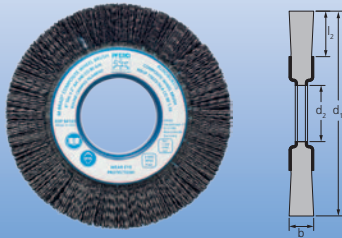
### Problems and solutions

| Problem   | Solution   |
|---|--|
| Inadequate brushing action                              | <ul style="list-style-type: none"> <li>■ Increase brush RPM or use larger brush diameter at same RPM</li> <li>■ Use brush with shorter trim</li> <li>■ Select a brush with larger filament size</li> <li>■ Select a brush with larger abrasive grain size</li> <li>■ Change the orientation of the brush to the workpiece (brushing action should be perpendicular to the workpiece edge)</li> <li>■ Increase interference between brush and workpiece</li> <li>■ Decrease coolant pressure onto brush/workpiece</li> <li>■ Decrease feed rate between brush and workpiece</li> <li>■ Select a brush with ceramic vs silicon carbide filled grain</li> </ul> |
| Excessively strong brushing action                      | <ul style="list-style-type: none"> <li>■ Reduce brush RPM, or use a smaller brush diameter at same RPM</li> <li>■ Reduce contact pressure</li> <li>■ Use brush with longer trim length</li> <li>■ Use brush with finer abrasive grain size</li> <li>■ Select a brush with thinner filament</li> <li>■ Change the orientation of the brush to the workpiece (make less perpendicular)</li> </ul>  |
| Change in workpiece colour (due to heat or nylon smear) | <ul style="list-style-type: none"> <li>■ Reduce brush RPM</li> <li>■ Use longer trim length brush running at the same speed</li> <li>■ Use coolant</li> <li>■ Use lighter density brush</li> <li>■ Decrease brush penetration into workpiece</li> </ul>  |
| Irregular/coarse surface finish                         | <ul style="list-style-type: none"> <li>■ Use brush with wider brush face</li> <li>■ Increase brush penetration</li> <li>■ Use larger disc brush diameter</li> <li>■ Use brush with smaller filament size</li> <li>■ Use brush with smaller abrasive grain size</li> <li>■ Make sure that workpiece is completely covered by brush</li> <li>■ Use brush with longer trim</li> </ul>   |
| Surface is too smooth                                   | <ul style="list-style-type: none"> <li>■ Select brush with thicker filament</li> <li>■ Use brush with shorter trim</li> <li>■ Use brush with larger abrasive grain size</li> <li>■ Reduce RPM</li> </ul>   |

# Power non-wire brushes

## M-BRAD® abrasive filament wheel brushes

### Composite wheels



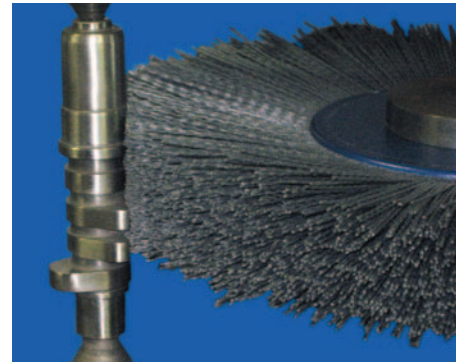
EDP 84165


For deburring, honing, edge radiusing, light cleaning, and polishing. Available with silicon carbide or ceramic oxide grain.

#### Ordering note

Please refer to pages 66-67 for drive arbor adapters.

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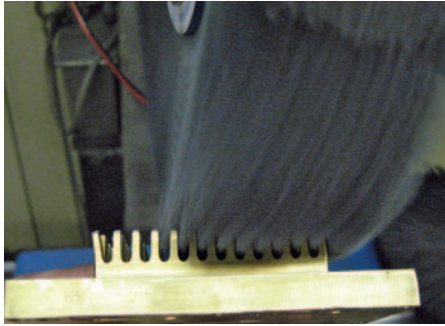


| Diameter<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Filament dimensions, grit size and EDP number |                      |                       |                       |                       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|--|--|---|-----------------------------|---|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|---------------|---|
|  |  |   |                             | Rectangular<br>.045 x .090<br>80 grit         | .040 dia.<br>80 grit | .040 dia.<br>120 grit | .022 dia.<br>120 grit | .022 dia.<br>320 grit |                       |                    |               |   |
| <b>Silicon carbide grain (SiC)</b>     |  |   |                             |   |                      |                       |                       |                       |                       |                    |               |   |
| 6                                      | 2  | 1-1/4                                     | 1                           | 83721   | 83720                | 83722                 | -                     | 83723                 | 900 - 1,500           | 3,600              | C             | 1   |
| 8                                      | 2  | 1-1/4                                     | 1                           | 83727   | 83726                | 83728                 | -                     | 83729                 | 900 - 1,500           | 3,600              | C             | 1   |
| 8                                      | 2  | 2-1/4                                     | 1                           | 83733   | 83732                | 83734                 | -                     | 83735                 | 900 - 1,500           | 3,600              | C             | 1   |
| 10                                     | 2  | 1-1/2                                     | 1                           | 83739   | 83738                | 83740                 | 83742                 | 83741                 | 900 - 1,500           | 3,600              | C             | 1   |
| 10                                     | 2  | 3-1/4                                     | 1                           | 83745   | 83744                | 83746                 | -                     | 83747                 | 900 - 1,500           | 3,600              | C             | 1   |
| 12                                     | 4-1/4                                    | 1-1/2                                     | 1                           | 83751   | 83750                | 83752                 | -                     | 83753                 | 500 - 800             | 1,800              | G             | 1   |
| 12                                     | 4-1/4                                    | 3   | 1                           | 83757   | 83756                | 83758                 | -                     | 83759                 | 500 - 800             | 1,800              | G             | 1   |
| 14                                     | 5-1/4                                    | 1-1/2                                     | 1                           | 83763   | 83762                | 83764                 | -                     | 83765                 | 500 - 800             | 1,800              | G             | 1   |
| 14                                     | 5-1/4                                    | 3-1/2                                     | 1                           | 83769   | 83768                | 83770                 | -                     | 83771                 | 500 - 800             | 1,800              | G             | 1   |
| <b>Ceramic oxide grain (CO)</b>        |  |   |                             |   |                      |                       |                       |                       |                       |                    |               |   |
| 6                                      | 2  | 1-1/4                                     | 1                           | -   | 84165                | -                     | -                     | -                     | 900 - 1,500           | 3,600              | C             | 1   |
| 8                                      | 2  | 1-1/4                                     | 1                           | -   | 84169                | -                     | -                     | -                     | 900 - 1,500           | 3,600              | C             | 1   |
| 10                                     | 2  | 1-1/2                                     | 1                           | -   | 84173                | -                     | -                     | -                     | 500 - 800             | 3,600              | C             | 1   |
| 12                                     | 4-1/4                                    | 1-1/2                                     | 1                           | -   | 84177                | -                     | -                     | -                     | 500 - 800             | 1,800              | G             | 1   |
| 14                                     | 5-1/4                                    | 1-1/2                                     | 1                           | -   | 84181                | -                     | -                     | -                     | 500 - 800             | 1,800              | G             | 1   |



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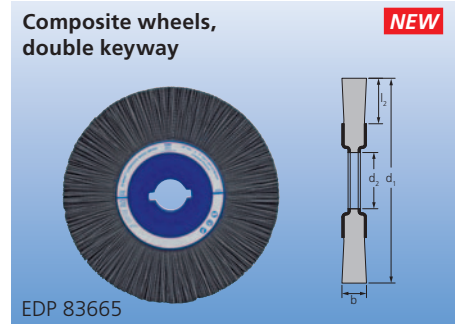



For deburring, honing, edge radiusing, light cleaning, and polishing. Available with silicon carbide or ceramic oxide grain.

### Ordering note

Please refer to pages 66-67 for drive arbor adapters.

Made in the USA.



| Diameter<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Keyway dimensions<br>[Inches] | Filament dimensions, grit size and EDP number |  |                       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|--|--|---|-----------------------------|-------------------------------|---|--|-----------------------|-----------------------|--------------------|---------------|---|
|  |  |   |                             |                               | .040 dia.<br>80 grit                          | Round crimped<br>.040 dia.<br>120 grit | .035 dia.<br>180 grit |                       |                    |               |   |
| <b>Silicon carbide grain (SiC)</b>     |  |   |                             |                               |   |  |                       |                       |                    |               |   |
| 10                                     | 2  | 3-1/4                                     | 1                           | 1/2 x 1/4                     | -   | -                                      | 83657                 | 900 - 1,500           | 3,600              | C             | 1   |
| 12                                     | 2  | 2-3/8                                     | 1                           | 1/2 x 1/4                     | 83659   | 83660                                  | 83661                 | 500 - 800             | 1,800              | C             | 1   |
| 14                                     | 2  | 3-1/2                                     | 1                           | 1/2 x 1/4                     | 83663   | -                                      | 83665                 | 500 - 800             | 1,800              | C             | 1   |
| <b>Ceramic oxide grain (CO)</b>        |  |   |                             |                               |   |  |                       |                       |                    |               |   |
| 12                                     | 2  | 2-3/8                                     | 1                           | 1/2 x 1/4                     | 84189   | 84190                                  | -                     | 500 - 800             | 1,800              | C             | 1   |
| 14                                     | 2  | 3-1/2                                     | 1                           | 1/2 x 1/4                     | 84193   | 84194                                  | -                     | 500 - 800             | 1,800              | C             | 1   |

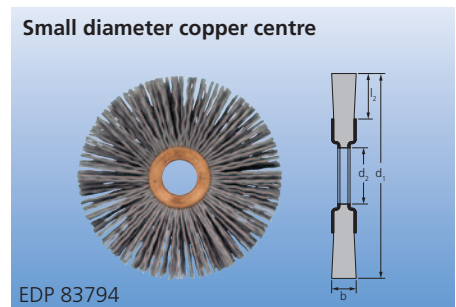



These brushes can be used on straight grinders for general surface conditioning applications.

### Ordering note

See pages 66-67 for information on drive arbors.

Made in the USA.

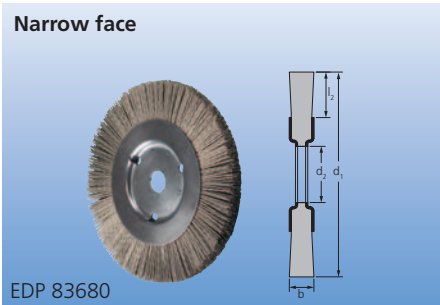


| Diameter<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Incl. adapter<br>[Inches] | Filament dimensions, grit size and EDP number |                       |                       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|--|--|---|-----------------------------|---------------------------|---|-----------------------|-----------------------|-----------------------|--------------------|---------------|---|
|  |  |   |                             |                           | .040 dia.<br>120 grit                         | .035 dia.<br>180 grit | .022 dia.<br>320 grit |                       |                    |               |   |
| <b>Silicon carbide grain (SiC)</b>     |  |   |                             |                           |   |                       |                       |                       |                    |               |   |
| 1-1/2                                  | 1/2                                      | 7/16                                      | 3/8                         | 3/8                       | -   | 83782                 | -                     | 4,000 - 6,000         | 10,000             | F             | 10  |
| 2                                      | 1/2                                      | 1   | 5/8                         | 3/8                       | 83784   | -                     | 83785                 | 2,600 - 4,500         | 10,000             | F             | 10  |
| 2-1/2                                  | 5/8                                      | 11/16                                     | 5/8                         | -                         | -   | -                     | 83792                 | 3,000 - 5,000         | 10,000             | F             | 10  |
| 3                                      | 1/2                                      | 15/16                                     | 5/8                         | 3/8                       | 83793   | 83794                 | 83795                 | 3,000 - 5,000         | 10,000             | F             | 10  |

# Power non-wire brushes

## M-BRAD® abrasive filament wheel brushes

### Narrow face



EDP 83680


For deburring, edge radiusing, light cleaning, and polishing.

#### Ordering note

See pages 66-67 for listing of adapters.

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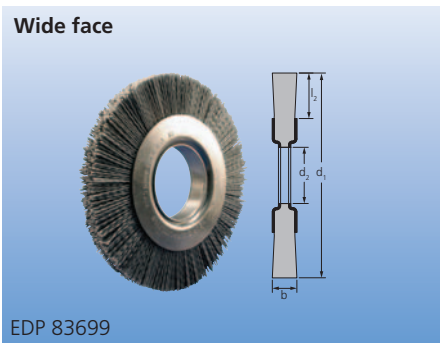


| Diameter<br>$d_1$<br>[Inches] | Arbor hole<br>$d_2$<br>[Inches] | Trim length<br>$l_2$<br>[Inches] | Face width<br>$b$<br>[Inches] | Included adapter<br>[Inches] | Filament dimensions, grit size and EDP number |                       |                       |                       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|-------------------------------|---------------------------------|----------------------------------|-------------------------------|------------------------------|---|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|---------------|---|
|                               |                                 |                                  |                               |                              | .040 dia.<br>80 grit                          | .040 dia.<br>120 grit | .035 dia.<br>180 grit | .022 dia.<br>320 grit |                       |                    |               |   |

#### Silicon carbide grain (SiC)

|   |     |     |     |     |       |       |       |       |               |        |   |    |
|---|-----|-----|-----|-----|-------|-------|-------|-------|---------------|--------|---|----|
| 3 | 1/2 | 1/2 | 1/2 | 3/8 | 83670 | -     | 83671 | 83672 | 3,000 - 5,000 | 20,000 | D | 10 |
| 4 | 5/8 | 3/4 | 3/4 | 1/2 | 83680 | 83681 | 83682 | 83683 | 3,000 - 5,000 | 12,500 | D | 10 |

### Wide face



EDP 83699


Wide face M-BRAD® wheels contain more fill material than narrow face version, providing faster cycle times and more aggressive deburring.

#### Ordering note

6" and 8" wide face M-BRAD® wheel brushes are supplied with metal adapters that reduce the 2" AH to 1-1/4". In addition, a selection of metric and imperial plastic reducing adapters are also included in every box. Please refer to ANSI minimum shaft size standards page 15 for appropriate adapters. See pages 66-67 for listing of adapters.



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| Diameter<br>$d_1$<br>[Inches] | Arbor hole<br>$d_2$<br>[Inches] | Trim length<br>$l_2$<br>[Inches] | Face width<br>$b$<br>[Inches] | Included adapter<br>[Inches] | Filament dimensions, grit size and EDP number |                       |                       |                       |                       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|-------------------------------|---------------------------------|----------------------------------|-------------------------------|------------------------------|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|---------------|---|
|                               |                                 |                                  |                               |                              | .040 dia.<br>80 grit                          | .040 dia.<br>120 grit | .035 dia.<br>180 grit | .022 dia.<br>120 grit | .022 dia.<br>320 grit |                       |                    |               |   |

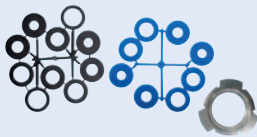
#### Silicon carbide grain (SiC)

|   |     |       |     |     |       |       |       |   |       |               |        |   |   |
|---|-----|-------|-----|-----|-------|-------|-------|---|-------|---------------|--------|---|---|
| 3 | 5/8 | 5/8   | 7/8 | 1/2 | 83689 | 83690 | 83691 | - | 83692 | 1,500 - 2,000 | 20,000 | D | 1 |
| 4 | 5/8 | 7/8   | 3/4 | 1/2 | 83693 | 83694 | 83695 | - | 83696 | 3,000 - 5,000 | 12,000 | D | 1 |
| 6 | 2   | 1-1/8 | 7/8 | -   | 83699 | 83700 | 83701 | - | 83702 | 1,500 - 2,500 | 6,000  | C | 1 |
| 8 | 2   | 1-1/2 | 1   | -   | 83703 | 83704 | 83705 | - | 83706 | 1,200 - 2,000 | 4,500  | C | 1 |

#### Ceramic oxide grain (CO)

|   |     |     |     |     |       |       |   |       |   |               |        |   |   |
|---|-----|-----|-----|-----|-------|-------|---|-------|---|---------------|--------|---|---|
| 4 | 5/8 | 7/8 | 3/4 | 1/2 | 84210 | 84211 | - | 84213 | - | 3,000 - 5,000 | 12,000 | D | 1 |
|---|-----|-----|-----|-----|-------|-------|---|-------|---|---------------|--------|---|---|

#### Included adapters



6" and 8" wide face wheel brushes include the following adapter sizes:

1-1/4", 1", 7/8", 3/4", 5/8", 1/2", 20 mm, 18 mm, 14 mm, 12 mm



M-BRAD® composite disc brushes are designed for aggressive deburring in CNC and robotic machines.

Bridle reduces filament flare during use. The bridle increases brush aggressiveness for applications where larger burrs need attention.

For deburring, honing, edge radiusing, light cleaning, and polishing.

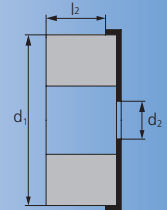
**Ordering note**

See page 67 for information on drive arbors.


Made in the USA.



**Composite discs, high density, bridled**



EDP 84123

| Diameter<br>d <sub>1</sub><br>[Inches]       | Arbor hole<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Filament dimensions, grit size and EDP number |                      |               |       |                       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] |  |
|--|--|---|---|----------------------|---------------|-------|-----------------------|-----------------------|--------------------|---|
|  |  |   | Rectangular<br>.045 x .090<br>80 Grit         | .040 dia.<br>80 Grit | Round crimped |       | .022 dia.<br>320 Grit |                       |                    |   |
| <b>Silicon carbide grain (SiC) – bridled</b> |  |   |   |                      |               |       |                       |                       |                    |   |
| 3  | 7/8                                      | 1-1/2                                     | 84121   | 84120                | 84122         | 84123 | 84125                 | 1,200 - 2,000         | 4,500              | 1   |
| 4  | 7/8                                      | 1-1/2                                     | 84129   | 84128                | 84130         | -     | 84131                 | 1,400 - 2,300         | 3,500              | 1   |
| 5  | 7/8                                      | 1-1/2                                     | 84135   | 84134                | 84136         | -     | 84137                 | 1,200 - 2,000         | 3,000              | 1   |
| 6  | 7/8                                      | 1-1/2                                     | 84141   | 84140                | 84142         | -     | 84143                 | 1,000 - 1,600         | 2,500              | 1   |
| 8  | 7/8                                      | 1-1/2                                     | 84147   | 84146                | 84148         | -     | 84149                 | 500 - 800             | 1,800              | 1   |
| 9  | 7/8                                      | 1-1/2                                     | 83917   | -                    | -             | -     | -                     | 400 - 700             | 1,500              | 1   |
| <b>Ceramic oxide grain (CO) – bridled</b>    |  |   |   |                      |               |       |                       |                       |                    |   |
| 3  | 7/8                                      | 1-1/2                                     | -   | 84231                | 84232         | -     | -                     | 1,200 - 2,000         | 4,500              | 1   |
| 4  | 7/8                                      | 1-1/2                                     | -   | 84236                | 84237         | 84238 | -                     | 1,400 - 2,300         | 3,500              | 1   |
| 5  | 7/8                                      | 1-1/2                                     | -   | 84241                | -             | -     | -                     | 1,200 - 2,000         | 3,000              | 1   |
| 6  | 7/8                                      | 1-1/2                                     | -   | 84246                | -             | -     | -                     | 1,000 - 1,600         | 2,500              | 1   |



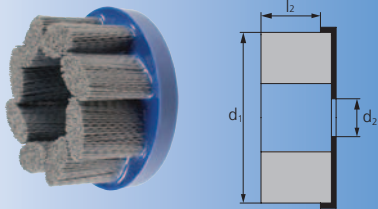
PFERDMEDIA

For more information, visit [pferdusa.com/mbrad](http://pferdusa.com/mbrad)

# Power non-wire brushes

## M-BRAD® abrasive filament disc brushes and drive arbors

### Composite discs, standard density, round filament




EDP 83946

M-BRAD® composite disc brushes are ideal for automatic deburring applications where magnetic conveyors are used. Standard density style provides better air and coolant flow.

Rectangular filament M-BRAD® composite disc brushes offer a more aggressive deburring action than round filament brushes.

Made in the USA.

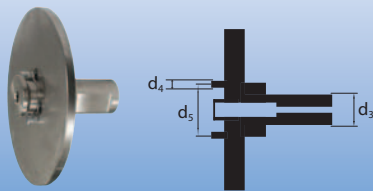


| Diameter<br>$d_1$<br>[Inches] | Arbor hole<br>$d_2$<br>[Inches] | Trim length<br>$l_2$<br>[Inches] | Filament dimensions, grit size and EDP number |                         |                      |                       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM]    |  |
|-------------------------------|---------------------------------|----------------------------------|---|-------------------------|----------------------|-----------------------|-----------------------|-----------------------|---|
|                               |                                 |                                  | Rectangular                                   |                         | Round crimped        |                       |                       |                       |   |
|                               |                                 |                                  | .045 x .090<br>80 grit                        | .045 x .090<br>120 grit | .040 dia.<br>80 grit | .040 dia.<br>120 grit | .035 Dia.<br>180 grit | .022 dia.<br>320 grit |   |

### Silicon carbide grain (SiC)

|    |     |       |       |       |       |       |       |       |               |       |   |
|----|-----|-------|-------|-------|-------|-------|-------|-------|---------------|-------|---|
| 3  | 7/8 | 1-1/2 | 83966 | 83967 | 83941 | 83942 | 83943 | 83944 | 1,200 - 2,000 | 4,500 | 1 |
| 4  | 7/8 | 1-1/2 | 83968 | 83969 | 83945 | 83946 | 83947 | 83948 | 1,400 - 2,300 | 3,500 | 1 |
| 6  | 7/8 | 1-1/2 | 83970 | 83971 | 83949 | 83950 | 83951 | 83952 | 1,000 - 1,600 | 2,500 | 1 |
| 8  | 7/8 | 1-1/2 | 83972 | 83973 | 83953 | 83954 | 83955 | 83956 | 500 - 800     | 1,800 | 1 |
| 10 | 7/8 | 1-1/2 | 83974 | 83975 | 83957 | 83958 | 83959 | 83960 | 350 - 600     | 1,340 | 1 |


### Drive arbors



EDP 83978

These drive arbors are designed for mounting composite disc brushes on automatic deburring equipment.



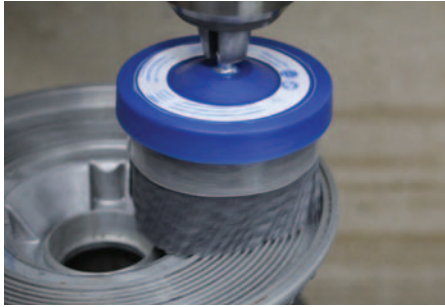
| Suitable for brush diameter<br>[Inches] | Shank diameter<br>$d_3$<br>[Inches] | No. of drive pins | Drive pin dia.<br>$d_4$<br>[Inches] | Bolt circle dia.<br>$d_5$<br>[Inches] | EDP number |  |
|---|-------------------------------------|-------------------|-------------------------------------|---------------------------------------|------------|---|
| 3-4                                     | 3/4                                 | 2                 | 1/4                                 | 1-1/4                                 | 83982      | 1   |
| 5-6                                     | 3/4                                 | 2                 | 1/4                                 | 1-1/4                                 | 83983      | 1   |
| 7-8                                     | 3/4                                 | 3                 | 1/4                                 | 3                                     | 83984      | 1   |
| 9-10                                    | 3/4                                 | 3                 | 1/4                                 | 3                                     | 83985      | 1   |
| 3-4                                     | 1                                   | 2                 | 1/4                                 | 1-1/4                                 | 83978      | 1   |
| 5-6                                     | 1                                   | 2                 | 1/4                                 | 1-1/4                                 | 83979      | 1   |
| 7-8                                     | 1                                   | 3                 | 1/4                                 | 3                                     | 83980      | 1   |
| 9-10                                    | 1                                   | 3                 | 1/4                                 | 3                                     | 83981      | 1   |



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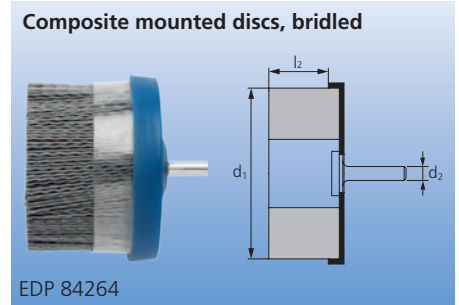



Ideal for flat surfaces with holes and low projections. Especially effective on aluminum, cast iron, brass, copper and hardened steels. Bridle reduces filament flare during use. The bridle increases brush aggressiveness for applications where larger burrs need attention.

The ceramic oxide grain brushes are recommended for larger burrs on steel parts.

**Recommendation for use**  
Recommended for CNC and robotic machines.

Made in the USA.



| Diameter<br>$d_1$<br>[Inches]                | Stem dia.<br>$d_2$<br>[Inches] | Trim length<br>$l_2$<br>[Inches] | Filament dimensions, grit size and EDP number |                       |                       |                       |       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] |  |
|--|--------------------------------|----------------------------------|---|-----------------------|-----------------------|-----------------------|-------|-----------------------|--------------------|---|
|  |                                |                                  | Rectangular<br>.045 x .090<br>80 grit         | Round crimped         |                       |                       |       |                       |                    |   |
|  |                                |                                  | .040 dia.<br>80 grit                          | .040 dia.<br>120 grit | .022 dia.<br>120 grit | .022 dia.<br>320 grit |       |                       |                    |   |
| <b>Silicon carbide grain (SiC) – bridled</b> |                                |                                  |   |                       |                       |                       |       |                       |                    |   |
| 2  | 1/4                            | 1-1/2                            | 84250   | 84251                 | 84252                 | 84253                 | 84254 | 1,500 - 3,500         | 5,000              | 1   |
| 2-1/2  | 1/4                            | 1-1/2                            | 84255   | 84256                 | 84257                 | -                     | 84259 | 1,500 - 3,500         | 5,000              | 1   |
| 3  | 1/4                            | 1-1/2                            | 84260   | 84261                 | 84262                 | -                     | 84264 | 1,500 - 3,500         | 5,000              | 1   |
| <b>Ceramic oxide grain (CO) – bridled</b>    |                                |                                  |   |                       |                       |                       |       |                       |                    |   |
| 2  | 1/4                            | 1-1/2                            | -   | 84270                 | 84271                 | -                     | -     | 1,500 - 3,500         | 5,000              | 1   |
| 2-1/2  | 1/4                            | 1-1/2                            | -   | 84275                 | -                     | 84279                 | -     | 1,500 - 3,500         | 5,000              | 1   |
| 3  | 1/4                            | 1-1/2                            | -   | 84280                 | 84281                 | -                     | -     | 1,500 - 3,500         | 5,000              | 1   |

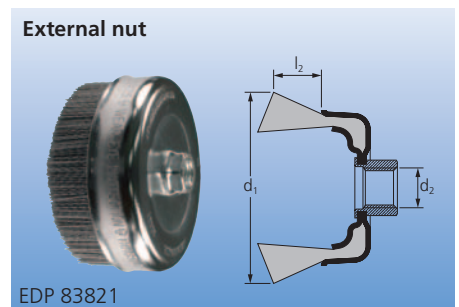
## M-BRAD® abrasive filament cup brushes




Designed for use on hand-held right-angle tools or stationary machine spindles. Ideal for flat surfaces with numerous holes and low projections. Cup brushes are especially effective on aluminum, cast iron, brass, copper and hardened steels.

**Recommendation for use**  
Suitable tool drives: stationary machines, variable speed angle grinders.

Made in the USA.

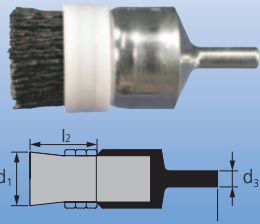


| Diameter<br>$d_1$<br>[Inches]      | Thread Size<br>$d_2$ | Trim length<br>$l_2$<br>[Inches] | Filament Dimensions, Grit Size and EDP Number |                       |                       |                       | Recom. Speed<br>[RPM] | MSFS max.<br>[RPM] |  |
|------------------------------------|----------------------|----------------------------------|---|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|---|
|                                    |                      |                                  | .040 dia.<br>80 Grit                          | .040 dia.<br>120 Grit | .035 Dia.<br>180 Grit | .022 dia.<br>320 Grit |                       |                    |   |
| <b>Silicon carbide grain (SiC)</b> |                      |                                  |   |                       |                       |                       |                       |                    |   |
| 3-1/2                              | 5/8-11               | 7/8                              | -   | 83810                 | 83811                 | -                     | 3,000 - 5,000         | 12,000             | 1   |
| 4                                  | 5/8-11               | 1                                | 83813   | 83814                 | 83815                 | 83817                 | 1,500 - 2,500         | 6,000              | 1   |
| 6                                  | 5/8-11               | 1-1/4                            | 83821   | 83822                 | 83823                 | 83825                 | 1,500 - 2,000         | 5,000              | 1   |

# Power non-wire brushes

## M-BRAD® abrasive filament end brushes

### End brushes, bridled




EDP 84005

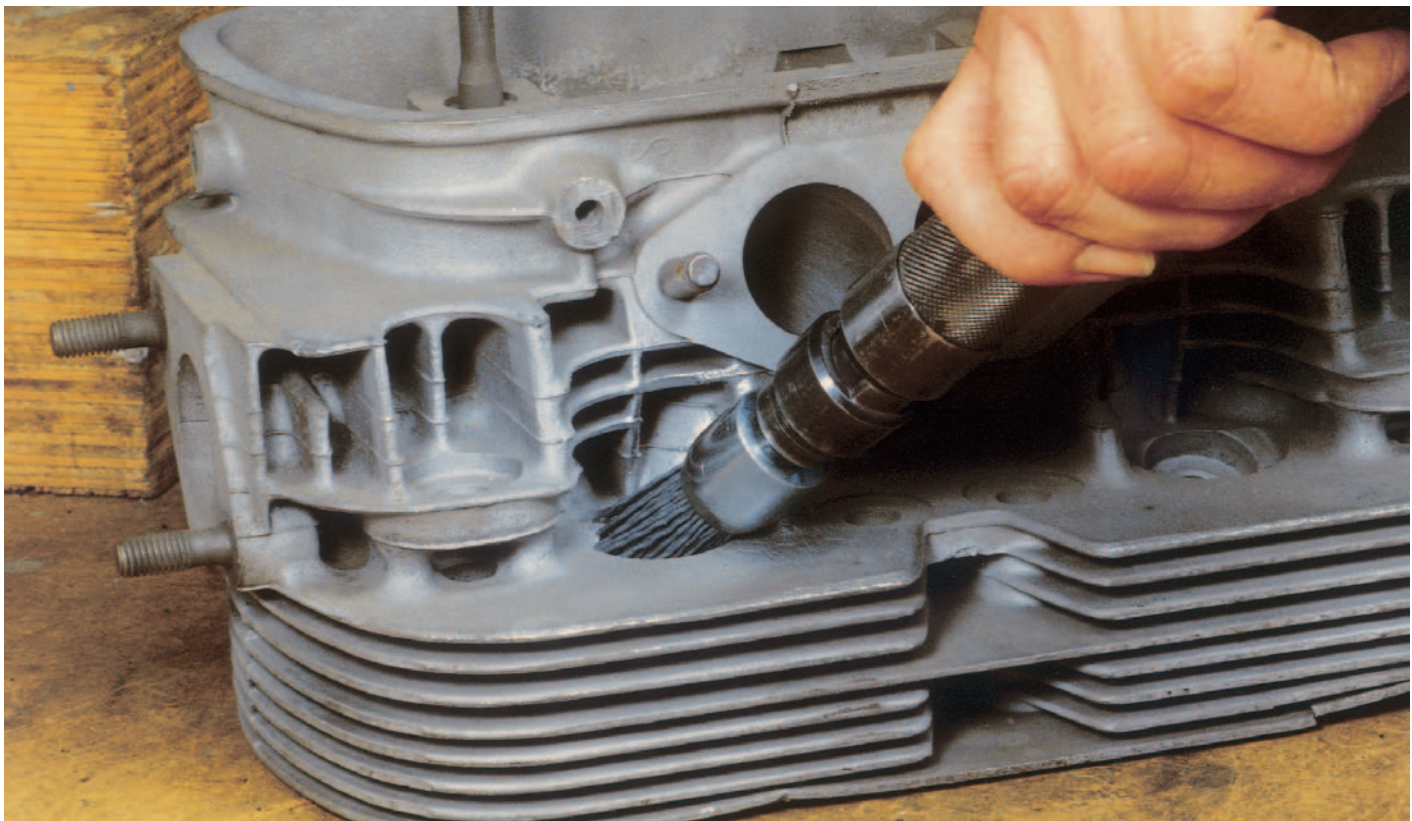
Use for cleaning and deburring bottoms and insides of mold cavities, bore holes and irregular small areas. Plastic bridles reduce trim length, increasing aggressiveness and reducing flare.

Trim length is 1/2" with bridle, 1" without bridle.

Made in the USA.



| Diameter<br>$d_1$<br>[Inches]      | Shank dia.<br>$d_3$<br>[Inches] | Trim length<br>$l_2$<br>[Inches] | Filament dimensions, grit size and EDP number |                       |                       |                       |                       | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] |  |
|------------------------------------|---------------------------------|----------------------------------|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|---|
|                                    |                                 |                                  | .040 dia.<br>80 grit                          | .040 dia.<br>120 grit | .035 dia.<br>180 grit | .022 dia.<br>120 grit | .022 dia.<br>320 grit |                       |                    |   |
| <b>Silicon carbide grain (SiC)</b> |                                 |                                  |   |                       |                       |                       |                       |                       |                    |   |
| 1/2                                | 1/4                             | 1/2, 1                           | -   | 83996                 | -                     | -                     | 83988                 | 5,200 - 9,000         | 20,000             | 10  |
| 3/4                                | 1/4                             | 1/2, 1                           | -   | 84000                 | 83990                 | -                     | 83991                 | 5,200 - 9,000         | 20,000             | 10  |
| 1                                  | 1/4                             | 1/2, 1                           | -   | 84004                 | 84005                 | -                     | 83994                 | 5,200 - 9,000         | 20,000             | 10  |
| <b>Ceramic oxide grain (CO)</b>    |                                 |                                  |   |                       |                       |                       |                       |                       |                    |   |
| 1                                  | 1/4                             | 1/2, 1                           | 84310   | 84311                 | -                     | 84313                 | -                     | 5,200 - 9,000         | 20,000             | 10  |



If desired, bridles may be removed to achieve more filament flaring, resulting in a wider brushing surface.



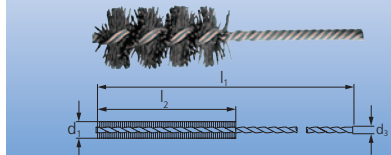
Cutting action is non-destructive to the part and will not alter bore dimensions.

### Recommendation for use

Recommended for conditioning internal bore holes or tubes as well as cleaning threads and burrs at cross-holes. Side action removes sharp edges and corners, as well as burrs produced when drilling cross-holes.

Made in the USA.

### Double stem, single spiral



EDP 84040

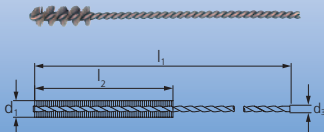
| Diameter<br>$d_1$<br>[Inches]      | Stem dia.<br>$d_3$<br>[Inches] | Brush part length<br>$l_2$<br>[Inches] | Overall length<br>$l_1$<br>[Inches] | Filament dimensions, grit size and EDP number |                       |                       |  |
|------------------------------------|--------------------------------|--|-------------------------------------|---|-----------------------|-----------------------|---|
|                                    |                                |  |                                     | .040 dia.<br>80 grit                          | .040 dia.<br>120 grit | .022 dia.<br>320 grit |   |
| <b>Silicon carbide grain (SiC)</b> |                                |  |                                     |   |                       |                       |   |
| 1/4                                | 5/32                           | 2                                      | 5                                   | -   | -                     | 84011                 | 10  |
| 5/16                               | 5/32                           | 2                                      | 5                                   | -   | -                     | 84012                 | 10  |
| 3/8                                | 5/32                           | 2                                      | 5                                   | -   | -                     | 84013                 | 10  |
| 7/16                               | 5/32                           | 2                                      | 5                                   | -   | -                     | 84014                 | 10  |
| 1/2                                | 3/16                           | 2                                      | 5                                   | -   | -                     | 84018                 | 10  |
| 5/8                                | 7/32                           | 2                                      | 5                                   | -   | -                     | 84022                 | 10  |
| 3/4                                | 1/4                            | 2-1/2                                  | 5-1/2                               | 84024   | 84025                 | 84027                 | 10  |
| 7/8                                | 1/4                            | 2-1/2                                  | 5-1/2                               | 84032   | -                     | -                     | 10  |
| 1                                  | 1/4                            | 2-1/2                                  | 5-1/2                               | 84040   | 84041                 | 84043                 | 10  |
| 1-1/4                              | 1/4                            | 2-1/2                                  | 5-1/2                               | -   | 84050                 | -                     | 10  |
| 1-1/2                              | 1/4                            | 2-1/2                                  | 5-1/2                               | -   | 84055                 | 84057                 | 10  |
| 1-3/4                              | 1/4                            | 2-1/2                                  | 5-1/2                               | 84059   | 84060                 | 84062                 | 10  |
| 2                                  | 1/4                            | 2-1/2                                  | 5-1/2                               | -   | 84064                 | 84066                 | 10  |



# Power non-wire brushes

## M-BRAD® abrasive filament tube brushes

### Microabrasive




EDP 84077

Effective cleaning action removes sharp cross-hole burrs, metal sliver residues and sharp corners that result from drilling close-tolerance hard metallic and non-metallic parts. Cleaning and very light deburring will not alter critical dimensions or hole geometry.

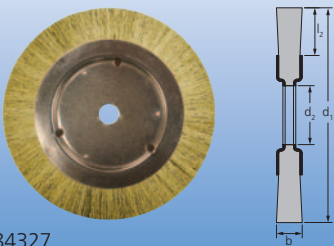
Made in the USA.



| Diameter<br>d <sub>1</sub><br>[Inches]             | Stem dia.<br>d <sub>3</sub><br>[Inches] | Brush part length<br>l <sub>2</sub><br>[Inches] | Overall length<br>l <sub>1</sub><br>[Inches] | For hole diameters |           |        | EDP number |  |
|--|---|---|--|--------------------|-----------|--------|------------|---|
|  |   |   |  | [Inches]           | [Decimal] | [mm]   |            |   |
| <b>2,000 grit aluminum silicate .008" filament</b> |   |   |  |                    |           |        |            |   |
| .030   | .015                                    | 1/2   | 4  | 1/32               | 0.029     | 0.787  | 84071      | 10  |
| .050   | .022                                    | 1/2   | 4  | 3/64               | 0.047     | 1.191  | 84072      | 10  |
| .075   | .033                                    | 3/4   | 4  | 1/16               | 0.063     | 1.588  | 84073      | 10  |
| .090   | .041                                    | 3/4   | 4  | 5/64               | 0.078     | 1.984  | 84074      | 10  |
| .105   | .041                                    | 1   | 4  | 3/32               | 0.094     | 2.381  | 84075      | 10  |
| .125   | .064                                    | 1   | 4  | 7/64               | 0.109     | 2.778  | 84076      | 10  |
| .135   | .075                                    | 1   | 4  | 1/8                | 0.125     | 3.175  | 84077      | 10  |
| <b>600 grit aluminum oxide .012" filament</b>      |   |   |  |                    |           |        |            |   |
| .165   | .087                                    | 1   | 5  | 5/32               | 0.156     | 3.962  | 84078      | 10  |
| .190   | .087                                    | 1   | 5  | 3/16               | 0.188     | 4.763  | 84079      | 10  |
| .260   | .115                                    | 1   | 5  | 1/4                | 0.250     | 6.350  | 84080      | 10  |
| .325   | .115                                    | 1   | 5  | 5/16               | 0.313     | 7.938  | 84081      | 10  |
| .385   | .147                                    | 1   | 5  | 3/8                | 0.375     | 9.525  | 84082      | 10  |
| .515   | .168                                    | 1   | 5  | 1/2                | 0.500     | 12.700 | 84083      | 10  |
| .640   | .168                                    | 1   | 5  | 5/8                | 0.625     | 15.870 | 84084      | 10  |

## Tampico wheel brushes

### Tampico wheels, untreated



EDP 84327

Tampico natural fibre provides highly effective dry or wet cleaning without compounds.


It is also highly effective for cleaning, finishing, burr and tool mark removal when used with buffing/polishing compound.

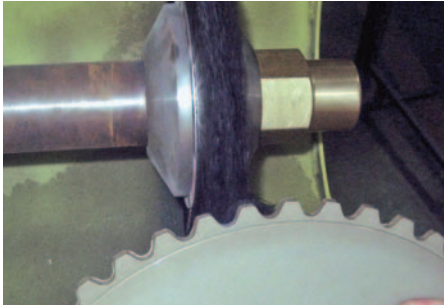
#### Ordering note

For drive arbors and adapters, please refer to pages 66-67.

Made in the USA.



| Diameter<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Keyway dimensions<br>[Inches] | EDP number | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|--|--|---|-----------------------------|----------------------------|-------------------------------|------------|-----------------------|--------------------|---------------|---|
|  |  |   |                             |                            |                               |            |                       |                    |               |   |
| <b>Narrow face</b>                     |  |   |                             |                            |                               |            |                       |                    |               |   |
| 6                                      | 1-1/4                                    | 1-1/2                                     | 5/8                         | 7/16                       | 1/4 x 1/8                     | 84324      | 1,500 - 2,500         | 6,000              | A             | 1   |
| 8                                      | 1-1/4                                    | 1-5/8                                     | 5/8                         | 5/8                        | 1/4 x 1/8                     | 84327      | 1,200 - 2,000         | 4,500              | A             | 1   |
| 12                                     | 1-1/4                                    | 3-3/8                                     | 1                           | 11/16                      | 1/4 x 1/8                     | 84332      | 900 - 1,500           | 3,600              | A             | 1   |



Type 6.6 nylon filament for scrubbing and brushing contaminants from surfaces and low-abrasion cleaning. Excellent for light cleaning action with solution-dependent applications. These brushes may be used individually or gang-mounted to any desired width.

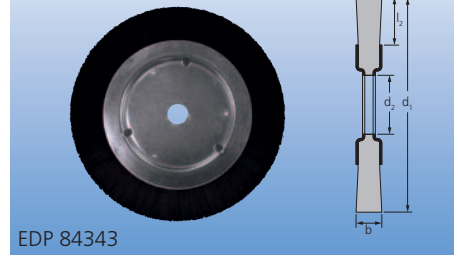
Highly abrasion resistant, highly chemical resistant, also heat stabilized.

**Ordering note**


For drive arbors and adapters, please refer to pages 66-67.

Made in the USA.

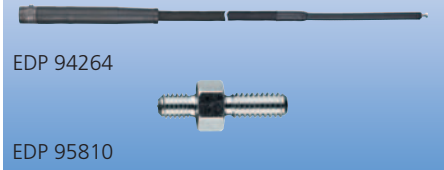
**Nylon filament wheels**



EDP 84343

| Diameter<br>d <sub>1</sub><br>[Inches] | Arbor hole<br>d <sub>2</sub><br>[Inches] | Trim length<br>l <sub>2</sub><br>[Inches] | Face width<br>b<br>[Inches] | Width on arbor<br>[Inches] | Keyway dimensions<br>[Inches] | Filament dia. and EDP number |            | Recom. speed<br>[RPM] | MSFS max.<br>[RPM] | Adapter style |  |
|--|--|---|-----------------------------|----------------------------|-------------------------------|------------------------------|------------|-----------------------|--------------------|---------------|---|
|  |  |   |                             |                            |                               | .014 Nylon                   | .016 Nylon |                       |                    |               |   |
| <b>Small diameter copper centre</b>    |  |   |                             |                            |                               |                              |            |                       |                    |               |   |
| 2                                      | 1/2                                      | 1/2                                       | 3/8                         | 7/32                       | -                             | 84340                        | -          | 5,200 - 9,000         | 20,000             | -             | 10  |
| 3                                      | 1/2                                      | 1   | 3/8                         | 5/16                       | -                             | -                            | 84343      | 5,200 - 9,000         | 20,000             | F             | 10  |
| <b>Narrow face</b>                     |  |   |                             |                            |                               |                              |            |                       |                    |               |   |
| 6                                      | 1-1/4                                    | 1-1/2                                     | 3/4                         | 7/16                       | 1/4 x 1/8                     | -                            | 84344      | 1,500 - 2,500         | 6,000              | A             | 2   |
| 8                                      | 1-1/4                                    | 1-7/8                                     | 3/4                         | 5/8                        | 1/4 x 1/8                     | -                            | 84345      | 1,200 - 2,000         | 4,800              | A             | 2   |

**Flexible shaft and threaded adapter**  
(see "Power tools" catalogue (section 209))



EDP 94264

EDP 95810

Threaded nylon tube brushes are designed for working the inside surfaces of tubes, pipes and pipe bends.

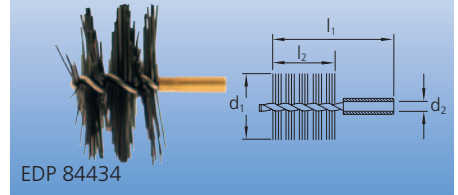
Recommended for removing sand casting residue and other debris from inside surfaces, and light cleaning of stainless steel pipe ID for pharmaceutical and food industry.

For more information on flexible shafts and adapters, see our "Power tools" catalogue (section 209).


Made in the USA.

**Nylon threaded tube brush for use with flexible shafts**

**NEW**



EDP 84434

| Brush diameter<br>d <sub>1</sub> |      | Brush length<br>l <sub>2</sub><br>[Inches] | Overall length<br>l <sub>1</sub><br>[Inches] | Thread size<br>d <sub>2</sub> | For pipe I.D.<br>[Inches] | Filament dia. and EDP number |  | Recom. speed<br>[RPM] | For use with flexible shaft EDP | Use with threaded adapter EDP |  |
|----------------------------------|------|--|--|-------------------------------|---------------------------|------------------------------|--|-----------------------|---------------------------------|-------------------------------|---|
| [Inches]                         | [mm] |  |  |                               |                           | .018 Nylon                   |  |                       |                                 |                               |   |
| 1                                | 25   | 1/2  | 1-5/16                                       | 8-32                          | 3/4                       | 84430                        |  | 750 - 2,000           | 94264, 94274                    | 95810, 95811                  | 10  |
| 1-1/4                            | 32   | 1/2  | 1-5/16                                       | 8-32                          | 1                         | 84432                        |  | 750 - 2,000           | 94264, 94274                    | 95810, 95811                  | 10  |
| 1-3/4                            | 44   | 1/2  | 1-5/16                                       | 8-32                          | 1-1/2                     | 84434                        |  | 750 - 2,000           | 94264, 94274                    | 95810, 95811                  | 10  |
| 2-1/4                            | 57   | 1/2  | 1-5/16                                       | 8-32                          | 2                         | 84436                        |  | 750 - 2,000           | 94264, 94274                    | 95810, 95811                  | 10  |
| 2-3/4                            | 69   | 1/2  | 1-5/16                                       | 8-32                          | 2-1/2                     | 84438                        |  | 750 - 2,000           | 94264, 94274                    | 95810, 95811                  | 10  |
| 3-1/4                            | 82   | 1/2  | 1-5/16                                       | 8-32                          | 3                         | 84440                        |  | 750 - 2,000           | 94264, 94274                    | 95810, 95811                  | 10  |



PFERDMEDIA

For more information, visit [pferdusa.com/flex-tube-brush](http://pferdusa.com/flex-tube-brush)

# Power brush accessories

## Drive arbors and adapters



| Brush adapters  | Style    | Brush type   | Fits brush arbor hole [Inches] | Brush keyways | Adapter I.D. [Inches]             | Keyways in adapter | EDP number |  |
|---|----------|--|--------------------------------|---------------|-----------------------------------|--------------------|------------|---|
|    | <b>A</b> | Crimped narrow face<br>Narrow face<br>M-BRAD®            | 1-1/4                          | 1/4 x 1/8 (2) | 1/2                               | 1/8 x 3/32 (2)     | 84605      | 1 pr.   |
|   |          |  | 1-1/4                          | 1/4 x 1/8 (2) | 5/8                               | 3/16 x 1/8 (2)     | 84606      | 1 pr.   |
|   |          |  | 1-1/4                          | 1/4 x 1/8 (2) | 3/4                               | 3/16 x 1/8 (2)     | 84607      | 1 pr.   |
|   |          |  | 1-1/4                          | 1/4 x 1/8 (2) | 7/8                               | 3/16 x 1/8 (2)     | 84608      | 1 pr.   |
|   |          |  | 1-1/4                          | 1/4 x 1/8 (2) | 1                                 | 1/4 x 5/32 (2)     | 84609      | 1 pr.   |
|    | <b>C</b> | Crimped medium face                                      | 2                              | None          | 1/2                               | None               | 84628      | 1 pr.   |
|   |          |  | 2                              | None          | 5/8                               | None               | 84629      | 1 pr.   |
|   |          |  | 2                              | None          | 3/4                               | None               | 84630      | 1 pr.   |
|   |          | Crimped wide face<br>M-BRAD® composite wheels            | 2                              | None          | 7/8                               | None               | 84631      | 1 pr.   |
|   |          |  | 2                              | None          | 1                                 | None               | 84632      | 1 pr.   |
|   |          |  | 2                              | None          | 1-1/4                             | None               | 84633      | 1 pr.   |
|   |          |  | 2                              | None          | 1-1/2                             | None               | 84634      | 1 pr.   |
|    | <b>D</b> | 3 - 6" wheel brushes<br>(3/32" thickness)                | 3/8                            | None          | 1/4                               | None               | 84600      | 10 pcs.   |
|   |          |  | 1/2                            | None          | 1/4                               | None               | 84601      | 10 pcs.   |
|   |          |  | 1/2                            | None          | 3/8                               | None               | 84602      | 10 pcs.   |
|   |          |  | 5/8                            | None          | 1/2                               | None               | 84603      | 10 pcs.   |
|  | <b>E</b> | EZmount®   | 2                              | None          | 1, 3/4, 5/8, 1/2                  | None               | 84615      | 1 pcs.  |
|  | <b>F</b> | Small diameter copper centre wheels<br>(5/32" thickness) | 5/8                            | None          | 1/2                               | None               | 84636      | 10 pcs.   |
|   |          |  | 5/8                            | None          | 3/8                               | None               | 84637      | 10 pcs.   |
|   |          |  | 5/8                            | None          | 1/4                               | None               | 84638      | 10 pcs.   |
|   |          |  | 1/2                            | None          | 3/8                               | None               | 84639      | 10 pcs.   |
|   |          |  | 1/2                            | None          | 1/4                               | None               | 84640      | 10 pcs.   |
|   |          |  | 3/8                            | None          | 1/4                               | None               | 84641      | 10 pcs.   |
|  | <b>G</b> | Composite wheel brush<br>(3/8 thickness)                 | 4-1/4                          | None          | 2                                 | 1/2 x 1/4 (2)      | 84670      | 1 pair  |
|   |          |  | 5-1/4                          | None          | 2                                 | 1/2 x 1/4 (2)      | 84671      | 1 pair  |
|  | <b>H</b> | Knot wheel brushes<br>(7/32 thickness)                   | 1-1/4                          | 1/4 x 1/8 (2) | 3/4                               | 3/16 x 1/8 (2)     | 84612      | 1 pr.   |
|   |          |  | 1-1/4                          | 1/4 x 1/8 (2) | 7/8                               | 3/16 x 1/8 (2)     | 84613      | 1 pr.   |
|   |          |  | 1-1/4                          | 1/4 x 1/8 (2) | 1                                 | 3/16 x 1/8 (2)     | 84614      | 1 pr.   |
|  | <b>K</b> | Medium and wide face brushes                             | 2                              | None          | 1-1/4, 1, 7/8, 3/4, 5/8, 1/2      | None               | 84665      | 1 pcs.  |
|   |          |  | 2                              | None          | 1-1/4, 20 mm, 18 mm, 14 mm, 12 mm | None               | 84666      | 1 pcs.  |

For mounting wheel brushes up to 4" in diameter.

### Chuck type

Countersunk head tightening-screw fits into a recessed flange washer for locking power. Allows brushes to reach edges without interference from arbor overhang. Change brush without removing arbor from collet. Unthreaded shoulder.

### Flat head type

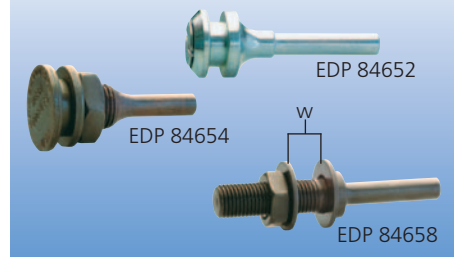
Brush mounts between a single washer and the flat head. Locked in place with a reverse-threaded nut. Allows the brush to be close to the workpiece. Threaded shoulder.


### Nut type

Nut can be removed to replace worn brush while arbor stem remains in chuck.

For spindle extensions for stem mounted brushes, see our "Power tools" catalogue (section 209).

### Drive arbors for wheel brushes

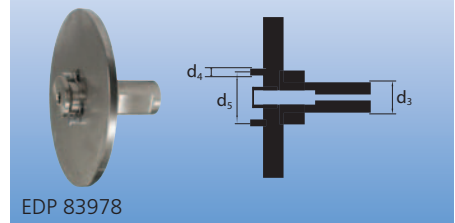



| Fits brush ID [Inches] | Clamping width w [Inches] | Shank dia. [Inches] | Head/flange dia. [Inches] | Overall length [Inches] | EDP number |  |
|------------------------|---------------------------|---------------------|---------------------------|-------------------------|------------|---|
| <b>Chuck type</b>      |                           |                     |                           |                         |            |   |
| 1/4                    | 3/16 to 3/8               | 1/4                 | 9/16                      | 2-1/8                   | 84650      | 5   |
| 3/8                    | 3/16 to 3/8               | 1/4                 | 11/16                     | 2-1/8                   | 84651      | 5   |
| 1/2                    | 3/16 to 3/8               | 1/4                 | 3/4                       | 2-1/8                   | 84652      | 5   |
| <b>Flat head type</b>  |                           |                     |                           |                         |            |   |
| 3/8                    | 0 to 1/2                  | 1/4                 | 3/4                       | 1-5/8                   | 84654      | 5   |
| 1/2                    | 0 to 1/2                  | 1/4                 | 15/16                     | 1-7/8                   | 84655      | 5   |
| 1/2, 5/8               | 1/8 to 1/2                | 1/4                 | 15/16                     | 1-7/8                   | 84656      | 5   |
| <b>Nut type</b>        |                           |                     |                           |                         |            |   |
| 1/4                    | Up to 7/8                 | 1/4                 | 5/8                       | 2-1/2                   | 84657      | 5   |
| 3/8                    | Up to 7/8                 | 1/4                 | 3/4                       | 2-1/2                   | 84658      | 5   |
| 1/2                    | Up to 1/4                 | 1/4                 | 7/8                       | 1-3/4                   | 84659      | 5   |





These drive arbors are designed for mounting composite disc brushes on automatic deburring equipment.

### Drive arbors for M-BRAD® disc brushes



| Suitable for brush diameter [Inches] | Shank diameter d <sub>3</sub> [Inches] | No. of drive pins | Drive pin dia. d <sub>4</sub> [Inches] | Bolt circle dia. d <sub>5</sub> [Inches] | EDP number |  |
|--------------------------------------|--|-------------------|--|--|------------|---|
| 3-4                                  | 3/4                                    | 2                 | 1/4                                    | 1-1/4                                    | 83982      | 1   |
| 5-6                                  | 3/4                                    | 2                 | 1/4                                    | 1-1/4                                    | 83983      | 1   |
| 7-8                                  | 3/4                                    | 3                 | 1/4                                    | 3  | 83984      | 1   |
| 9-10                                 | 3/4                                    | 3                 | 1/4                                    | 3  | 83985      | 1   |
| 3-4                                  | 1                                      | 2                 | 1/4                                    | 1-1/4                                    | 83978      | 1   |
| 5-6                                  | 1                                      | 2                 | 1/4                                    | 1-1/4                                    | 83979      | 1   |
| 7-8                                  | 1                                      | 3                 | 1/4                                    | 3  | 83980      | 1   |
| 9-10                                 | 1                                      | 3                 | 1/4                                    | 3  | 83981      | 1   |

| Minigrinder adapter insert   | Fits brush thread | Fits tool spindle thread | EDP number |  |
|--|-------------------|--------------------------|------------|---|
| <br>EDP 84646 | 5/8-11            | M10x1.25                 | 84645 P    | 5/5   |
|  | 5/8-11            | M10x1.50                 | 84646 P    | 5/5   |
|  | 5/8-11            | 3/8-24                   | 84647 P    | 5/5   |

# Power brushes – Economy line

## Crimped wire wheel brushes



### Economy line brushes

The economy line contains a selection of the most popular brush sizes and styles used by contractors and tradesmen in single-use, shift-work environments. The offering includes abrasive filament as well as crimped and knot style radial, cup, end and scratch brushes.

The design of these brushes is tailored for power tools that are frequently found on contractor jobsites such as drills, angle grinders, die grinders and bench grinders.

### Crimped wire wheels, narrow face, plain arbor hole



EDP 764206


General purpose wheel for bench/pedestal machines. Use for edge blending, flash removal, cleaning, removing paint, removing rust and corrosion, roughening, matt finishing, and light deburring work.

Suitable tool drives: bench grinders, stationary machines, flexible shafts. Tool contact pressure should be kept low. Ensure that workpiece contact is made by wire ends only.

### Crimped wire wheels, medium face, plain arbor hole



EDP 764190

| Diameter [Inches]                      | Arbor hole [Inches] | Face width [Inches] | Included adapters [Inches] | Wire diameter and EDP number<br>.014 | MSFS max. [RPM] |  |
|--|---------------------|---------------------|----------------------------|--------------------------------------|-----------------|---|
| <b>Carbon steel wire – narrow face</b> |                     |                     |                            |                                      |                 |   |
| 4                                      | 5/8                 | 1/2                 | 1/2                        | 764169                               | 12,500          | 5   |
| 6                                      | 5/8                 | 5/8                 | 1/2                        | 764206                               | 8,000           | 5   |
| 8                                      | 5/8                 | 13/16               | -                          | 764220                               | 6,000           | 5   |
| <b>Carbon steel wire – medium face</b> |                     |                     |                            |                                      |                 |   |
| 6                                      | 1-1/4               | 29/32               | 1, 7/8, 3/4, 5/8           | 764190                               | 6,000           | 5   |
| 8                                      | 1-1/4               | 1-1/8               | 1, 7/8, 3/4, 5/8           | 764213                               | 4,500           | 5   |


### High speed wheel, crimped wire, threaded arbor hole





EDP 764145

Crimped wire wheel brushes are less aggressive than knot wire type for lighter-duty applications. Crimped wire is more flexible, and leaves a superior surface finish.

For weld cleaning, scale, rust, paint, adhesive and oxidation removal.

| Diameter [Inches]        | Thread size [Inches] | Wire size and EDP number<br>.014 | MSFS max. [RPM] |  |
|--------------------------|----------------------|----------------------------------|-----------------|---|
| <b>Carbon steel wire</b> |                      |                                  |                 |   |
| 4                        | 5/8-11               | 764145                           | 12,500          | 5   |

| Minigrinder adapter insert  | Fits brush thread | Fits tool spindle thread | EDP number |  |
|---|-------------------|--------------------------|------------|---|
|  <p>EDP 764336</p> | 5/8-11            | M10 x 1.25               | 764336     | 1   |
|   | 5/8-11            | M10 x 1.50               | 764343     | 1   |



### Standard twist, plain arbor hole




EDP 763988

Standard twist knot wheel brushes feature twisted knots for aggressive brushing action with a good surface finish. They are ideal when heavy-duty or severe cleaning is required.

### Standard twist, threaded arbor hole



EDP 764008

| Diameter [Inches]        | Arbor hole/thread size [Inches] | Included adapter [Inches] | Wire size and EDP number |        | MSFS max. [RPM] |  |
|--------------------------|---------------------------------|---------------------------|--------------------------|--------|-----------------|---|
|                          |                                 |                           | .014                     | .020   |                 |   |
| <b>Carbon steel wire</b> |                                 |                           |                          |        |                 |   |
| 4                        | 1/2                             | 3/8                       | 763919                   | -      | 20,000          | 5   |
| 4                        | 5/8-11                          | -                         | -                        | 763926 | 20,000          | 5   |
| 6                        | 5/8                             | 1/2                       | 763988                   | -      | 9,000           | 5   |
| 6                        | 5/8                             | 1/2                       | -                        | 763995 | 9,000           | 5   |
| 6                        | 5/8-11                          | -                         | -                        | 764008 | 9,000           | 5   |
| 8                        | 5/8                             | -                         | 764046                   | -      | 7,000           | 5   |
| 8                        | 5/8                             | -                         | -                        | 764053 | 7,000           | 5   |


Stringer bead twist knot wheel brushes are tightly twisted for low flex, high impact brushing action. Designed for root and hot pass weld cleaning in pipe joining applications.

Also for general use where a narrow face, aggressive brush is desired.

### Stringer bead twist, threaded arbor hole



EDP 764015

| Diameter [Inches]                  | Thread size [Inches] | No. knots | Wire size and EDP number |  | MSFS max. [RPM] |  |
|------------------------------------|----------------------|-----------|--------------------------|--|-----------------|---|
|                                    |                      |           | .020                     |  |                 |   |
| <b>Carbon steel wire</b>           |                      |           |                          |  |                 |   |
| 4                                  | 5/8-11               | 32        | 763940                   |  | 20,000          | 5   |
| 6                                  | 5/8-11               | 48        | 764015                   |  | 12,500          | 5   |
| 7                                  | 5/8-11               | 56        | 764039                   |  | 9,000           | 5   |
| <b>Stainless steel wire (INOX)</b> |                      |           |                          |  |                 |   |
| 4                                  | 5/8-11               | 32        | 763957                   |  | 20,000          | 5   |
| 6                                  | 5/8-11               | 48        | 764022                   |  | 12,500          | 5   |

# Power brushes – Economy line


## Cup brushes

### Crimped wire cup, external nut



EDP 764176

Crimped wire cup brushes are excellent for medium-duty brushing work. Ideal for use on large surfaces, for deburring, cleaning and rust removal.

| Diameter [Inches]        | Thread size [Inches] | Wire size and EDP number |        | MSFS max. [RPM] |  |
|--------------------------|----------------------|--------------------------|--------|-----------------|---|
|                          |                      | .014                     | .020   |                 |   |
| <b>Carbon steel wire</b> |                      |                          |        |                 |   |
| 2-3/4                    | 5/8-11               | 763889                   | -      | 14,000          | 5   |
| 3-1/2                    | 5/8-11               | 764091                   | -      | 12,000          | 5   |
| 3-1/2                    | 5/8-11               | -                        | 764107 | 12,000          | 5   |
| 4                        | 5/8-11               | 764114                   | -      | 9,000           | 2   |
| 4                        | 5/8-11               | -                        | 764138 | 9,000           | 2   |
| 5                        | 5/8-11               | -                        | 764176 | 8,000           | 2   |

### Knot wire cup, single row, unbridled



EDP 763896


Unbridled knot wire cup brushes are ideal for use on large surfaces. For use in corners, on angles, and for removal of contaminants such as scale, concrete, slag, and marine growth.



Bridled knot wire cup brushes feature a removable steel bridle which creates a shorter trim length for extra heavy-duty applications.

### Knot wire cup, single row, bridled



EDP 763902

| Diameter [Inches]                              | Thread size [Inches] | Wire size and EDP number |        | MSFS max. [RPM] |  |
|--|----------------------|--------------------------|--------|-----------------|---|
|  |                      | .014                     | .020   |                 |   |
| <b>Carbon steel wire – unbridled</b>           |                      |                          |        |                 |   |
| 2-3/4  | 5/8-11               | 764237                   | -      | 14,000          | 5   |
| 2-3/4  | 5/8-11               | -                        | 764251 | 14,000          | 5   |
| 3-1/2  | 5/8-11               | -                        | 763865 | 12,000          | 5   |
| 4  | 5/8-11               | 763896                   | -      | 9,000           | 2   |
| 5  | 5/8-11               | 763971                   | -      | 7,000           | 2   |
| <b>Stainless steel wire (INOX) – unbridled</b> |                      |                          |        |                 |   |
| 2-3/4  | 5/8-11               | 764244                   | -      | 14,000          | 5   |
| 2-3/4  | 5/8-11               | -                        | 764268 | 14,000          | 5   |
| <b>Carbon steel wire – bridled</b>             |                      |                          |        |                 |   |
| 2-3/4  | 5/8-11               | 792049                   | -      | 12,500          | 5   |
| 3-1/2  | 5/8-11               | 763827                   | -      | 8,500           | 5   |
| 4  | 5/8-11               | -                        | 763902 | 8,500           | 2   |
| 5  | 5/8-11               | -                        | 763964 | 7,000           | 2   |

| Minigrinder adapter insert  | Fits brush thread | Fits tool spindle thread | EDP number |  |
|---|-------------------|--------------------------|------------|---|
|  | 5/8-11            | M10 x 1.25               | 764336     | 1   |
|   | 5/8-11            | M10 x 1.50               | 764343     | 1   |


Crimped wire end brushes are for general purpose work in hard-to-reach places. Used for paint and rust removal.

For use with electric/pneumatic die-grinders and power drills.

### End brushes, crimped wire



EDP 764411

| Diameter [Inches]        | Shank diameter [Inches] | Wire size and EDP number |        | MSFS max. [RPM] |  |
|--------------------------|-------------------------|--------------------------|--------|-----------------|---|
|                          |                         | .014                     | .020   |                 |   |
| <b>Carbon steel wire</b> |                         |                          |        |                 |   |
| 3/4                      | 1/4                     | 764411                   | -      | 20,000          | 5   |
| 3/4                      | 1/4                     | -                        | 764428 | 20,000          | 5   |
| 1                        | 1/4                     | 764442                   | -      | 20,000          | 5   |
| 1                        | 1/4                     | -                        | 764459 | 20,000          | 5   |

### Stainless steel wire (INOX)

All stainless steel (INOX) brushes are degreased.


|     |     |        |        |        |   |
|-----|-----|--------|--------|--------|---|
| 3/4 | 1/4 | 764435 | -      | 20,000 | 5 |
| 1   | 1/4 | -      | 764466 | 20,000 | 5 |

Knotted end brushes for use in heavy-duty and severe applications. For use with electric/pneumatic die-grinders and power drills.

### End brushes, knot wire



EDP 764404

| Diameter [Inches]        | Shank diameter [Inches] | Wire size and EDP number |        | MSFS max. [RPM] |  |
|--------------------------|-------------------------|--------------------------|--------|-----------------|---|
|                          |                         | .014                     | .020   |                 |   |
| <b>Carbon steel wire</b> |                         |                          |        |                 |   |
| 3/4                      | 1/4                     | 764350                   | -      | 20,000          | 5   |
| 1                        | 1/4                     | 764398                   | -      | 20,000          | 5   |
| 1                        | 1/4                     | -                        | 764374 | 20,000          | 5   |

### Stainless steel wire (INOX)

All stainless steel (INOX) brushes are degreased.

|     |     |        |        |        |   |
|-----|-----|--------|--------|--------|---|
| 3/4 | 1/4 | 764367 | -      | 20,000 | 5 |
| 1   | 1/4 | 764404 | -      | 20,000 | 5 |
| 1   | 1/4 | -      | 764381 | 20,000 | 5 |

# Power brushes – Economy line


## Stem mounted brushes

### Mounted wheel, crimped wire



EDP 764084

Stem mounted crimped wire brushes provide lighter brushing action and superior finish when removing rust, paint. Also for cleaning and surface conditioning.


| Diameter [Inches]        | Shank diameter [Inches] | Wire size and EDP number<br>.012 | MSFS max. [RPM] |  |
|--------------------------|-------------------------|----------------------------------|-----------------|---|
| <b>Carbon steel wire</b> |                         |                                  |                 |   |
| 2                        | 1/4                     | 763872                           | 20,000          | 5   |
| 3                        | 1/4                     | 764084                           | 20,000          | 5   |

### Mounted wheel, knot wire



EDP 764275

Stem mounted knot wire brushes offer more aggressive brushing action than crimped wire brushes. For deburring, cleaning, rust removal, and weld seam conditioning.

| Diameter [Inches]        | Shank diameter [Inches] | Wire size and EDP number<br>.014 | MSFS max. [RPM] |  |
|--------------------------|-------------------------|----------------------------------|-----------------|---|
| <b>Carbon steel wire</b> |                         |                                  |                 |   |
| 3                        | 1/4                     | 764275                           | 25,000          | 5   |
| 4                        | 1/4                     | 763933                           | 20,000          | 5   |


### Mounted cup, crimped wire



EDP 763858

Stem mounted crimped wire cup brushes are designed for weld and mold cleaning, light deburring, rust, paint and flash removal.

For use with electric/pneumatic die-grinders and power drills.


| Diameter [Inches]        | Shank diameter [Inches] | Wire size and EDP number<br>.014 | MSFS max. [RPM] |  |
|--------------------------|-------------------------|----------------------------------|-----------------|---|
| <b>Carbon steel wire</b> |                         |                                  |                 |   |
| 2                        | 1/4                     | 763858                           | 13,000          | 5   |

Stem mounted abrasive filament wheel brush for use in small confined areas. Nylon filament evenly encapsulates silicon carbide particles. Flexible, uniform conditioning of soft and hard materials.

### Mounted wheel, nylon abrasive filament



EDP 763841

| Dia. [Inches] | Shank diameter [Inches] | Filament dimensions, grit size and EDP number | MSFS max. [RPM] |  |
|---------------|-------------------------|---|-----------------|---|
|               |                         | .040<br>120 grit                              |                 |   |

#### Silicon carbide grain (SiC)


|   |     |        |       |   |
|---|-----|--------|-------|---|
| 3 | 1/4 | 763841 | 4,500 | 5 |
|---|-----|--------|-------|---|

Stem mounted abrasive filament cup brushes are ideal for flat surfaces with numerous holes and low projections.

### Mounted cup, nylon abrasive filament



EDP 763834

| Dia. [Inches] | Shank diameter [Inches] | Filament dimensions, grit size and EDP number | MSFS max. [RPM] |  |
|---------------|-------------------------|---|-----------------|---|
|               |                         | .040<br>120 grit                              |                 |   |

#### Silicon carbide grain (SiC)


|   |     |        |       |   |
|---|-----|--------|-------|---|
| 3 | 1/4 | 763834 | 4,500 | 5 |
|---|-----|--------|-------|---|

For removing rust, paint, scale, dirt and other debris. Cleans metal parts, threads and much more.

### Metal scratch brushes, plastic grip handle





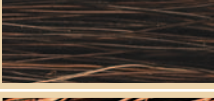



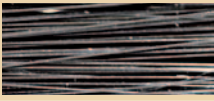



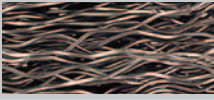
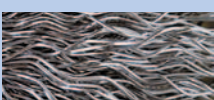
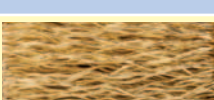
EDP 764077

| Wire rows                          | Brush part length [Inches] | Block | Wire size and EDP number |  |
|------------------------------------|----------------------------|-------|--------------------------|---|
|                                    |                            |       | .012                     |   |
| <b>Carbon steel wire</b>           |                            |       |                          |   |
| 1                                  | 5                          | Metal | 764077                   | 12  |
| <b>Stainless steel wire (INOX)</b> |                            |       |                          |   |
| 1                                  | 5                          | Metal | 764282                   | 12  |
| <b>Brass wire</b>                  |                            |       |                          |   |
| 1                                  | 5                          | Metal | 764060                   | 12  |

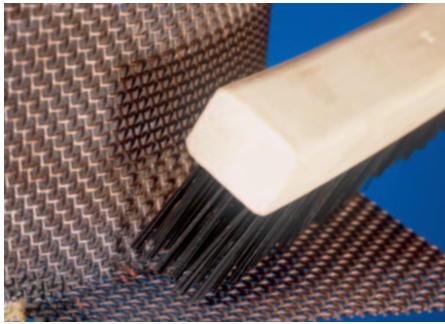


| Application  | Product list  | Page      | Product list  | Page    |
|--|---|-----------|---|---------|
| <b>Cleaning</b><br>                       |  Scratch brushes             | 77-80     |  Wire duster                            | 83      |
|  |  Block brushes               | 80-81     |  Parts cleaning brushes                 | 103     |
|  |  Chip brushes                | 82-83     |  Spoke and grill brushes                | 103     |
|  |  Squeegees                   | 91-92     |  Internal/external tube fitting brushes | 101     |
|  |  Hand tube brushes           | 99        |  Platers and molders brushes            | 102     |
|  |  Pipe and flue brushes       | 100       |   |         |
| <b>Washing</b><br>                       |  Squeegees                   | 91-92     |  Sidewall brushes                       | 103     |
|  |  Handles and accessories     | 89, 93-94 |  Deck and hand scrub brushes            | 97      |
|  |  Car and truck wash brushes | 95        |  Fender brushes                        | 98      |
|  |  Bottle brushes            | 96        |  Can swabbing brushes                 | 96      |
| <b>Sweeping</b><br>                     |  Chip brushes              | 82-83     |  Wire duster                          | 83      |
|  |  Floor sweeps              | 84-89     |  Whisk brooms                         | 90      |
|  |  Handles and accessories   | 89, 93-94 |  Counter dusters                      | 95      |
|  |  Upright brooms            | 90        |   |         |
| <b>Painting and surface coating</b><br> |  Chip brushes              | 82-83     |  Paint brushes                        | 104-106 |
|  |  Acid brushes              | 83        |  Bent handle radiator brush           | 106     |
|  |  Whitewash brushes         | 108       |  Foam brushes                         | 105     |
|  |  Masonry brushes           | 108       |  Rollers                              | 109-111 |
|  |  Fitch marking brushes     | 106       |  Roller frames                        | 110-111 |
|  |  Stencil brushes           | 107       |  Paint trays                          | 112     |
|  |  Sash brushes              | 107       |   |         |

### Filament composition – maintenance brushes

| Natural filaments  |   |  |
|--|---|--|
| Includes animal hair and vegetable fibers. Generally less expensive than synthetics, vegetable fibers are excellent in wet and dry applications. |   |  |
| <b>African bass</b>  |    | Very coarse vegetable fibre with good flexibility. Used primarily in street brooms, African bass is very durable, water resistant, and can be used on any wet or dry concrete surface. Its light weight and excellent sweeping action make it a favorite of maintenance crews. Often used with other fibers as a blend.  |
| <b>Bassine</b>   |    | Coarse and stiff natural fibers from India palms, Bassine is a superior quality palmyra most commonly used in heavy floor cleaning and stiff scrubbing products. Bassine is a durable, low cost fibre ranging in colour from dark brown to black.  |
| <b>Horsehair</b>   |    | Soft to slightly stiff characteristics and good resilience. Soft, scratchless, fine dry sweeping. Horsehair is the most effective filament for cleaning smooth, highly polished surfaces. Also used to finely smooth newly poured concrete. Not recommended for use on wet or oily surfaces. Used with other fibers as a blend.  |
| <b>Palmyra</b>   |    | A cinnamon-brown coloured vegetable fibre derived from the leaf stalks of the palmyra palm tree in India. Palmyra is a durable, medium stiff fibre tough enough for heavy sweeping. Stiff, water-resistant palmyra is used in garage floor sweeps, scrub brushes, and more.  |
| <b>Tampico</b>   |    | Soft to medium bristle with very good durability. Distinctive liquid holding and release properties; absorbs more water than synthetic filaments. Superior for general sweeping, and in all applications requiring liquid retention, scrubbing and surface finishing. Used alone or blended, it is highly resistant to heat, solvents and chemicals.   |
| <b>Union mix</b>   |   | A blend of fibers, usually tampico and palmyra. Provides a medium stiff filament texture for use in a variety of applications, especially scrubbing.   |
| Synthetic filament   |   |  |
| An alternative to natural filaments, man-made materials are frequently the best choice for durability, effectiveness and versatility.            |   |  |
| <b>Polyester</b>   |  | Wear-resistant, very soft fibre that resists acid, heat, oil and most solvents. Provides a soft brushing surface when flagged. Offers excellent abrasion resistance and tear/break strength. Choice fibre selection for general use and for extreme exposure to cleaning chemicals. Withstands temperatures up to 350°F.   |
| <b>Polypropylene</b>   |  | Strong, lightweight, resistant to oil solvents and detergents. Excellent for sweeping stubborn dirt. Rot, fungus and mildew resistant. Will not mat or load. Commonly used in floor sweeps and scrub brushes. Available in straight or crimped filament. Crimped filament is best for wet applications. Withstands heat up to 225°F.   |
| <b>Polystyrene</b>   |  | Heavier than Polypropylene, it is also durable, long wearing, excellent flexibility, resistant to moisture and many solvents. Heat resistant up to 180°F. Available crimped for superior performance in wet applications, or flagged for a softer brushing surface. Used in sweeps, scrub and wash brushes, utility scrubs, and more.  |
| <b>Nylon</b>   |  | Very resilient and durable, resistant to most common chemicals. Withstands temperatures up to 350°F. It features excellent shear/break strength and bend recovery. Filament may be straight, crimped or flagged. Available in a wide range of diameters, textures, shapes and lengths. Used in both mechanical and maintenance applications.   |
| Wire filament  |   |  |
| Selected due to its ability to conform to irregular surfaces as well as for its stiffness, bend recovery, and long life.                         |   |  |
| <b>Tempered carbon steel</b>   |  | Provides excellent abrasion and wear resistance, along with high flexing action. High strength filament able to remove heavy buildups. Good bend recovery. Available in crimped and knotted configurations. Available in both round and flat wire.   |
| <b>Stainless steel (INOX)</b>  |  | Corrosion resistant, non-rusting material works well with chemicals and solvents. Features excellent bend recovery with a high level of abrasion and wear resistance. Stainless steel brushes in this catalogue are produced with 302 stainless steel wire (INOX). 316 stainless steel wire (INOX) available upon request. For more information about stainless steel, see stainless steel (INOX) overview on page 14. |
| <b>Brass/bronze</b>  |  | Non-corrosive, flexible filaments that provide a high degree of abrasion, but are softer than stainless steel or carbon steel to clean surfaces without damaging them. Great for grills, tire sidewalls and other metal equipment that is heavily soiled but cannot sustain heavy scratches.   |





### Scratch brushes

PFERD scratch brushes are manufactured to exacting standards on state-of-the-art production equipment. This ensures that all wire tufts are precision-located in the block to ensure uniform and consistent brushing performance, and long service life.

PFERD premium hardwood scratch brush blocks are kiln-dried to keep wire tufts firmly in place, and hand-selected to ensure straightness and quality.

A complete offering of molded synthetic handle scratch brushes is now available. Synthetic handle brushes won't rot, splinter or crack over time – providing good longevity.

Optional scraper (1-7/16" wide) for loosening especially difficult material.




Quality scratch brushes for maintenance applications. Removal of rust, paint, scale, dirt and other debris. Cleans metal parts, threads and much more.

### Curved handle, hardwood



EDP 85002


| Wire rows                             | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Wire type and EDP number |                      |             |  |
|---------------------------------------|----------------------------|---------------------------|----------------------|--------------------------|----------------------|-------------|--|
|                                       |                            |                           |                      | .012 Carbon steel        | .012 Stainless steel | .010 Bronze |  |
| <b>Wooden block – without scraper</b> |                            |                           |                      |                          |                      |             |  |
| 3 x 19                                | 6-1/4                      | 13-3/4 x 7/8              | 1-3/16               | 85002                    | 85004                | 85005       | 12   |
| 4 x 19                                | 6-1/4                      | 13-3/4 x 1-1/8            | 1-3/16               | 85006                    | 85008                | 85009       | 12   |
| <b>Wooden block – with scraper</b>    |                            |                           |                      |                          |                      |             |  |
| 3 x 19                                | 6-1/4                      | 13-3/4 x 7/8              | 1-3/16               | 85003                    | -                    | -           | 12   |
| 4 x 19                                | 6-1/4                      | 13-3/4 x 1-1/8            | 1-3/16               | 85007                    | -                    | -           | 12   |

Effective for cleaning pipe threads and welds. Also for removal of rust, paint, dirt, and debris. Popular in the oil and gas industries.

### Shoe handle, hardwood



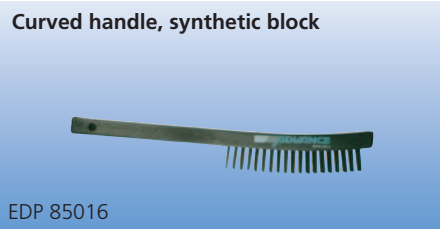
EDP 85034

| Wire rows                             | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Wire type and EDP number |                      |             |  |
|---------------------------------------|----------------------------|---------------------------|----------------------|--------------------------|----------------------|-------------|---|
|                                       |                            |                           |                      | .012 Carbon steel        | .012 Stainless steel | .010 Bronze |   |
| <b>Wooden block – without scraper</b> |                            |                           |                      |                          |                      |             |   |
| 2 x 17                                | 5                          | 10 x 5/8                  | 1-3/16               | 85030                    | 85031                | -           | 12  |
| 4 x 16                                | 5                          | 10-1/4 x 1-1/8            | 1-3/16               | 85033                    | 85035                | 85036       | 12  |
| <b>Wooden block – with scraper</b>    |                            |                           |                      |                          |                      |             |   |
| 4 x 16                                | 5                          | 10-1/4 x 1-1/8            | 1-3/16               | 85034                    | -                    | -           | 12  |

# Maintenance brushes

## Scratch brushes

### Curved handle, synthetic block



Curved handle wire scratch brush with synthetic block that won't splinter, crack or rot.



EDP 85016

| Wire rows                                | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Wire type and EDP number |                      |             |    |
|--|----------------------------|---------------------------|----------------------|--------------------------|----------------------|-------------|----|
|  |                            |                           |                      | .012 Carbon steel        | .012 Stainless steel | .010 Bronze |    |
| <b>Synthetic block – without scraper</b> |                            |                           |                      |                          |                      |             |    |
| 3 x 19                                   | 6-1/4                      | 11 x 1-5/8                | 1-1/2                | 85012                    | 85014                | 85015       | 12 |
| 4 x 19                                   | 6-1/4                      | 13-3/4 x 1-1/8            | 1-3/16               | 85016                    | 85018                | -           | 12 |

### Shoe handle, synthetic block

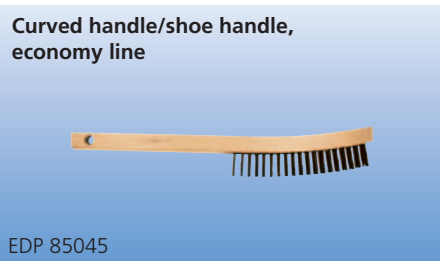


Shoe handle wire scratch brush with synthetic block that won't splinter, crack or rot.

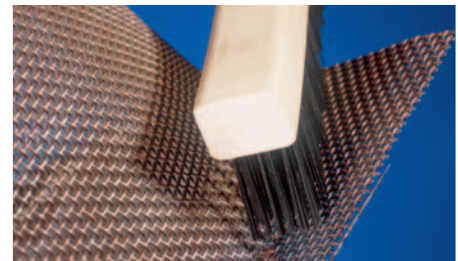
EDP 85037

| Wire rows              | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Wire type and EDP number |                      |             |    |
|------------------------|----------------------------|---------------------------|----------------------|--------------------------|----------------------|-------------|----|
|                        |                            |                           |                      | .012 Carbon steel        | .012 Stainless steel | .010 Bronze |    |
| <b>Synthetic block</b> |                            |                           |                      |                          |                      |             |    |
| 4 x 16                 | 5                          | 10-1/4 x 1-1/8            | 1-3/16               | 85037                    | 85039                | 85040       | 12 |

### Curved handle/shoe handle, economy line



Value-priced brush for maintenance applications. Removal of rust, paint, scale, dirt and other debris. Cleans metal parts, threads and much more.



EDP 85045


| Wire rows                           | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Wire type and EDP number |                      |    |
|-------------------------------------|----------------------------|---------------------------|----------------------|--------------------------|----------------------|----|
|                                     |                            |                           |                      | .012 Carbon steel        | .012 Stainless steel |    |
| <b>Curved handle – economy line</b> |                            |                           |                      |                          |                      |    |
| 3 x 19                              | 6                          | 13-3/4 x 7/8              | 1-3/16               | 85045                    | 85047                | 12 |
| 4 x 18                              | 6                          | 13-3/4 x 1                | 1-3/16               | 85048                    | 85050                | 12 |
| <b>Shoe handle – economy line</b>   |                            |                           |                      |                          |                      |    |
| 4 x 16                              | 5                          | 10 x 1                    | 1-3/16               | 85051                    | 85053                | 12 |

Heavy-duty scratch brush with wood handle and scraper attachment.

**Straight handle with scraper**



EDP 85071

| Wire rows | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Wire type and EDP number |  |  |
|-----------|----------------------------|---------------------------|----------------------|--------------------------|--|---|
|           |                            |                           |                      | .012 Carbon steel        |  |   |
| 4 x 11    | 4-1/2                      | 11 x 1-5/8                | 1-1/2                | 85071                    |  | 12  |




Designed for cleaning in tight bevels and other narrow grooves and channels.

**V-Groove**



EDP 85010

| Wire rows | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Wire type and EDP number |                      |  |
|-----------|----------------------------|---------------------------|----------------------|--------------------------|----------------------|---|
|           |                            |                           |                      | .012 Carbon steel        | .012 Stainless steel |   |
| 3 x 14    | 5-1/4                      | 13-3/4 x 1-1/8            | 1-1/2                | 85010                    | 85011                | 12  |




Solid bent hardwood block, excellent for spot cleaning small welds.

**Welder's toothbrush, wooden handles**



EDP 85054

| Wire rows | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Wire type and EDP number |                      |            |  |
|-----------|----------------------------|---------------------------|----------------------|--------------------------|----------------------|------------|---|
|           |                            |                           |                      | .006 Carbon steel        | .006 Stainless steel | .006 Brass |   |
| 3 x 7     | 1-1/2                      | 7-1/2 x 1/2               | 1/2                  | 85054                    | 85055                | 85056      | 36  |


Wire hand-laced in wooden block.

Laced-back construction eliminates the need for staples which may loosen over time.

**Welder's toothbrush, wooden handles, laced back**



EDP 85058

| Wire rows | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Wire type and EDP number |                      |  |
|-----------|----------------------------|---------------------------|----------------------|--------------------------|----------------------|---|
|           |                            |                           |                      | .006 Carbon steel        | .006 Stainless steel |   |
| 3 x 7     | 1-1/2                      | 7-1/2 x 1/2               | 1/2                  | 85058                    | 85059                | 36  |

# Maintenance brushes

## Scratch brushes

**Welder's toothbrush, plastic handles**



EDP 85060


Bent handle with comfortable grip won't rot, crack, or splinter.

The double headed brush conveniently combines more aggressive and lighter cleaning in one brush.

**Welder's toothbrush, plastic handles, double-headed**



EDP 85063


| Wire rows                              | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Filament type and EDP number |                            |            |                  |            |  |
|--|----------------------------|---------------------------|----------------------|------------------------------|----------------------------|------------|------------------|------------|---|
|  |                            |                           |                      | .006 Stainless steel         | .006 Stainless steel/Nylon | .006 Brass | .006 Brass/nylon | .012 Nylon |   |
| <b>Plastic handles</b>                 |                            |                           |                      |                              |                            |            |                  |            |   |
| 3 x 7                                  | 1-1/2                      | 7-1/2 x 1/2               | 1/2                  | 85060                        | -                          | 85061      | -                | 85062      | 36  |
| <b>Plastic handles – double-headed</b> |                            |                           |                      |                              |                            |            |                  |            |   |
| 3 x 7                                  | 1-1/2                      | 7-1/2 x 1/2               | 1/2                  | -                            | 85063                      | -          | 85064            | -          | 36  |

**Small cleaning, curved handles**



EDP 85065

Great for small area cleaning such as welding applications and intersections.

| Wire rows | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Wire type and EDP number |            |  |
|-----------|----------------------------|---------------------------|----------------------|--------------------------|------------|---|
|           |                            |                           |                      | .006 Stainless steel     | .008 Brass |   |
| 2 x 9     | 2-1/2                      | 8-5/8 x 1/2               | 1/2                  | 85065                    | 85067      | 36  |

## Block brushes

**Standard, straight back**



EDP 85081

**Standard, straight back**

Originally designed for butcher block cleaning, this block brush has been adapted to pipeline and industrial machine applications. Excellent for cleaning concrete forms. Features round steel and stainless steel (INOX) wires.


**Standard, curved back**

Curved back provides better control when brushing large, flat surfaces.

**Standard, curved back**



EDP 85084

| Wire rows                       | Brush length [Inches] | Block width [Inches] | Trim length [Inches] | Wire type and EDP number |                      |  |
|---------------------------------|-----------------------|----------------------|----------------------|--------------------------|----------------------|---|
|                                 |                       |                      |                      | .012 Carbon steel        | .012 Stainless steel |   |
| <b>Standard – straight back</b> |                       |                      |                      |                          |                      |   |
| 5 x 10                          | 4-1/2                 | 1-1/2                | 1-3/16               | 85081                    | -                    | 12  |
| 6 x 19                          | 7-1/4                 | 2-1/4                | 1-3/4                | 85082                    | 85083                | 12  |
| <b>Standard – curved back</b>   |                       |                      |                      |                          |                      |   |
| 9 x 21                          | 7-3/8                 | 2-7/8                | 1-3/16               | 85084                    | -                    | 12  |



Flat steel wire in hardwood block, good for pipeline and industrial machine applications.

**Flat wire, straight back**



EDP 85092

| Wire rows | Block length [Inches] | Block width [Inches] | Trim length [Inches] | Wire type and EDP number |  |
|-----------|-----------------------|----------------------|----------------------|--------------------------|---|
|           |                       |                      |                      | .105 x .017 Carbon steel |   |
| 5 x 10    | 7-3/4                 | 2-5/8                | 1-1/4                | 85092                    | 12  |



Flat wire block brush with handle for rough cleaning of large flat areas like brick work and concrete forms. Also used by farriers.

**Flat wire, jumbo**



EDP 85094

| Wire rows | Block length [Inches] | Block width [Inches] | Trim length [Inches] | Wire type and EDP number |  |
|-----------|-----------------------|----------------------|----------------------|--------------------------|--|
|           |                       |                      |                      | .105 x .017 Carbon steel |  |
| 8 x 12    | 9-1/4                 | 3-3/4                | 1-1/4                | 85094                    | 12   |



A refill brush for most chipping hammers. Mainly used for weld cleaning.

**Chipping hammer replacement brush**

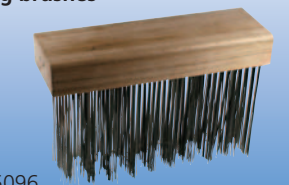


EDP 85085


| Wire rows | Block length [Inches] | Block width [Inches] | Trim length [Inches] | Wire type and EDP number |  |
|-----------|-----------------------|----------------------|----------------------|--------------------------|---|
|           |                       |                      |                      | Carbon steel             |   |
| 3 x 15    | 4-11/16               | 13-16                | 1-3/16               | 85085                    | 12  |

Flat tempered steel wire mounted in hardwood block. The long trim length makes this brush ideal to remove sand from surface of castings.

**Flat wire, casting brushes**



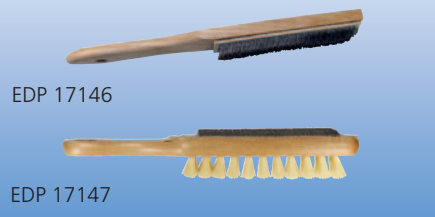
EDP 85096

| Wire rows | Block length [Inches] | Block width [Inches] | Trim length [Inches] | Wire type and EDP number |  |
|-----------|-----------------------|----------------------|----------------------|--------------------------|---|
|           |                       |                      |                      | .017 x .059 Carbon steel |   |
| 5 x 10    | 7-3/4                 | 2-5/8                | 2                    | 85096                    | 12  |
| 5 x 10    | 7-3/4                 | 2-5/8                | 3                    | 85097                    | 12  |
| 5 x 10    | 7-3/4                 | 2-5/8                | 4                    | 85098                    | 12  |

# Maintenance brushes

## Chip brushes

### File cleaning card and brush



Designed for easy removal of chips from clogged files. Rugged wooden handle with wear-resistant steel wire.


See our "Files" catalogue (section 201) for detailed information.



### Pipeline dauber brush



White tampico brush for hand-applying pipe coatings. Brush head 3-1/2" oval.


| Brush length x width [Inches] | Block width [Inches] | Overall length [Inches] | Trim length [Inches] | Filament type and EDP number |  |  |
|-------------------------------|----------------------|-------------------------|----------------------|------------------------------|--|---|
|                               |                      |                         |                      | Tampico filament             |  |   |
| 3-1/2 x 5                     | 2-9/16               | 17                      | 2-1/4                | 85100                        |  | 12  |

### Chip brushes



High volume/cost-effective brushes for a wide range of products including painting, gluing, touch-up, chip removal, parts cleaning, and other industrial applications. Economy quality white and black bristle. Wood handles.



| Width [Inches]                     | Thickness [Inches] | Trim length [Inches] | Bristle type and EDP number |               |  |
|------------------------------------|--------------------|----------------------|-----------------------------|---------------|---|
|                                    |                    |                      | White bristle               | Black bristle |   |
| <b>Chip brushes</b>                |                    |                      |                             |               |   |
| 1/2                                | 1/4                | 1 1/2                | 89695                       | 89703         | 36  |
| 1                                  | 5/16               | 1-1/2                | 89696                       | 89704         | 36  |
| 1-1/2                              | 5/16               | 1-1/2                | 89697                       | 89705         | 36  |
| 2                                  | 3/8                | 1-1/2                | 89698                       | 89706         | 24  |
| 2-1/2                              | 3/8                | 1-1/2                | 89699                       | 89707         | 24  |
| 3                                  | 3/8                | 1-1/2                | 89700                       | 89708         | 24  |
| 4                                  | 3/8                | 2-1/2                | 89701                       | 89709         | 12  |
| <b>Chip brushes – double thick</b> |                    |                      |                             |               |   |
| 4                                  | 11/16              | 2-1/2                | 89702                       | 89710         | 12  |




Small stiff wire brush with 100% metal construction for brushing hot metal and chip removal. No plastic or wood components, this brush will not burn or melt, and is ideal for environments where open flames may be present.

### Metal made loop handles



EDP 85124

| Overall length [Inches] | Width [Inches] | Trim length [Inches] | Wire type and EDP number |                 |  |
|-------------------------|----------------|----------------------|--------------------------|-----------------|---|
|                         |                |                      | Carbon steel             | Stainless steel |   |
| 5-1/2                   | 1-1/4          | 1/5/8                | 85124                    | 85138           | 12  |




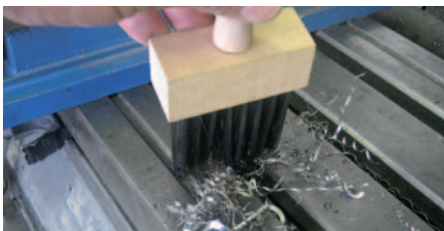
Flat face. Stiff black horsehair. High quality. This brush is ideal for applying coatings for small areas such as soldering flux to copper pipe.

### Tin handle acid brushes



EDP 89602

| Width [Inches] | Trim length [Inches] | Overall length [Inches] | Filament type and EDP number |  |  |
|----------------|----------------------|-------------------------|------------------------------|--|--|
|                |                      |                         | Black horsehair              |  |  |
| 1/4            | 3/4                  | 6                       | 89601                        |  | 144  |
| 3/8            | 7/8                  | 6                       | 89602                        |  | 144  |
| 1/2            | 7/8                  | 6                       | 89603                        |  | 144  |
| 9/16           | 1                    | 6                       | 89622                        |  | 144  |
| 3/4            | 1                    | 6                       | 89604                        |  | 144  |



Soft brushing action for cleaning metal chips and shavings.

### Wire duster



EDP 89559

| Wire rows wide | Overall length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Wire type and EDP number |  |  |
|----------------|-------------------------|---------------------------|----------------------|--------------------------|--|---|
|                |                         |                           |                      | Carbon steel             |  |   |
| 4 x 8          | 5-3/4                   | 2-3/4 x 1-1/8             | 2-3/8                | 89559                    |  | 12  |

# Maintenance brushes

## Floor sweeps

### Wide selection of filaments

Stiffness, liquid retention, durability and cost are just a few of the characteristics that make certain fibers better for certain jobs. We offer many varieties of both natural and synthetic filaments in our maintenance brushes and floor sweeps.






### "Flagged" filament

Many brushes have "flagged" (also known as "feathered") bristles. Flagged bristles contain split ends which decrease stiffness and add liquid and dust retention properties. This soft, synthetic fibre is ideal for dusting, fine sweeping

of smooth surfaces and washing vehicles without scratching.

Please refer to the chart on page 76 of this catalogue for detailed information on all of our available filament types.


### Broom handle key

|   |                                  |
|---|----------------------------------|
|  | Uses tapered handle              |
|  | Uses threaded handle             |
|  | Uses strip broom handle          |
|  | Uses contractor handle           |
|  | Compatible with FlexSweep handle |









For additional information on broom handles and other accessories, please see pages 85-86.





## FlexSweep push brooms

| Brush type | Broom handle | Description | Filament description | Block length [Inches] | Trim length [Inches] | EDP number |  |
|------------|--------------|-------------|----------------------|-----------------------|----------------------|------------|---|
|------------|--------------|-------------|----------------------|-----------------------|----------------------|------------|---|

FlexSweep handles flex on impact and absorb repetitive shock. Makes broom virtually unbreakable. Eliminates the need for braces which limits the accessibility of push brooms in tight spaces. Comes complete with block, FlexSweep handle, and hardware.

|  |   |  |  |    |       |       |   |
|--|---|--|--|----|-------|-------|---|
|  <b>NEW</b> |  | Sanded hardwood. Durable stiff synthetic fibre with flared end, will outlast most natural fibers.  | Brown plastic fill   | 16 | 5-1/4 | 85348 | 1 |
|  <b>NEW</b> |  | Lacquered hardwood. Two threaded holes. Stiff palmyra fibre for wet or dry sweeping on rough concrete or wood floors.  | Stiff palmyra fill   | 18 | 4     | 85320 | 1 |
|  <b>NEW</b> |  | Lacquered hardwood. Two threaded holes. Excellent for shop and store use. Oil-resistant, washable black synthetic fill with crimped centre stock and straight casing.                                    | Black synthetic fill   | 24 | 3     | 85236 | 1 |
|  <b>NEW</b> |  | Lacquered hardwood. Two threaded holes. Brown plastic centre rows sweep coarse dirt while flagged-top plastic casing sweeps fine dust and grit. For smooth or rough floors with heavy dirt accumulation. | Brown plastic centre fill with flagged silver plastic casing | 24 | 3     | 85241 | 1 |



| Broom handle  | Description   | Filament description       | Block length [Inches] | Trim length [Inches] | EDP number |  | Brush type  |
|---|---|----------------------------|-----------------------|----------------------|------------|---|---|
|    | Lacquered hardwood. 100% black horsehair bristles, for fine sweeping of smooth floors such as tile, linoleum, polished hardwood, etc. Two threaded holes.                         | 100% black horsehair       | 24                    | 3                    | 89211      | 12  |    |
|   |   |                            | 36                    | 3                    | 89213      | 12  |   |
|    | Lacquered hardwood. High-quality sweep for best cleaning of fine dirt on smooth floors. Horsehair-nylon mix stapled into lacquered hardwood block with two threaded handle holes. | Horsehair/nylon mix        | 18                    | 3                    | 89214      | 12  |    |
|   |   |                            | 24                    | 3                    | 89215      | 12  |   |
|   |   |                            | 30                    | 3                    | 89216      | 12  |   |
|   |   |                            | 36                    | 3                    | 89217      | 12  |   |
|    | Lacquered hardwood. Flagged bristles for sweeping smooth, highly-polished floors and smooth concrete. Sweeps even the finest dust or grit. Two threaded holes.                    | Silver flagged-tip plastic | 18                    | 3                    | 89222      | 12  |    |
|   |   |                            | 24                    | 3                    | 89223*     | 12  |   |
|   |   |                            | 30                    | 3                    | 89224*     | 12  |   |
|   |   |                            | 36                    | 3                    | 89225      | 12  |   |
|  | Foam plastic block with threads. Flagged bristles for sweeping smooth, highly-polished floors and smooth concrete. Sweeps even the finest dust or grit.                           | Silver flagged-tip plastic | 18                    | 3                    | 89230      | 12  |  |
|   |   |                            | 24                    | 3                    | 89231      | 12  |   |

\*Pre-drilled to be compatible with the FlexSweep handle.



# Maintenance brushes

## Floor sweeps









| Brush type  | Broom handle  | Description  | Filament description   | Block length [Inches] | Trim length [Inches] | EDP number |  |
|---|---|--|--|-----------------------|----------------------|------------|---|
|    |    | Lacquered hardwood. Two threaded holes. Excellent for shop and store use. Oil-resistant, washable black synthetic fill with crimped centre stock and straight casing.                                    | Black synthetic fill   | 16                    | 3                    | 89233      | 12  |
|   |   |  |  | 18                    | 3                    | 89234      | 12  |
|   |   |  |  | 24                    | 3                    | 89236*     | 12  |
|   |   |  |  | 36                    | 3                    | 89239      | 12  |
|    |    | Lacquered hardwood. Two threaded holes. Brown plastic centre rows sweep coarse dirt while flagged-top plastic casing sweeps fine dust and grit. For smooth or rough floors with heavy dirt accumulation. | Brown plastic centre fill with flagged silver plastic casing | 18                    | 3                    | 89240      | 12  |
|   |   |  |  | 24                    | 3                    | 89241*     | 12  |
|   |   |  |  | 36                    | 3                    | 89243      | 12  |
|  |  | Lacquered hardwood. Two threaded holes. Black tampico fibre in a lacquered hardwood block.   | Black tampico fill   | 18                    | 2-5/8                | 89249      | 12  |
|   |   |  |  | 18                    | 3                    | 89250      | 12  |
|   |   |  |  | 24                    | 2-5/8                | 89252*     | 12  |
|   |   |  |  | 24                    | 3                    | 89253      | 12  |
|   |   |  |  | 30                    | 3                    | 89255      | 12  |
|  |  | Lacquered hardwood. Two threaded holes. Popular broom has black tampico centre with horsehair casing.  | Black tampico centre fill with horsehair casing              | 16                    | 3                    | 89259      | 12  |
|   |   |  |  | 18                    | 3                    | 89260      | 12  |
|   |   |  |  | 24                    | 3                    | 89261      | 12  |
|   |   |  |  | 36                    | 3                    | 89263      | 12  |
|  |  | Foam plastic with threads. Black plastic bristles staple-set in foam plastic block. For wet or dry sweeping of rough or semi-smooth surfaces.  | Black synthetic fill   | 18                    | 3                    | 89273      | 12  |
|   |   |  |  | 24                    | 3                    | 89274      | 12  |
|  |  | Foam plastic with threads. Densely set yellow plastic bristles. For wet or dry sweeping. Excellent versatility, can handle fine dust or coarse debris.   | Yellow synthetic fill  | 18                    | 3                    | 89277      | 12  |
|   |   |  |  | 24                    | 3                    | 89278      | 12  |

\*Pre-drilled to be compatible with the FlexSweep handle.














| Broom handle | Description | Filament description | Block length [Inches] | Trim length [Inches] | EDP number |  | Brush type |
|--------------|-------------|----------------------|-----------------------|----------------------|------------|---|------------|
|--------------|-------------|----------------------|-----------------------|----------------------|------------|---|------------|

Heavy sweeping brooms are recommended for sweeping concrete and other rough surfaces such as pavement and factory floors. The working filament in these brushes tend to be larger in diameter and also feature longer trim length. These brooms are ideal for sweeping small stones, gravels and metal chips.

|   |  |                           |    |   |                     |    |   |
|---|--|---------------------------|----|---|---------------------|----|---|
|  | Lacquered hardwood. Two threaded holes. Non-absorbent brown plastic filament may be used for wet or dry sweeping. Oil-resistant and easy to wash.  | Brown/red plastic fill    | 16 | 3 | 89283               | 12 |  |
|   |  |                           | 18 | 3 | 89285 <sup>†</sup>  | 12 |   |
|   |  |                           | 24 | 3 | 89287 <sup>†*</sup> | 12 |   |
|   |  |                           | 36 | 3 | 89289               | 12 |   |
|  | Lacquered hardwood. Two threaded holes. Stiff palmyra fibre for wet or dry sweeping on rough concrete or wood floors.                              | Stiff palmyra fill        | 18 | 4 | 89320*              | 12 |  |
|   |  |                           | 24 | 4 | 89322*              | 12 |   |
|   |  |                           | 30 | 4 | 89324               | 12 |   |
|   |  |                           | 36 | 4 | 89325               | 12 |   |
|  | Lacquered hardwood. Stiff black polypropylene fill is not affected by grease, water, or oil. For wet or dry sweeping of rough concrete or asphalt. | Stiff black polypropylene | 18 | 4 | 89326               | 12 |  |

Street brooms for most demanding applications. Features stiff filaments with longer trim. Street brooms can be used to texture concrete.

|   |  |                                  |    |       |        |    |   |
|---|--|----------------------------------|----|-------|--------|----|---|
|  | Heavy-duty street broom. Sanded hardwood. Heavily filled with 5 rows of African bass fibre.  | African bass fill                | 16 | 6-1/4 | 89343  | 12 |  |
|  | Heavy-duty street broom. Sanded hardwood. Bass/palmyra mix for wet or dry sweeping of barns, streets, highway work, etc.   | Bass/palmyra mix                 | 16 | 6-1/4 | 89345  | 12 |  |
|   |  |                                  | 16 | 7-1/4 | 89346  | 12 |   |
|  | Heavy-duty street broom. Sanded hardwood. Durable stiff synthetic fibre with flared end, will outlast most natural fibers.   | Brown polypropylene fill         | 16 | 5-1/4 | 89348* | 12 |  |
|   |  |                                  | 18 | 5-1/4 | 89349  | 12 |   |
|   |  |                                  | 24 | 5-1/4 | 89350  | 12 |   |
|  | Heavy-duty street broom. Sanded hardwood. Dyed palmyra stalk with wide flared ends for sweeping close to curbs.  | Red dyed palmyra fill            | 16 | 6-1/4 | 89351  | 12 |  |
|  | Heavy-duty street broom. Sanded hardwood. Heavy-gauge orange plastic will not absorb mold, mildew, or water. Safety orange colour perfect for high visibility use. | Safety orange polypropylene fill | 16 | 5     | 89353  | 6  |  |
|   |  |                                  | 18 | 5     | 89354  | 6  |   |
|   |  |                                  | 24 | 5     | 89355  | 6  |   |
|   | Scraper attachment kit   | 8-1/2" long                      | -  | -     | 89928  | 1  |  |

<sup>†</sup> Pre-drilled for use with scraper attachment.


\*Pre-drilled to be compatible with the FlexSweep handle.







# Maintenance brushes

## Floor sweeps



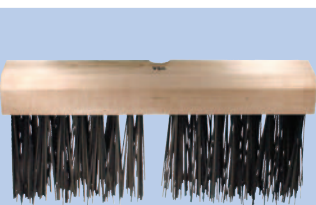






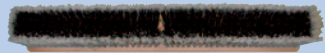



| Brush type | Broom handle | Description | Filament description | Block length [Inches] | Trim length [Inches] | EDP number |  |
|------------|--------------|-------------|----------------------|-----------------------|----------------------|------------|---|
|------------|--------------|-------------|----------------------|-----------------------|----------------------|------------|---|



Floor sweeps, metal frame/economy, fine sweeping



|   |   |  |                       |    |       |       |    |
|---|---|--|-----------------------|----|-------|-------|----|
|  |  | Tubular steel frame.<br>Fine sweep for general industrial use.<br>Tubular steel frame with high-quality, tough synthetic bristles.   | Fine synthetic fill   | 24 | 3-1/4 | 89313 | 12 |
|  |  | Tubular steel frame.<br>Medium sweep for general industrial use.<br>Tubular steel frame with high-quality, tough synthetic bristles. | Medium synthetic fill | 18 | 3-1/4 | 89314 | 12 |
|   |   |  |                       | 24 | 3-1/4 | 89315 | 12 |

Floor sweeps, hardwood block, coarse sweeping

|   |   |   |   |    |       |       |    |
|---|---|---|---|----|-------|-------|----|
|   |   | Lacquered hardwood block.<br>Steel wire centre with shorter trim than surrounding tampico fibre fill. Added pressure engages wire with the brushing surface to penetrate heavy dirt and grease. | Round steel wire centre with black tampico border | 18 | 2-7/8 | 89362 | 12 |
|   |   |   |   | 24 | 2-7/8 | 89363 | 12 |
|  |  | Sanded hardwood.<br>Flat wire broom features .017 x .059 tempered carbon steel wire. Especially effective for work on uneven, rough surfaces, as in road repair and steel millwork.             | .017 x .059 tempered flat carbon steel wire       | 14 | 5     | 89370 | 12 |
|   |   |   |   | 16 | 5     | 89381 | 12 |

| Broom handle  | Description   | Filament description                                | Block length [Inches] | Trim length [Inches] | EDP number |  | Brush type  |
|---|---|---|-----------------------|----------------------|------------|---|---|
|    | Lacquered hardwood. Fine sweep for smooth, highly polished floors and smooth concrete. Will sweep finest dust or grit.                                    | Silver flagged-tip plastic fill                     | 18                    | 3                    | 89294      | 1   |    |
|   |   |   | 24                    | 3                    | 89295      | 1   |   |
|   |   |   | 30                    | 3                    | 89296      | 1   |   |
|    | Lacquered hardwood. Medium sweep for wood, concrete, asphalt, tile, etc.  | Selected black tampico fill                         | 24                    | 3                    | 89298      | 1   |    |
|    | Lacquered hardwood. Coarse plastic centre with fine flagged border rows. For dry sweeping of smooth or rough floors with heavy dirt buildup.              | Coarse brown plastic with silver flagged-tip border | 24                    | 3                    | 89301      | 1   |    |
|   |   |   | 30                    | 3                    | 89302      | 1   |   |
|  | Lacquered hardwood. Coarse sweep with tough palmyra fill for wet or dry sweeping of rough or smooth concrete, driveways, and floors.                      | Brown palmyra fill                                  | 24                    | 4                    | 89304      | 1   |  |
|   |   |   | 36                    | 4                    | 89306      | 1   |   |
|  | Lacquered hardwood. Coarse sweep for wet or dry sweeping of concrete and asphalt. Also good for wet floors such as in creameries and industrial settings. | Coarse brown plastic fill                           | 24                    | 3                    | 89308      | 1   |  |

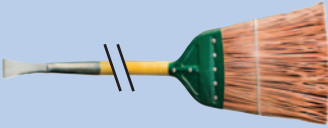


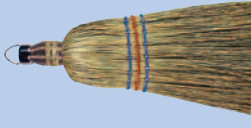


| Description   | Handle length [Feet] | Handle diameter [Inches] | EDP number |  | Handle type  |
|---|----------------------|--------------------------|------------|---|--|
| Contractor style handle features malleable metal connector on high-grade lacquered hardwood pole. For use with contractor series push brooms. | 5                    | 1-1/8                    | 89901      | 12  | <b>Contractor handle</b><br> |

| Description   | Item type  | EDP number |  | Handle type  |
|---|------------|------------|---|--|
| This sturdy, reusable steel brace clamps around the handle and fastens to the block with screws. Adds strength and stability. Especially useful with contractor handle. | Heavy duty | 89922      | 1   | <b>Handle brace, heavy duty</b><br> |

# Maintenance brushes

## Upright brooms and whisk brooms



| Brush type  | Description   | Filament description | Handle type         | Sweep width [Inches] | Overall length [Inches] | EDP number |  |
|---|---|----------------------|---------------------|----------------------|-------------------------|------------|---|
| <b>Upright brooms</b>   |   |                      |                     |                      |                         |            |   |
|    | Handle with chiseled end. Track brooms feature a narrow face for softer sweeping. This broom has a steel chisel handle end for tough-to-remove debris such as chewing gum. One reinforcing wire band. | Bass fibre           | 1-1/8 dia. x 39     | 10                   | 55                      | 89374      | 6   |
|    | Bass fibre for wet or dry sweeping on rough floors. Compact for use in narrow areas. Three stitched rows.   | Bass fibre           | 1-1/8 dia. x 39     | 10-1/2               | 53                      | 89375      | 6   |
|    | Selected corn filament for light sweeping on smooth floors. Compact broom with three twine sews and one wire band for long life. Three stitched rows.   | Selected corn        | 7/8 dia. x 37       | 10                   | 56                      | 89376      | 12  |
|   |   |                      | 1-1/8 dia. x 37     | 11                   | 56                      | 89377      | 12  |
| <b>Whisk brooms</b>   |   |                      |                     |                      |                         |            |   |
|  | Metal cap with ring. Use on dust, lint and fine dirt in office, factory or home. Topped by convenient hanging ring. Three stitched rows.  | Selected corn        | Metal cap with ring | 4-1/2                | 10                      | 89378      | 12  |
|  | Wire loop handle. Economical whisk for multi-purpose dusting. Twisted-in wire construction, loop handle. One reinforcing wire band.   | Palmyra fill         | Wire loop handle    | 4-1/2                | 10                      | 89379      | 12  |
|  | Wooden handle. For heavy duty cleaning. Has a wood handle grip. One reinforcing wire band.  | Stiff natural fill   | Wood grip handle    | 4-1/2                | 9-3/4                   | 89380      | 12  |






For pushing debris and liquids from concrete, tile, linoleum, etc. to achieve a clean, dry surface.

Features red gum blade with medium flexibility.

### Floor squeegees, standard duty



EDP 89471

| Overall width [Inches] | Frame plating | Blade material | Handle type   | Blade size w x d [Inches] | EDP number |  |
|------------------------|---------------|----------------|---|---------------------------|------------|---|
| 18                     | Steel         | Red gum        |  | 2 x 3/16                  | 89471      | 12  |
| 24                     | Steel         | Red gum        |  | 2 x 3/16                  | 89472      | 12  |








Premium performance squeegee features superior construction and heavier blade for industrial use.

Can be used to clean up chemical or petroleum based spills. Blade is securely fastened with machine screws.

### Floor squeegees, heavy duty



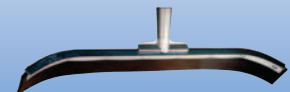
EDP 89475

| Overall width [Inches] | Frame plating | Blade material | Handle type   | Blade size w x d [Inches] | EDP number |  |
|------------------------|---------------|----------------|---|---------------------------|------------|---|
| 18                     | Cadmium steel | Neoprene       |  | 2 x 1/4                   | 89473      | 12  |
| 24                     | Cadmium steel | Neoprene       |  | 2 x 1/4                   | 89474      | 12  |
| 30                     | Cadmium steel | Neoprene       |  | 2 x 1/4                   | 89475      | 12  |
| 36                     | Cadmium steel | Neoprene       |  | 2 x 1/4                   | 89476      | 12  |





Premium construction for industrial use. Curved ends allow improved control of large amounts of liquid. 36" comes with a handle brace.

Features plated metal hardware and machine screws for longer service life.

### Floor squeegees, heavy duty, curved end



EDP 89479

| Overall width [Inches] | Frame plating | Blade material | Handle type   | Blade size w x d [Inches] | EDP number |  |
|------------------------|---------------|----------------|---|---------------------------|------------|---|
| 24                     | Cadmium steel | Neoprene       |  | 2-1/2 x 1/4               | 89478      | 6   |
| 30                     | Cadmium steel | Neoprene       |  | 2-1/2 x 1/4               | 89479      | 6   |
| 36                     | Cadmium steel | Neoprene       |  | 2-1/2 x 1/4               | 89480      | 6   |

# Maintenance brushes

## Squeegees

### Window squeegees










EDP 89464

Plated steel frame and handle socket.

Blade securely fastened with machine screws.


















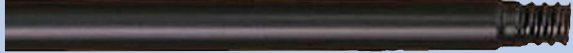

Non marking red gum blade is ideal for heavy duty use.



| Overall length [Inches] | Frame plating | Blade material | Handle type   | Blade size w x d [Inches] | EDP number |  |
|-------------------------|---------------|----------------|---|---------------------------|------------|---|
| 6                       | Steel         | Red gum        |  | 1 x 3/16                  | 89464      | 6   |
| 8                       | Steel         | Red gum        |  | 1 x 3/16                  | 89465      | 6   |
| 10                      | Steel         | Red gum        |  | 1 x 3/16                  | 89466      | 6   |
| 12                      | Steel         | Red gum        |  | 1 x 3/16                  | 89467      | 6   |
| 14                      | Steel         | Red gum        |  | 1 x 3/16                  | 89468      | 6   |
| 16                      | Steel         | Red gum        |  | 1 x 3/16                  | 89469      | 6   |







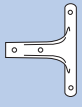












| Description  | Handle length [Feet] | Handle diameter [Inches] | EDP number |  | Handle type   |
|--|----------------------|--------------------------|------------|---|---|
| <b>Wood handles</b>  |                      |                          |            |   |   |
| Wooden handles made of smooth, lacquered hardwood. Easily attach to push brooms.   | 4-1/2                | 15/16                    | 89882      | 12  | <b>Wood threads*</b><br>         |
|  | 5                    | 15/16                    | 89883      | 12  |   |
|  | 6                    | 15/16                    | 89884      | 12  |   |
|  | 4-1/2                | 1-1/8                    | 89885      | 12  |   |
|  | 5                    | 1-1/8                    | 89886      | 12  |   |
|  | 6                    | 1-1/8                    | 89887      | 12  |   |
| Plastic thread model features plastic coating for fortifying wood threads.   | 5                    | 15/16                    | 89893      | 12  | <b>Plastic threads*</b><br>      |
| Wooden handle made of smooth lacquered hardwood with threaded metal tip.   | 5                    | 15/16                    | 89889      | 12  | <b>Metal threads*</b><br>        |
|  | 5                    | 1-1/8                    | 89891      | 12  |   |
| Tapered wood handle for use with pushbrooms, deck scrubs, window brushes, roof brushes and squeegees. Use with replaceable handle tips and handle braces.                        | 4-1/2                | 1-1/8                    | 89897      | 12  | <b>Tapered end</b><br>           |
|  | 5                    | 1-1/8                    | 89899      | 12  |   |
|  | 6                    | 1-1/8                    | 89900      | 12  |   |
| <b>FlexSweep flexible handle</b>   |                      |                          |            |   |   |
| Flexible push-broom handle. Wooden handle with flexible rubber connector. Includes attachment hardware.  | 5-1/2                | 1-1/8                    | 89930      | 3   | <b>FlexSweep handle</b><br>  |
| <b>Aluminum/fibreglass handles</b>   |                      |                          |            |   |   |
| Metal "utility" quality metal extension pole has threaded end.   | 5                    | 15/16                    | 89905      | 12  | <b>Metal threads*</b><br>    |
| Fibreglass professional quality extension pole. Fibreglass housing with aluminum extension.  | 4 to 8               | 1                        | 89913      | 6   | <b>Telescoping*</b><br>      |
|  | 6 to 12              | 1                        | 89914      | 6   |   |
| Standard fibreglass broom handle with threaded plastic tip.  | 5                    | 15/16                    | 89915      | 12  | <b>Fibreglass*</b><br>       |
| "Flo-Thru" handle for use with window and wash brushes. Attaches to standard hose for continuous water flow. Includes on/off control valve and combination tapered/threaded end. | 5                    | 7-8                      | 89919      | 12  | <b>"Flo-Thru"*</b><br>       |

\*All threaded broom handles are equipped with standard 3/4" acme thread.

# Maintenance brushes

## Handles and accessories



| Handle type  | Description   | Handle length [Feet] | Handle diameter [Inches] | EDP number  |  |
|--|---|----------------------|--------------------------|---|---|
| <b>Special purpose handles</b>   |   |                      |                          |   |   |
| <b>Brace attachment</b><br>           | <br>Brace attachment handle features a reversible cast aluminum brace 7" wide. Attaches directly to brush block with wing nuts.                  | 5                    | 1-1/8                    | 89902   | 12  |
| <b>Contractor handle</b><br>          | <br>Contractor style handle features malleable metal connector on high-grade lacquered hardwood pole. For use with contractor push broom series. | 5                    | 1-1/8                    | 89901   | 12  |
| <b>Metal frame broom handle</b><br>   | <br>Metal frame broom handle.  | 5                    | 1-1/8                    | 89903   | 12  |
| Handle tip type  | Description   | Item size [Inches]   | EDP number               |    |   |
| <b>Plastic threads*</b><br>         | Convenient replacement tips, threaded plastic.  | 15/16 (dia.)         | 89923                    | 12  |   |
| <b>Metal threads*</b><br>           | Metal clamp-on threaded tip converts tapered poles to threaded.   | 15/16 (dia.)         | 89925                    | 1   |   |
| Brace type   | Description   | Item grade           | EDP number               |  |   |
| <b>Handle brace, standard</b><br>   | This brace fits on the underside of the handle between handle and block. Attaches easily with wing nuts. Brace is reusable.   | Standard             | 89921                    | 1   |   |
| <b>Handle brace, heavy duty</b><br> | This sturdy, reusable steel brace clamps around the handle and fastens to the block with screws. Adds strength and stability. Especially useful with Contractor Handle.   | Heavy duty           | 89922                    | 1   |   |
| Dust pan   | Description   | Item size [Inches]   | EDP number               |  |   |
| <b>Metal hand dust pan</b><br>      | Black metal dust pan is 20 gauge steel with enamel finish.  | 12 (edge)            | 89876                    | 12  |   |
|  |   | 16 (edge)            | 89877                    | 12  |   |

\*All threaded broom handle tips are equipped with standard 3/4" acme thread.



Counter brushes in three grades for convenient light cleaning and sweeping of small flat surfaces such as counters, table tops and work surfaces.

**Premium Line** is for very fine sweeping.

**Standard Line**, features extended flare at brush tip for better corner cleaning. Versatile, picks up fine dust as well as heavy dirt.

**Heavy duty** line brush for general use and coarse sweeping.

### Counter dusters

EDP 89390




EDP 89397



EDP 89400



| Overall length [Inches]                               | Trim length [Inches] | Block type | Filament description      | EDP number |  |
|---|----------------------|------------|---------------------------|------------|---|
| <b>Premium line – fine sweep</b>                      |                      |            |                           |            |   |
| 8   | 2-1/2                | Wood block | Black horsehair           | 89390      | 12  |
| 8   | 2-3/4                | Wood block | Black horsehair and nylon | 89393      | 12  |
| 9   | 2-1/4                | Wood block | Black horsehair           | 89394      | 12  |
| 9   | 2-1/2                | Wood block | Black horsehair and nylon | 89395      | 12  |
| <b>Standard line – medium sweep</b>                   |                      |            |                           |            |   |
| 8   | 2-1/2                | Plastic    | Black horsehair and nylon | 89397      | 12  |
| <b>Heavy duty line – coarse/general purpose sweep</b> |                      |            |                           |            |   |
| 8   | 2-1/2                | Plastic    | Black tampico             | 89400      | 12  |
| 8   | 2-1/2                | Wood block | Black tampico             | 89402      | 12  |
| 9   | 2-1/2                | Plastic    | Black tampico             | 89405      | 12  |



Wash brushes with staple set construction are great for cleaning all kinds of windows, glass surfaces, automotive surfaces, siding, decks.

Soft flagged synthetic filament will not scratch surfaces.

For use as hand-held brushes, or use with Flo-Thru handle for high-powered cleaning. Threaded hole on all brushes.

See page 93 for information on handles.




### Wash brushes

EDP 89449



EDP 89456




| Block size [Inches]         | Trim length [Inches] | Block type     | Handle type   | Filament description              | EDP number |  |
|-----------------------------|----------------------|----------------|---|-----------------------------------|------------|---|
| <b>Window brush – round</b> |                      |                |   |                                   |            |   |
| 4-1/2                       | 2-1/2                | Round plastic  |  | Soft grey flagged synthetic fill  | 89449      | 6   |
| <b>Car/truck wash brush</b> |                      |                |   |                                   |            |   |
| 10 x 3                      | 2-1/4                | Molded plastic |  | Black and white flagged synthetic | 89456      | 6   |

# Maintenance brushes

## Utility brushes




Durable wood handle or flexible wire handle, spiral wound tip brush is beneficial for deep cleaning of bottles and narrow, hard-to-reach interior spaces.

| Overall length [Inches] | Handle type     | Filament type | Brush part length [Inches] | Brush diameter [Inches] | EDP number |  |
|-------------------------|-----------------|---------------|----------------------------|-------------------------|------------|---|
| 15                      | Wood            | Nylon         | 5                          | 3 to 2-1/2              | 89432      | 12  |
| 18                      | Twisted in wire | Horsehair     | 6-1/2                      | 2-3/4                   | 89434      | 12  |
| 18                      | Twisted in wire | Horsehair     | 6-1/4                      | 3                       | 89435      | 12  |








Wood handle, spiral-wound tampico brush designed for cleaning multi-gallon cans and other containers.

| Overall Length [Inches] | Handle Type | Filament Type | Brush Part Length [Inches] | Brush Diameter [Inches] | EDP Number |  |
|-------------------------|-------------|---------------|----------------------------|-------------------------|------------|---|
| 25                      | Wood        | Grey tampico  | 7                          | 3-3/8                   | 89438      | 1   |

For scrubbing floors made of wood, composite boards or concrete, decks. Home and industrial use.

See page 93 for information on handles.




| Brush size<br>l x w<br>[Inches] | Trim<br>length<br>[Inches] | Block<br>type | Handle<br>type  | Filament<br>description | EDP number |  |
|---------------------------------|----------------------------|---------------|---|-------------------------|------------|---|
| <b>Regular fill 6 x 18 rows</b> |                            |               |   |                         |            |   |
| 10 x 2-3/4                      | 2                          | Hardwood      |  | Palmyra                 | 89514      | 12  |
| 12 x 2-3/4                      | 1-7/8                      | Hardwood      |  | Palmyra                 | 89515      | 12  |
| <b>Heavy fill 6 x 18 rows</b>   |                            |               |   |                         |            |   |
| 10 x 2-3/4                      | 2                          | Hardwood      |  | High density tampico    | 89516      | 12  |
| 10 x 2-3/4                      | 2                          | Hardwood      |  | Polypropylene           | 89517      | 12  |



Dependable ergonomically designed scrub brushes for general purpose scrubbing and cleaning. Removes paint, oil and other foreign substances off smooth and rough surfaces.



| Brush size<br>l x w<br>[Inches] | Trim<br>length<br>[Inches] | Block<br>type               | Filament<br>description | EDP number |  |
|---------------------------------|----------------------------|-----------------------------|-------------------------|------------|---|
| <b>Pointed end</b>              |                            |                             |                         |            |   |
| 8-3/4 x 2-1/4                   | 1-1/8                      | Hardwood                    | Palmyra                 | 89519      | 12  |
| 8-3/4 x 2-1/4                   | 1-1/8                      | Hardwood                    | White tampico           | 89521      | 12  |
| 8-3/4 x 2-1/4                   | 1-1/8                      | Hardwood                    | Yellow polypropylene    | 89522      | 12  |
| <b>Square end</b>               |                            |                             |                         |            |   |
| 8 x 2-3/4                       | 1-1/4                      | Hardwood                    | Plastic fill            | 89526      | 12  |
| 8 x 2-3/4                       | 1                          | Hardwood                    | Palmyra                 | 89528      | 12  |
| 8 x 2-3/4                       | 1-1/8                      | Hardwood with threaded hole | Palmyra                 | 89529      | 12  |
| 8 x 2-3/4                       | 1-1/8                      | Hardwood                    | White tampico           | 89530      | 12  |
| <b>Hand/nail cleaning</b>       |                            |                             |                         |            |   |
| 5 x 1-1/2                       | 3/4                        | Hardwood                    | Plastic                 | 89532      | 12  |
| 5 x 1-1/2                       | 3/4                        | Plastic                     | Plastic                 | 89533      | 12  |

# Maintenance brushes


## Fender brushes



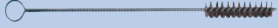
For general purpose scrubbing and industrial use on metal surfaces, specifically cans, auto fenders, wheel covers, hub caps, and car detailing.

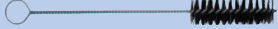
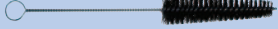
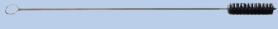
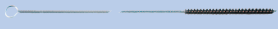
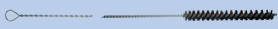
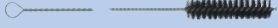
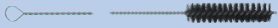
Long handle version allows easy access for cleaning deep cavities.



| Overall length [Inches] | Trim length [Inches] | Block type | Filament description     | EDP number |  |
|-------------------------|----------------------|------------|--------------------------|------------|---|
| <b>Long handle</b>      |                      |            |                          |            |   |
| 21-1/2                  | 2                    | Plastic    | Cream-coloured synthetic | 89439      | 12  |
| 21-1/2                  | 2                    | Plastic    | Palmyra                  | 89441      | 12  |
| 21-1/2                  | 2                    | Plastic    | White tampico            | 89443      | 12  |
| <b>Short handle</b>     |                      |            |                          |            |   |
| 10                      | 2                    | Plastic    | Cream-coloured synthetic | 89444      | 12  |
| 10                      | 2                    | Plastic    | Palmyra                  | 89445      | 12  |
| 10                      | 2                    | Plastic    | White tampico            | 89447      | 12  |



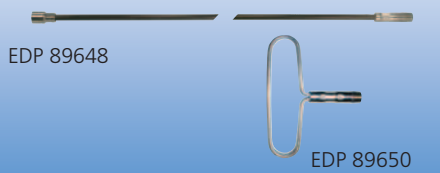
| Description  | Face type | Dia. [Inches] | Brush part length [Inches] | Overall length [Inches] | Wire dia., type and EDP number |         |         |         |         | Brush type |   |
|--|-----------|---------------|----------------------------|-------------------------|--------------------------------|---------|---------|---------|---------|------------|---|
|  |           |               |                            |                         | .003 CS                        | .005 CS | .006 CS | .008 CS | .006 SS |            |   |
| Wire tube and spout brushes are used for internal cleaning in industrial, dairy and laboratory applications. | Straight  | 3/16          | 1-1/2                      | 7                       | 89560                          | 89561   | -       | -       | 89568   | 12         | <br>Hand tube brushes, wire<br>EDP 89567 |
|  |           | 1/4           | 1-1/2                      | 7                       | -                              | -       | -       | -       | 89569   | 12         |   |
|  |           | 1/4           | 1-1/2                      | 8                       | -                              | -       | -       | -       | 89564   | 12         |   |
|  |           | 3/8           | 2                          | 8                       | -                              | -       | 89565   | -       | 89570   | 12         |   |
|  |           | 1/2           | 2                          | 8                       | -                              | 89563   | 89566   | 89567   | 89571   | 12         |   |

| Description  | Face type | Dia. [Inches] | Brush part length [Inches] | Overall length [Inches] | Bristle type and EDP number |       | Brush type   |
|--|-----------|---------------|----------------------------|-------------------------|-----------------------------|-------|--|
|  |           |               |                            |                         | Black horsehair             | Nylon |  |
| Straight face. Brush fill comes in stiff black horsehair or nylon.       | Straight  | 1/4           | 2                          | 6-1/4                   | 89572                       | -     | <br>Hand tube brushes, bristle<br>EDP 89581           |
|  |           | 1/4           | 2                          | 6-1/8                   | -                           | 89578 |  |
|  |           | 5/16          | 1-1/2                      | 9                       | 89573                       | -     |  |
|  |           | 1/2           | 3                          | 8-1/2                   | 89574                       | 89580 |  |
|  |           | 3/4           | 3                          | 8-1/2                   | 89575                       | 89581 |  |
|  |           | 1             | 4                          | 12                      | 89576                       | 89582 |  |
|  |           | 1-1/4         | 4                          | 12-7/8                  | 89577                       | -     |  |
|  |           | 1-1/4         | 4                          | 13                      | -                           | 89583 |  |
| 2  | 5         | 15            | -                          | 89585                   |                             |       |  |
| 1-1/4" brush diameter at wide end tapered to 3/4" at narrow end.         | Tapered   | 1-1/4 to 3/4  | 5                          | 12                      | 89586                       | -     | <br>Hand tube brushes, bristle tapered<br>EDP 89586 |
| Straight face, horsehair fill. For cleaning percolators and coffee urns. | Straight  | 1/2           | 2                          | 12                      | 89587                       | -     | <br>Percolator brushes<br>EDP 89587                 |
|  |           | 5/8           | 3-1/2                      | 24                      | 89588                       | -     |  |
| Farm and ranch industry use. For cleaning bottle-filling machines.       | Straight  | 1/4           | 4-3/4                      | 26                      | 89590                       | -     | <br>Air tube brushes<br>EDP 89592                   |
|  |           | 3/8           | 4                          | 26                      | 89591                       | -     |  |
|  |           | 1/2           | 4                          | 26                      | 89592                       | -     |  |
| Farm and ranch industry use. For cleaning milking machines.              | Straight  | 1/2           | 4-1/2                      | 42                      | 89593                       | -     | <br>Rubber hose brushes<br>EDP 89593                |
|  |           | 5/8           | 4-1/2                      | 42                      | 89594                       | -     |  |
|  |           | 3/4           | 4-1/2                      | 42                      | 89595                       | -     |  |
| Farm and ranch industry use. For cleaning bottle-filling machines.       | Straight  | 1             | 4-1/2                      | 40-1/2                  | 89596                       | -     | <br>Milk tube brushes<br>EDP 89597                  |
|  |           | 1-1/4         | 4-1/2                      | 40-1/2                  | 89597                       | -     |  |
|  |           | 1-1/2         | 4-1/2                      | 40-1/2                  | 89598                       | -     |  |
|  |           | 2             | 4-1/2                      | 40-1/2                  | 89599                       | -     |  |
| Stiff bristle twisted in wire handles, with loop end.                    | Straight  | 2-1/4         | 7                          | 30                      | 89437                       | -     | <br>Radiator tube brushes<br>EDP 89600              |
|  |           | 1-1/2         | 18                         | 90                      | 89600                       | -     |  |

# Maintenance brushes

## Internal cleaning – pipe and flue brushes


### Galvanized wire handles



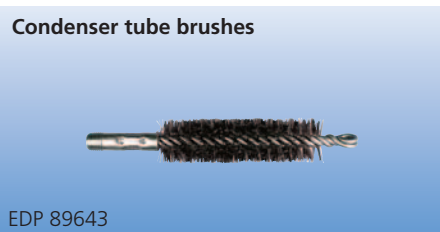
This 60" long light weight fibreglass handle is equipped with 1/4" x 2-1/2" pipe nipple. Multiple handles can be threaded together for longer reach.

Galvanized T-handle has 1/4" NPT thread.




| Handle length [Inches]              | EDP number |  |
|-------------------------------------|------------|---|
| 60                                  | 89648      | 1   |
| Galvanized T-handle, 1/4 NPT thread | 89650      | 1   |

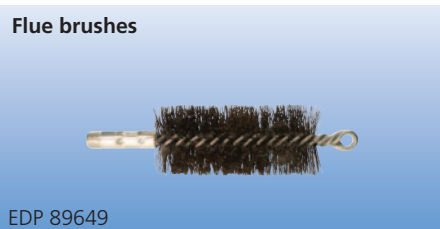
### Condenser tube brushes



The double stem double spiral condenser brushes feature a 1/8" NPT with 5/16-18 internal thread. Condenser brushes are built with loop on one end for easy use.


| Brush part length [Inches] | Brush OD (exact size) [Inches] | Wire diameter and EDP number |  |
|----------------------------|--------------------------------|------------------------------|---|
|                            |                                | .010 Carbon steel            |   |
| 4-1/2                      | 1/2                            | 89643                        | 1   |
| 4-1/2                      | 5/8                            | 89644                        | 1   |
| 4-1/2                      | 3/4                            | 89645                        | 1   |
| 4-1/2                      | 7/8                            | 89646                        | 1   |
| 4-1/2                      | 1                              | 89647                        | 1   |

### Flue brushes



Flue brushes are round wire style "W". The double stem double spiral flue brushes are equipped with 1/4" x 2-1/2" NPT on one end and a loop on the other for easy use.

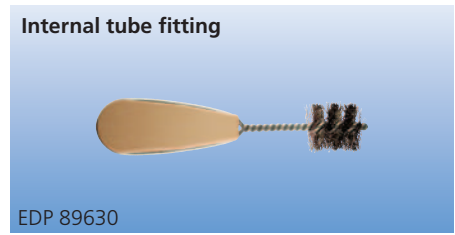



| Brush part length [Inches] | Flue size [Inches] | Brush OD (exact size) [Inches] | Wire diameter and EDP number |  |
|----------------------------|--------------------|--------------------------------|------------------------------|---|
|                            |                    |                                | .012 Carbon steel            |   |
| 4-1/2                      | 1                  | 3/4                            | 89649                        | 1   |
| 4-1/2                      | 1-1/4              | 1                              | 89651                        | 1   |
| 4-1/2                      | 1-1/2              | 1-1/4                          | 89652                        | 1   |
| 4-1/2                      | 1-3/4              | 1-1/2                          | 89653                        | 1   |
| 4-1/2                      | 2                  | 1-3/4                          | 89654                        | 1   |
| 4-1/2                      | 2-1/4              | 2                              | 89655                        | 1   |
| 4-1/2                      | 2-1/2              | 2-1/4                          | 89656                        | 1   |
| 4-1/2                      | 2-3/4              | 2-1/2                          | 89657                        | 1   |
| 4-1/2                      | 3                  | 2-3/4                          | 89658                        | 1   |
| 4-1/2                      | 3-1/4              | 3                              | 89659                        | 1   |
| 4-1/2                      | 3-1/2              | 3-1/4                          | 89660                        | 1   |
| 4-1/2                      | 3-3/4              | 3-1/2                          | 89661                        | 1   |
| 4-1/2                      | 4                  | 3-3/4                          | 89662                        | 1   |





Tube fitting brush is equipped with a hand-fitting handle. Cleaning action assures leak-proof joints.




| Nominal tubing [Inches] | Exact size [Inches] | Wire type and EDP number |  |
|-------------------------|---------------------|--------------------------|---|
|                         |                     | Carbon steel             |   |
| 1/8                     | 17/64               | 89625                    | 12  |
| 1/4                     | 25/64               | 89626                    | 12  |
| 3/8                     | 33/64               | 89627                    | 12  |
| 1/2                     | 21/32               | 89628                    | 12  |
| 5/8                     | 25/32               | 89629                    | 12  |
| 3/4                     | 29/32               | 89630                    | 12  |
| 7/8                     | 1-1/32              | 89631                    | 12  |
| 1                       | 1-5/32              | 89632                    | 12  |
| 1-1/4                   | 1-7/16              | 89633                    | 12  |
| 1-1/2                   | 1-11/16             | 89634                    | 12  |
| 2                       | 2-3/16              | 89635                    | 12  |



External tube fitting and cleaning brush, featuring a plastic case to protect user's hands from sharp edges.

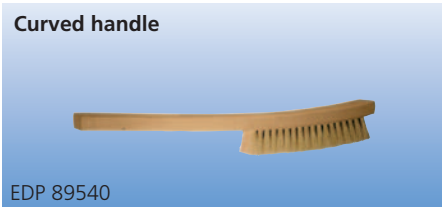


| Nominal tubing [Inches] | Exact size [Inches] | Wire type and EDP number |  |
|-------------------------|---------------------|--------------------------|---|
|                         |                     | Carbon steel             |   |
| 1/4                     | 3/8                 | 89636                    | 6   |
| 3/8                     | 1/2                 | 89637                    | 6   |
| 1/2                     | 5/8                 | 89638                    | 6   |
| 5/8                     | 3/4                 | 89639                    | 6   |
| 3/4                     | 7/8                 | 89640                    | 6   |
| 7/8                     | 1                   | 89641                    | 6   |

# Maintenance brushes


## Platers and molders brushes

### Curved handle

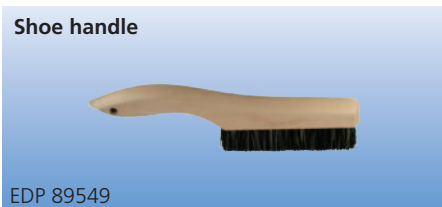


For light cleaning and polishing in metal finishing and plating applications.

EDP 89540


| Wire rows            | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Fill material and EDP number |         |            |               |               |  |
|----------------------|----------------------------|---------------------------|----------------------|------------------------------|---------|------------|---------------|---------------|---|
|                      |                            |                           |                      | .006 CS                      | .006 SS | .006 Brass | White tampico | Black bristle |   |
| <b>Curved handle</b> |                            |                           |                      |                              |         |            |               |               |   |
| 3                    | 5-1/2                      | 13 x 7/8                  | 1                    | 89542                        | 89546   | 89544      | -             | -             | 12  |
| 4                    | 5-1/2                      | 13 x 1                    | 1                    | 89543                        | 89547   | 89545      | -             | -             | 12  |
| 4                    | 5-1/2                      | 13 x 1-1/4                | 1                    | -                            | -       | -          | 89540         | -             | 12  |
| 4                    | 5-1/2                      | 13 x 1-1/8                | 1                    | -                            | -       | -          | -             | 89541         | 12  |

### Shoe handle

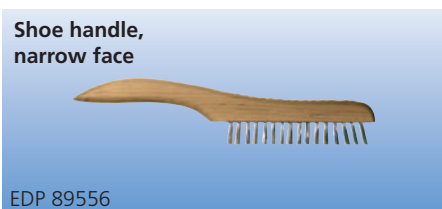


Shoe handle platers brushes are ergonomically designed for a comfortable grip.

EDP 89549

| Wire rows          | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Fill material and EDP number |         |            |              |             |  |
|--------------------|----------------------------|---------------------------|----------------------|------------------------------|---------|------------|--------------|-------------|---|
|                    |                            |                           |                      | .006 CS                      | .006 SS | .005 Brass | Grey tampico | Black nylon |   |
| <b>Shoe handle</b> |                            |                           |                      |                              |         |            |              |             |   |
| 3                  | 5                          | 10 x 13/16                | 1                    | 89550                        | -       | 89552      | -            | -           | 12  |
| 4                  | 5                          | 10 x 1-1/16               | 1                    | 89551                        | 89539   | 89553      | 89548        | 89549       | 12  |


### Shoe handle, narrow face



Corrosion resistant wire for cleaning narrow grooves and channels. Hardwood block.

EDP 89555 features wire laced construction.  
EDP 89556 has staple set construction.

EDP 89556


| Wire rows | Brush part length [Inches] | Block size l x w [Inches] | Trim length [Inches] | Wire type and EDP number |                 |  |
|-----------|----------------------------|---------------------------|----------------------|--------------------------|-----------------|---|
|           |                            |                           |                      | Carbon steel             | Stainless steel |   |
| 1         | 4-3/4                      | 10 x 3/8                  | 3/4                  | 89555                    | 89556           | 12  |

### Soft molders brush



Stapled in hardwood block.

EDP 89554

| Filament rows wide | Block size l x w [Inches] | Trim length [Inches] | Filament type and EDP number |  |
|--------------------|---------------------------|----------------------|------------------------------|---|
|                    |                           |                      | Black horsehair              |   |
| 4                  | 9-1/4 x 1-1/8             | 2-7/8                | 89554                        | 12  |

Grey tampico fibre or black crimped polypropylene fill. Bright ferrule. Round tapered handles.

### Parts cleaning brushes, pointed


EDP 89610



### Parts cleaning brush, flat

EDP 89614




| Diameter<br>[Inches]                  | Trim length<br>[Inches] | Filament type and EDP number |               |  |
|---------------------------------------|-------------------------|------------------------------|---------------|---|
|                                       |                         | Tampico                      | Polypropylene |   |
| <b>Parts cleaning brush – pointed</b> |                         |                              |               |   |
| 1-3/16                                | 2-5/8                   | 89609                        | -             | 12  |
| 1-1/4                                 | 3                       | 89610                        | -             | 12  |
| 1                                     | 2-3/4                   | -                            | 89612         | 12  |
| 1-1/16                                | 3                       | -                            | 89613         | 12  |
| <b>Parts cleaning brush – flat</b>    |                         |                              |               |   |
| 1                                     | 2-3/4                   | -                            | 89614         | 12  |

Pure black bristle or nylon fill. Bright seamless ferrule. Round tapered handle.

### Dome trim brushes, nylon

EDP 89616




| Diameter<br>[Inches] | Trim length<br>[Inches] | Filament type and EDP number |       |  |
|----------------------|-------------------------|------------------------------|-------|---|
|                      |                         | Black bristle                | Nylon |   |
| 1                    | 2-1/2                   | 89615                        | -     | 12  |
| 1-1/4                | 2-3/4                   | -                            | 89616 | 12  |

Twisted in wire brush part. Plain wood handle. Tapers from 2-7/8" diameter to 1-1/2".

### Spoke/grill brush

EDP 89617




| Diameter<br>[Inches] | Brush part<br>length<br>[Inches] | Overall<br>length<br>[Inches] | Filament type and EDP number |  |
|----------------------|----------------------------------|-------------------------------|------------------------------|---|
|                      |                                  |                               | Tampico                      |   |
| 2-7/8 to 1-1/2       | 10                               | 15                            | 89617                        | 12  |

White sidewall tire brushes have crimped brass wire fill. Staple set.

### Sidewall brushes

EDP 89620



| Brush part<br>l x w<br>[Inches] | Block size<br>l x w<br>[Inches] | Trim length<br>[Inches] | Filament type and EDP number |  |
|---------------------------------|---------------------------------|-------------------------|------------------------------|---|
|                                 |                                 |                         | Brass wire                   |   |
| 2-1/4 x 1-3/8                   | 7 x 1-5/8                       | 5/8                     | 89619                        | 12  |
| 3 x 2-1/2                       | 8-3/4 x 2-1/2                   | 5/8                     | 89620                        | 12  |

# Maintenance brushes

## Paint brushes

### Wall brushes, bristle




EDP 89726

**Better** natural bristle brush for general painting.

**Best** quality natural bristle brush. Longer length bristle for increased capacity and longer life. Protected in a vinyl sleeve.

**Professional** quality natural bristle brushes give the best performance and durability. Softer bristle gives smooth finish. Great for oil paints, urethane, varnish, etc. Wood handle gives most comfort and ease of use. Protected in a vinyl sleeve. Copper plated ferrule.

| Overall width [Inches]                         | Thickness [Inches] | Trim length [Inches] | EDP number |  |
|--|--------------------|----------------------|------------|---|
| <b>Better quality bristle wall brush</b>       |                    |                      |            |   |
| 1/2  | 1/4                | 1-3/4                | 89711      | 20  |
| 1-1/4  | 3/8                | 1-3/4                | 89712      | 20  |
| 2  | 3/8                | 1-3/4                | 89714      | 20  |
| 2-1/2  | 3/8                | 2                    | 89715      | 12  |
| 3  | 1/2                | 1-3/4                | 89716      | 10  |
| 4  | 1/2                | 2-1/4                | 89717      | 10  |
| <b>Best quality bristle wall brush</b>         |                    |                      |            |   |
| 1-1/4  | 3/8                | 2                    | 89718      | 20  |
| 2  | 1/2                | 2-1/4                | 89719      | 20  |
| 3  | 1/2                | 2-1/2                | 89720      | 10  |
| 4  | 5/8                | 2-3/4                | 89721      | 10  |
| <b>Professional quality bristle wall brush</b> |                    |                      |            |   |
| 2  | 3/4                | 3                    | 89724      | 10  |
| 3  | 7/8                | 3-1/4                | 89725      | 5   |
| 4  | 7/8                | 3-1/2                | 89726      | 5   |

### Wall brushes, synthetic




EDP 89750

**Better** quality polyester wall brush. Great value brush. Polyester is stiff and allows use as a glue applicator and general cleaning brush.

**Best** quality polyester brush. Economical, but still provides improved performance. Packaged in vinyl sleeve.

**Premier** quality nylon/polyester brush for top quality finishes. Nylon component provides increased durability and excellent workability. Foam injected handle and full packaging.

**Professional** wall brush features solid round tapered polyester/nylon filaments for long lasting performance. Wood handle gives most comfort and ease of use.

| Overall width [Inches]                     | Thickness [Inches] | Trim length [Inches] | EDP number |  |
|--|--------------------|----------------------|------------|---|
| <b>Better quality synthetic wall brush</b> |                    |                      |            |   |
| 1/2  | 1/4                | 1-3/4                | 89734      | 20  |
| 1-1/4                                      | 3/8                | 1-3/4                | 89735      | 20  |
| 2  | 3/8                | 2                    | 89737      | 20  |
| 3  | 1/2                | 2                    | 89739      | 10  |
| 4  | 1/2                | 2-1/4                | 89740      | 10  |
| <b>Best quality synthetic wall brush</b>   |                    |                      |            |   |
| 1-1/4                                      | 3/8                | 2                    | 89741      | 20  |
| 2  | 1/2                | 2-1/4                | 89742      | 20  |
| 3  | 1/2                | 2-1/2                | 89743      | 10  |
| 4  | 5/8                | 2-3/4                | 89744      | 10  |
| <b>Premier synthetic wall brush</b>        |                    |                      |            |   |
| 1-1/4                                      | 1/2                | 2-1/4                | 89745      | 20  |
| 2  | 5/8                | 2-1/2                | 89746      | 20  |
| 3  | 3/4                | 3                    | 89747      | 10  |
| 4  | 7/8                | 3-1/4                | 89748      | 10  |
| <b>Professional synthetic wall brush</b>   |                    |                      |            |   |
| 2  | 3/4                | 2-3/4                | 89749      | 10  |
| 3  | 7/8                | 3-1/4                | 89750      | 5   |




Angular brushes designed for "cutting in" for precise painting. Usually for detail painting around trim, corners, etc. Polyester/nylon mix is designed for all coatings. Blue plastic handle and full packaging.

### Wall brushes, synthetic angular



EDP 89730


| Overall width [Inches] | Thickness [Inches] | Trim length [Inches] | Filament type and EDP number |  |
|------------------------|--------------------|----------------------|------------------------------|---|
|                        |                    |                      | Polyester/nylon mix          |   |
| 1-1/2                  | 1/2                | 2-1/8                | 89729                        | 10  |
| 2                      | 5/8                | 2-5/8                | 89730                        | 10  |

Value priced, single use foam paint brushes for small touch-up jobs. Use on smooth surfaces with all paints, stains, varnishes, urethanes, melamine and gloss paints. Not recommended for shellac and lacquer.

### Foam brushes



EDP 89789


| Overall width [Inches] | Thickness [Inches] | Trim length [Inches] | Filament type and EDP number |  |
|------------------------|--------------------|----------------------|------------------------------|---|
|                        |                    |                      | Foam                         |   |
| 1                      | 9/16               | 2                    | 89788                        | 48  |
| 2                      | 9/16               | 2-7/16               | 89789                        | 48  |
| 3                      | 9/16               | 2-7/16               | 89790                        | 36  |
| 4                      | 9/16               | 2-7/16               | 89791                        | 24  |

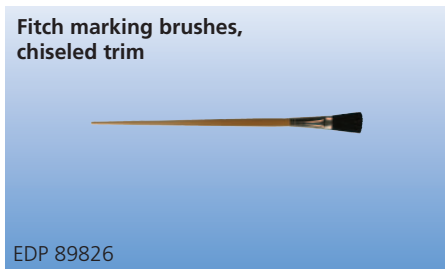
# Maintenance brushes

## Paint brushes




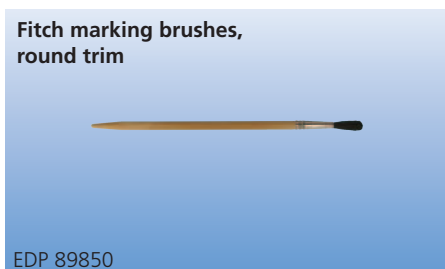
Designed to make painting easier in hard-to-reach places. Bent at 45°. Plastic handle with natural bristle.

| Handle length [Inches] | Brush width [Inches] | Trim length [Inches] | Overall length [Inches] | Filament type and EDP number |  |  |
|------------------------|----------------------|----------------------|-------------------------|------------------------------|--|---|
|                        |                      |                      |                         | Natural bristle              |  |   |
| 12                     | 1-1/2                | 1-3/4                | 15-1/2                  | 89795                        |  | 10  |




Natural bristle brush set in seamless metal ferrule. Natural polished wood handle.

| Width [Inches] | Trim length [Inches] | Filament type and EDP number |  |  |
|----------------|----------------------|------------------------------|--|---|
|                |                      | Black bristle                |  |   |
| 1/4            | 7/8                  | 89821                        |  | 6   |
| 1/2            | 7/8                  | 89823                        |  | 6   |
| 3/4            | 1-5/16               | 89825                        |  | 6   |
| 1              | 1-3/4                | 89826                        |  | 6   |



Natural bristle brush set in seamless metal ferrule. Plain wood handle. Available in camel hair and black bristle filaments.

| Width [Inches] | Brush size | Trim length [Inches] | Filament type and EDP number |               |  |
|----------------|------------|----------------------|------------------------------|---------------|---|
|                |            |                      | Camel hair                   | Black bristle |   |
| 9/64           | #1         | 5/8                  | 89839                        | -             | 6   |
| 5/32           | #2         | 3/4                  | 89840                        | 89846         | 6   |
| 3/16           | #3         | 7/8                  | 89841                        | -             | 6   |
| 7/32           | #4         | 7/8                  | 89842                        | -             | 6   |
| 7/32           | #4         | 1                    | -                            | 89848         | 6   |
| 1/4            | #5         | 1-1/16               | 89843                        | -             | 6   |
| 9/32           | #6         | 1-1/8                | 89844                        | 89850         | 6   |

Stiff black bristle set in bright metal seamless ferrule. Clear lacquered wood handle.

### Stencil brushes

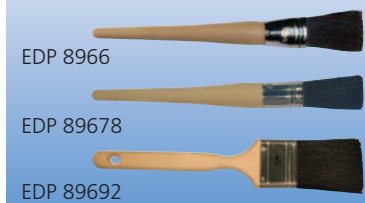


EDP 89860

| Brush diameter [Inches] | Stencil brush size | Trim length [Inches] | Filament type and EDP number |    |
|-------------------------|--------------------|----------------------|------------------------------|----|
|                         |                    |                      | Black china bristle          |    |
| 1                       | #6                 | 1-1/8                | 89860                        | 12 |
| 1-1/4                   | #8                 | 1-1/2                | 89861                        | 12 |
| 1-1/2                   | #10                | 1-5/8                | 89862                        | 12 |
| 2                       | #12                | 1-3/4                | 89863                        | 12 |

PFERD sash brushes are filled with natural black bristle, and are set into bright metal ferrules. Also used for mold cleaning and as parts cleaning brushes, and for application of gunk, adhesive, and grease in industrial applications.

### Sash brushes

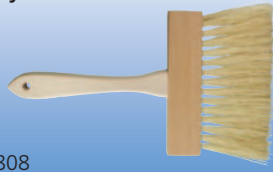


| Brush size              | Width [Inches] | Trim length [Inches] | Filament type and EDP number |    |
|-------------------------|----------------|----------------------|------------------------------|----|
|                         |                |                      | Black bristle                |    |
| <b>Round sash brush</b> |                |                      |                              |    |
| #6                      | 7/8            | 2-1/8                | 89665                        | 12 |
| #8                      | 1              | 2-1/8                | 89666                        | 12 |
| #10                     | 1-1/8          | 2-1/2                | 89667                        | 12 |
| <b>Oval sash brush</b>  |                |                      |                              |    |
| #2                      | 1/2            | 1-13/16              | 89674                        | 12 |
| #4                      | 13/16          | 2                    | 89675                        | 12 |
| #6                      | 1              | 2-1/16               | 89677                        | 12 |
| #8                      | 1-1/8          | 2-1/4                | 89678                        | 12 |
| #10                     | 1-1/4          | 2-1/4                | 89679                        | 12 |
| <b>Flat sash brush</b>  |                |                      |                              |    |
| #2                      | 9/16           | 2-3/4                | 89692                        | 12 |

# Maintenance brushes


## Painters sundries

### Masonry brushes



EDP 89808

White tampico fibre set into hardwood block.  
Extra heavy fill, handle attached.

| Block size<br>l x w<br>[Inches] | No.<br>rows | Trim length<br>[Inches] | Filament type and EDP number |  |
|---------------------------------|-------------|-------------------------|------------------------------|---|
|                                 |             |                         | Tampico                      |   |
| 6 x 7/8                         | 2           | 3                       | 89808                        | 12  |
| 6-1/2 x 2                       | 5           | 4                       | 89814                        | 12  |
| 6-1/2 x 1-3/4                   | 5           | 3-1/2                   | 89809                        | 12  |

### Whitewash brush



EDP 89818

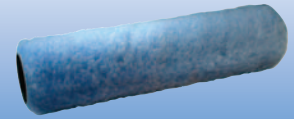
White tampico fibre staple set into hardwood block. Tapered handle hole (see page 93 for handle information).

| Block size<br>l x w<br>[Inches] | No.<br>rows | Trim length<br>[Inches] | Handle<br>EDP   | Filament type and EDP number |  |
|---------------------------------|-------------|-------------------------|---|------------------------------|--|
|                                 |             |                         |   | Tampico                      |  |
| 8 x 1                           | 2           | 2-1/2                   |  | 89818                        | 12   |




Economy grade refill provides the lowest cost knitted fabric. Recommended when a quality finish is not required. Economy quality PVC core. Bulk packed.

### Economy roller refill



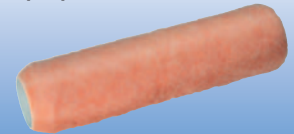
EDP 89753

| Overall width [Inches] | Pile height [Inches] | Fill material and EDP number |  |
|------------------------|----------------------|------------------------------|---|
|                        |                      | Polyester/knit fabric        |   |
| 9                      | 3/8                  | 89753                        | 30  |


These knitted polyester fabric rollers provide great coverage and a better finish. Available in a wide range of pile heights for all painting circumstances.

3/4" and 1-1/4" pile height rollers suitable for painting rough surfaces such as cinder block, brick, stone, tile and concrete.

### General purpose refill



EDP 89755


| Overall width [Inches] | Pile height [Inches] | Fill material and EDP number |  |
|------------------------|----------------------|------------------------------|---|
|                        |                      | Polyester/knit fabric        |   |
| 3                      | 1/4                  | 89768                        | 20  |
| 4                      | 1/4                  | 89769                        | 20  |
| 4                      | 3/8                  | 89770                        | 20  |
| 9                      | 1/4                  | 89755                        | 30  |
| 9                      | 3/8                  | 89756                        | 25  |
| 9                      | 1/2                  | 89757                        | 20  |
| 9                      | 3/4                  | 89758                        | 16  |
| 9                      | 1-1/4                | 89759                        | 16  |

Shed-resistant roller refill for smooth surfaces. Ideal for semi-gloss and high-gloss paints.

### Lint-free roller refill



EDP 89796


| Overall width [Inches] | Pile height [Inches] | Fill material and EDP number |  |
|------------------------|----------------------|------------------------------|---|
|                        |                      | Polyester/nylon mix          |   |
| 9                      | 1/4                  | 89796                        | 25  |

"Mocryl" specialty fabric is specifically formulated to apply to all high and semi-gloss paints, urethanes, enamels, varnish, and melamines. Smooth finishes. Also features solvent resistant phenolic cores.

### Mocryl specialty refill



EDP 89767

| Overall width [Inches] | Pile height [Inches] | Fill material and EDP number |  |
|------------------------|----------------------|------------------------------|---|
|                        |                      | Mocryl/nylon fabric          |   |
| 9                      | 1/4                  | 89767                        | 20  |

# Maintenance brushes

## Paint rollers and frames


### Pro-polylamb roller refill



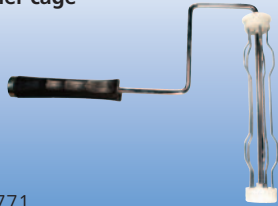
EDP 89763

"Polylamb" provides a high quality polyester/nylon fabric. Excellent paint carrying capacity and high durability makes "Polylamb" perfect for all painting and industrial coatings. Solvent resistant phenolic cores.




| Overall width [Inches] | Pile height [Inches] | Fill material and EDP number |  |
|------------------------|----------------------|------------------------------|---|
|                        |                      | Polyester/Nylon fabric       |   |
| 9                      | 3/8                  | 89763                        | 25  |
| 9                      | 1/2                  | 89764                        | 20  |
| 9                      | 3/4                  | 89765                        | 16  |

### Pro roller cage

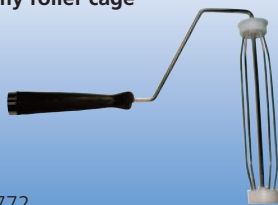


EDP 89771

Five wire cage frame allows tight fit with refills for less slipping. Comfortable plastic handle is threaded for use with extension poles (see page 93).


| Overall width [Inches] | Cage diameter [Inches] | EDP number |  |
|------------------------|------------------------|------------|---|
| 9                      | 1-1/2                  | 89771      | 10  |

### Economy roller cage

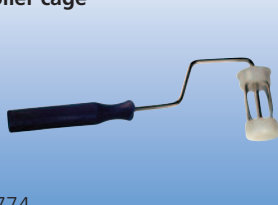


EDP 89772

Economy quality cage frame suitable for economy roller refills.

| Overall width [Inches] | Cage diameter [Inches] | EDP number |  |
|------------------------|------------------------|------------|---|
| 9                      | 1-1/2                  | 89772      | 10  |

### Trim roller cage



EDP 89774

Trim roller cage frame suitable for trim rollers.

| Overall width [Inches] | Cage diameter [Inches] | EDP number |  |
|------------------------|------------------------|------------|---|
| 3                      | 1-1/2                  | 89774      | 24  |
| 4                      | 1-1/2                  | 89775      | 24  |

"Time Trimmer" frame for use with "Gold Stripe" and velour rollers. Threaded handle to accommodate standard extension poles (see page 93).

### "Time Trimmer" frames



EDP 89782

| Frame length [Inches] | Refill size [Inches] | EDP number |  |
|-----------------------|----------------------|------------|---|
| 12                    | 4-6                  | 89782      | 20  |

"Gold Stripe" woven fabric is ideal for quickly painting most surfaces. Fabric over end of refill will paint both sides of corner at same time. Small diameter gets into tight spots. Also gives great finish.

### "Time Trimmer" refills - gold stripe roller refill



EDP 89779


| Overall width [Inches] | Pile height [Inches] | Fill material and EDP number |  |
|------------------------|----------------------|------------------------------|--|
|                        |                      | Woven fabric                 |  |
| 4                      | 7/16                 | 89779                        | 100  |
| 6                      | 7/16                 | 89780                        | 100  |

Mini mocryl trim rollers are best for fine finishes. Mini-diameter roller and steel handle are perfect for small area painting. Ideal for gloss paints, enamels, varnishes, melamine, marine finishes and epoxy.

### Mocryl trim roller coater and refills



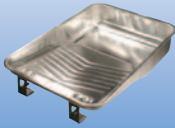
EDP 89785

| Overall width [Inches] | Pile height [Inches] | Fill material and EDP number |  |
|------------------------|----------------------|------------------------------|---|
|                        |                      | Mocryl/nylon blend           |   |
| 3                      | 1/8                  | 89785                        | 20  |

# Maintenance brushes

## Paint trays


### Metal tray



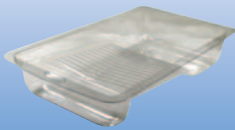
EDP 89776

Metal tray with 2 qt. capacity. For use with all 9" rollers.




| Overall capacity | Dimensions<br>l x w x h<br>[Inches] | EDP number |  |
|------------------|-------------------------------------|------------|---|
| 2 qt.            | 15-3/4 x 11-3/4 x 3                 | 89776      | 10  |

### "Time Trimmer" tray

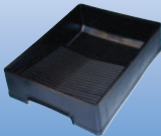


EDP 89784

"Time Trimmer" mini tray is constructed of solvent resistant R-PetG material. 6" width to accommodate the "Gold Stripe" or velour rollers.

| Overall capacity | Dimensions<br>l x w x h<br>[Inches] | EDP number |  |
|------------------|-------------------------------------|------------|---|
| 1 qt.            | 12-3/4 x 6-7/8 x 2-1/4              | 89784      | 20  |

### Super tray




EDP 89777

Professional plastic tray has unique design with deep well for added capacity (4 qt.). Impact resistant recycled polypropylene is also resistant to solvents. The professional's choice.









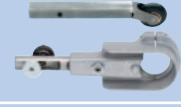
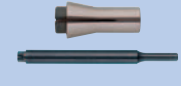

These disposable liners saves time and energy by eliminating clean up time.



| Overall capacity                   | Dimensions<br>l x w x h<br>[Inches] | EDP number |  |
|------------------------------------|-------------------------------------|------------|---|
| <b>Super tray</b><br>1 gal.        | 15 x 11-1/2 x 3-3/4                 | 89777      | 10  |
| <b>Super tray liners</b><br>1 gal. | 15 x 11-1/2 x 3-3/4                 | 89778      | 25  |



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|  | <b>Handpieces</b>   | 64          |
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|  | <b>Collets</b><br><b>Extensions</b><br>■ spindle extensions<br>■ rigid extensions | 66<br>67    |
|  | <b>SENSEHANDLE</b>  | 68          |



PFERDMEDIA

**NEW**

See what's new since we printed this book, visit [www.pferdusa.com/new](http://www.pferdusa.com/new)

### The PFERD system

The PFERD product range includes hand-held power tools for grinding, milling, brushing, cutting and polishing applications.

Our power tool range includes air-powered drives, electric drives and flexible shaft drives, offering the best solution for almost any working environment.

The PFERD system offers a wide range of products for all cutting, grinding, and surface finishing operations, as well as power tools designed specifically for those products, all from a single source.

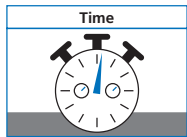
PFERD power tools are characterized by their performance, durability, comfort, and ease of use. They are less prone to faults and comply with the latest technological standards.

The use of PFERD high-performance products with the correct power tool provides maximum productivity for your application.

PFERD sales representatives and applications specialists are always happy to work with you on-site or remotely to analyze your application, and find the best and most economical individual combination of high-performance PFERD products and power tool. Contact us today!



### Economic value

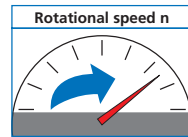


Time is money. The cost-effectiveness of a process is determined by the performance of the product and the time required. The faster

the grinding process, the greater its cost-effectiveness. The best results are achieved by products that have a consistently high aggressiveness throughout the processing time, in combination with PFERD quality power tool. These are powerful, durable and less susceptible to faults.

$$t = \$$$

### Rotational speed n



The rotational speed  $n$  is given in revolutions per minute [RPM]. The required rotational speed is determined from the cutting speed  $V$  in surface

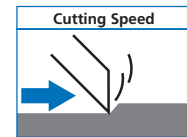
feet per minute [SFPM] or in metres per second [m/s] and the diameter of the product  $d \times \pi$  (3.14).

#### Note

The rotational speed data for PFERD products relates to their use under load.

$$n = \frac{V}{d \times \pi}$$

### Cutting speed V



The cutting speed  $V$  is the speed at which a product moves through the workpiece material in the direction of the cut, removing a chip.

The cutting speed,  $V$ , is given in surface feet per minute [SFPM] or metres per second [m/s]. It depends on the rotational speed of the drive  $n$  in revolutions per minute [RPM] and the diameter of the product  $d \times \pi$  (3.14).

$$V = n \times d \times \pi$$

### Dust warning

Use of the tools in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after tool operation.

Refer to the Safety Data Sheet (SDS) for further information regarding the product to be used.

Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material.

PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.

### Safety regulations



Read the instructions!  
= (Please always observe the respective valid safety regulations!)



= Wear a respirator!






= Read the Safety Data Sheets (SDS) before using any materials!



In accordance with legal requirements, all machines are accompanied by operating manuals and safety notes.



The PFERD power tool range is classified by three drive systems:

| Air grinders   | Electric grinders  | Flexible shaft drives  |
|--|--|--|
|   |  |                                     |
| <b>Applications and economic value</b>   |  |  |
| Single workstation, stationary use   | Single workstation, flexible use on assembly sites                                 | Single workstation, stationary use with a variety of speeds and applications, very easy to handle at high power output |
| High power output, low wear, long service life, economical air consumption, robust, hard-wearing slide vane and turbine motors | High power output, low wear, long service life                                     | Very robust, low wear, long service life   |
| <b>Power tool types</b>  |  |  |
| Straight grinders  | Straight grinders  | Straight grinders  |
| Angle grinders   | Angle grinders   | Angle grinders   |
| Belt grinders  | Belt grinders  | Belt grinders  |
| -  | Linear finishing tools   | Linear finishing tools   |
| -  | Fillet weld grinder  | -  |
| Specialty tools  | Specialty tools  | Specialty tools  |
| <b>Power tool characteristics</b>  |  |  |
| No risk of damaging the drive from excessive pressure; can be safely loaded up to stall point                                  | Overload protection, can briefly withstand up to four times the nominal output     | Overload protection, can briefly withstand up to six times the nominal output  |
| Optimum rotational speed and power ratios  | Optimal tuning possible for product application                                    | Optimal tuning possible for product application  |
| Good size to power output ratio  | Higher rotational speed/power output ratio compared to air grinders                | High motor power output, compact handpieces, high power transmission to the product                                    |
| High rotational speeds   | Maintains constant rotational speed even under load                                | Cover large rotational speed ranges  |
| <b>Ergonomics/Handling</b>   |  |  |
| Drive size and shape suitable for many applications  | Ergonomic drive shapes, easy to handle   | Light arbors that are easy to handle for low-fatigue work  |
| <b>Speed ranges [RPM]</b>  |  |  |
| 4,500 to 100,000   | 750 to 33,000  | 0 to 28,800  |
| <b>Speed regulation</b>  |  |  |
| Single-rotation speed  | Stepless, electronic   | Stepless, electronic, or gear-driven   |
| <b>Power source</b>  |  |  |
| Compressed air (87 psi / 6.3 bar)  | 1-phase alternating current  | 1-phase alternating current, 3-phase alternating current   |
| <b>Power output range [HP]</b>   |  |  |
| 0.1 to 1.3 (75 to 1,100 Watts)   | 0.4 to 1.2 (500 to 910 Watts)  | 0.4 to 1.2 (300 to 880 Watts)  |
| <b>Safety</b>  |  |  |
| Safe energy form, no sparking  | Safeguard to prevent unintentional re-starting                                     | Safeguard to prevent unintentional re-starting (most models)   |
| <b>Maintenance</b>   |  |  |
| Simple replacement of worn parts. Drawings and spare parts available online.   | Simple replacement of carbon brushes. Drawings and spare parts available online.   | Maintenance can be performed by qualified technicians. Drawings and spare parts available online.                      |



The most important prerequisite for cost effective working methods is the selection of the optimal PFERD product. After this, the choice of a suitable power tool can be made.

The following points have to be taken into consideration:

- Design, shape and size
- Speed
- Power output
- Adapters and drive arbors


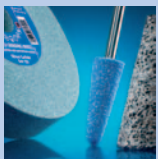



The selection is also influenced through:

- Accessibility of the workpiece
- Mobility
- Availability of air or electrical power supply.

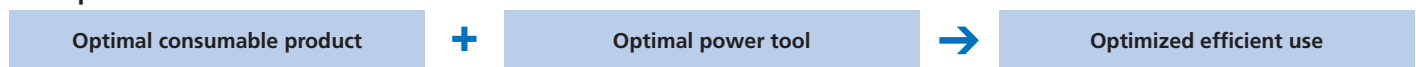
The table below provides you with a general overview of suitable power tools for the PFERD products shown in the catalogues.

For help with any specific application problems, contact a PFERD sales representative or applications specialist today!



| Power tool            |                       | Tool  | Page(s) | Catalogue 202   | Catalogue 203   | Catalogue 204  | Catalogue 206   | Catalogue 208   |
|-----------------------|-----------------------|-------|---------|---|---|--|---|---|
|                       |                       |       |         |  |  |  |  |  |
| Air-powered machines  | Straight grinders     | 11-22 | ●       | ●   | ●   | ●  | ●   |   |
|                       | Angle grinders        | 26-27 | ●       | ●   | ●   | ●  | ●   |   |
|                       | Belt grinder          | 28    | -       | -   | ●   | -  | -   |   |
| Electric machines     | Straight grinders     | 35-40 | ●       | ●   | ●   | ●  | ●   |   |
|                       | Angle grinders        | 41-42 | -       | -   | ●   | -  | -   |   |
|                       | Linear finishing tool | 42    | -       | -   | ●   | -  | -   |   |
|                       | Belt grinder          | 44    | -       | -   | ●   | -  | -   |   |
|                       | Fillet weld grinder   | 46    | -       | -   | ●   | -  | ●   |   |
| Flexible shaft drives | Flexible shafts with  | 50-61 |         |   |   |  |   |   |
|                       | - Straight handpieces | 54-60 | ●       | ●   | ●   | ●  | ●   |   |
|                       | - Angle handpieces    | 54-60 | ●       | ●   | ●   | ●  | ●   |   |

### Principle:



PFERD catalogues 202 - 208 provide a multitude of possibilities, allowing you to choose the best product for your application. In order to apply these products with optimum efficiency, you need a power tool perfectly matching the chosen product.

The power tools are especially conceived for grinding, milling, brushing, cutting and polishing. They cover all relevant speed and power output performance ranges and accord with the latest requirements in ergonomics and safety.

They are also reliable and have long service lives. In order to find the most cost effective solution to your application problem, always choose the machine matching the most suitable product.

## PFERDVALUE®

Results from the PFERD test laboratories as well as from independent testing institutes prove: **PFERD products offer measurable added value.**

The optimization of work processes through the use of powerful premium power tools has a positive effect on the cost-effectiveness of your operations.

In the long term, to be cost-effective is to be sustainable.

Experience the added value with PFERD. Discover **PFERDERGONOMICS®** and **PFERDEFFICIENCY®**, both part of the **PFERDVALUE®** program.

Comprehensive and detailed information on this program can be found in the **PFERDVALUE®** brochure.

Call PFERD today to request your copy, or visit [www.pferd.com](http://www.pferd.com) to download one!



### PFERDMEDIA

For more information, a complete brochure is available. Please visit [pferdusa.com/pferdvalue](http://pferdusa.com/pferdvalue) to request a free copy or to download a pdf version.

## PFERDERGONOMICS®

Ergonomics is an important aspect of occupational health. The aim is to organize working conditions in such a way as to **increase the users' comfort and not to impair their health** – even under tough working conditions and if they have to carry out a certain job for a long time.

As a manufacturer of hand-held tools, we feel especially obliged to tool users to contribute to more safety, working comfort and health. That is why people are at the focus of all the processes that a hand-held tool passes through during its creation – from research and development right through to mass production.

As part of **PFERDERGONOMICS®**, PFERD offers ergonomically optimized power tools that contribute to greater safety and working comfort, and thus to health protection. Use the chart below to understand the **ergonomic** properties of PFERD power tools.



Vibration Filter

### Less vibration

- Elastically mounted spindles
- Anti-vibration handle
- Autobalancer
- EU Occupational Health Directive 2002/44/EC



Noise Filter

### Reduced noise

- Quieter than 72 dB(A)
- EU Occupational Health Directive 2003/10/EC



Emission Filter

### Minimized emissions

- Oil-free drives



Haptic Filter

### Optimized feel

- Light
- Easy to handle
- Slim
- Ergonomic (shape)

## PFERDEFFICIENCY®

**Efficiency** is the focus of all work processes. It is motivated by **cost savings** on the one hand and **productivity increases** on the other.

With efficiency as the goal, users are challenged daily with completing their **tasks quickly, effectively, and with the best results.**

As part of **PFERDEFFICIENCY®**, PFERD offers innovative, high-performance power tools with **outstanding added value.** They achieve excellent results in the shortest possible **time**, save **energy** and/or generate **less costly waste.**

Use the chart beside to understand the **efficiency** assessments of PFERD power tools.



Energy Saving

### Less energy consumption

- Air tools with centrifugal governors
- Electric tools with stepless speed variation
- Flexible shaft tools with frequency regulation



Waste Saving

### Less waste created

- Power tools with elastic-suspended spindles
- Long service life in tools with 3-phase motor



Time Saving

### Shorter processing times

- Air tools with elastic-suspended spindles
- Electric tools with stepless speed variation
- Flexible shaft tools with quickchanging handpieces
- Higher than average motor: handpiece ratios



Resource Saving

### Less overall resources consumed

- **Energy Saving**
- **Time Saving**
- **Waste Saving**
- Ergonomically optimized (minimum one of the **PFERDERGONOMICS®** pictograms)



### PFERD packaging

PFERD provides power tools as standard in industrial packaging.

#### Advantages

- Robust packaging protecting the power tools from dirt and damage.
- All the important information included on the packaging label to facilitate product selection.



### PFERD box label

In addition to the description and the EAN code, the most important technical information is shown with the help of graphical icons (see table below).

#### Advantages

- Easier comparison of product features thanks to clear icons.
- The label contains information on other accessories.



### PFERD TOOL-CENTER

All power tools can be presented with special supports on the **PFERD TOOL-CENTER**. The information and symbol cards present all the important information on the use of suitable PFERD products on the spot.



Further information on PFERD TOOL-CENTER systems can be found in the brochure **"The PFERD TOOL-CENTER – More turnover for you at the point of sale"**.

### Explanation of box label icons

| Power tool general information |                         |
|--------------------------------|-------------------------|
|                                | Rotational speed        |
|                                | Belt speed              |
|                                | Power output            |
| <br>                           | Included keys/wrenches  |
| <br>                           |                         |
| <b>Included accessories</b>    |                         |
| <br>                           | Collet/threaded spindle |
|                                | Guard                   |

| Product mounting |                                    |
|------------------|------------------------------------|
|                  | Centre hole/arbor hole             |
|                  | Suitable for this disc diameter    |
|                  | Suitable for these drum dimensions |
|                  | Suitable for these belt dimensions |
| Air grinders     |                                    |
| <br>             | Oiling requirements                |
|                  | Air consumption                    |
|                  | Air supply hose diameter           |

| Electric grinders and flexible shaft drives |                                      |
|---|--------------------------------------|
| <br>  | Voltage                              |
| <br>  | Frequency                            |
|   | Double insulation                    |
|   | Protective grounding                 |
| Flexible shafts                             |                                      |
|   | Drive side shaft connection          |
|   | Handpiece side sliding-type coupling |
|   | Core diameter                        |
|   | Length flexible shaft/core           |



### Maintenance and repair service

PFERD provides a maintenance and repair service, which includes basic cleaning, repair and final safety checks at our factory. Our qualified specialists will be happy to quickly create a detailed quotation without obligation.

Should the repair costs exceed the replacement value, you will also receive a quotation for a new power tool. Only original PFERD spare parts will be used for the repair of the power tool. After the repair, you will receive your power tool in as-new condition.

### PFERD support

PFERD offers you individual targeted support to solve your application problems. PFERD's experienced sales representatives and technical advisors are happy to help you select your power tool – by visiting you on-site if desired. Please contact us:

**Canada Phone: (905) 501-1555**  
**Toll-Free: (866) 245-1555**

**USA Phone: (262) 255-3200**  
**Toll-Free: (800) 342-9015**



### PFERDMEDIA

For information on our power tool repair facilities, or to register your power tool, visit [pferdusa.com/repair](http://pferdusa.com/repair)



### Performance test bench

PFERD has modern performance test benches for quality control, drive optimization and verification of safety guidelines. On request, you will receive a detailed PFERD performance certificate for your professional power tool. For each machine type, we perform safety checks according to the current state of the art and write test reports.



### Products made to order

If you cannot find the solution for your particular application in our comprehensive product catalogue, on request we can produce power tools in premium PFERD quality, tailor-made to meet the requirements of your job.



### PFERD PRAXIS

PFERD PRAXIS brochures contain valuable and practical information about material properties, as well as tips and tricks on the use of PFERD products and power tools on specific applications and market segments.

### Guarantee

Our PFERD guarantee for defects on electric and air grinders as also the required accessories is exercised in such a manner that all parts, which have material defects, will either be repaired or replaced free of charge. Warranty for these material defect claims shall be valid for a period of twelve (12) months at the most. This does not apply if longer periods of time are stipulated by law.

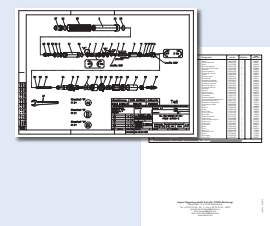
The warranty shall not cover damage caused by improper handling, the use of spare parts other than our own, or by repairs carried out in workshops other than our own.

### Technical modifications

Technical developments and ergonomic improvements are continuously incorporated into our design and manufacture. We therefore reserve the right to make technical changes to our products.

In the event of changes to the design, we still ensure the availability of spare parts for four years.

You can find drawings and spare parts information at [pferdusa.com/spareparts](http://pferdusa.com/spareparts), or order them from a PFERD repair facility!





Air grinders are the fastest machines amongst the power tools. They achieve higher speeds in comparison to electric or flexible shaft drives. They have – when measured against their smaller size – a high power output. The durable and wear-resistant sliding vane and turbine motors have a long service life, low maintenance and are very easy to service.

### Areas of application

Air grinders are very versatile. They are used especially in medium- and large-sized companies that have a compressed air network at their disposal. They are used economically and reliably in production and assembly lines.

### Criteria for selecting the optimum air grinder

The most important prerequisite for cost effective work is the selection of an optimal tool. After this, the choice of a suitable power tool can be made. The following points have to be taken into consideration.

#### 1. Design, shape and size

Every type of application places a specific demand on the shape and size of the power tool. The various designs can be used for many different tasks. Depending on the dimensions, accessibility, type and frequency of the application, the ideal power tool can be selected for the task at hand.

#### 2. RPM

The power tool should always be selected according to the RPM and cutting speed recommendations for the tool. Please refer to catalogues 202 - 208 for these recommendations.

### Recommendations and prerequisites for cost-effective use of air grinders

#### 1. Air pressure

The machine should be run at an air pressure of 85 - 90 psi. A sufficient flow rate must be continuously ensured. Over-pressure leads to premature and higher levels of wear.

#### 2. Air consumption

All data in this catalogue refers to air consumption in cubic feet per minute [cfm]. This is the volume of the air when expanded to atmospheric pressure. Unless otherwise indicated, the air consumption figures stated are always for a pressure of 90 psi and the maximum consumption of the machine in question. Non-regulated, pneumatic devices have the highest consumption at idling speed. Machines with centrifugal governors have the highest air consumption under full load.

#### 3. Rotational speed (RPM)

All speeds are stated in revolutions per minute [RPM] and refer to the idling speed at a pressure of 90 psi. In the case of non-controlled machines, the speed under full load is approximately 50% of the idling speed.

With machines featuring a centrifugal governor, the speed under full load is approximately 80 to 90% of the idling speed.

### PFERD product range

PFERD offers straight, angle and belt grinders as well as special drives. PFERD air grinders are technologically advanced and contain the latest ergonomic findings and requirements. They have been developed especially for the economic application of abrasives and cutting tools with defined geometries and cover a wide range of speeds (4,000 - 100,000 RPM) and power outputs (0.1 - 1.3 HP).

#### 3. Power output

The drive unit's power output is the deciding factor for maintaining the RPM under load. The load is determined from the material, cutting capability of the tool and the grinding pressure.

#### 4. Mounting system

Depending on the PFERD product you are using on the power tool, different adapters are available to mount the product (e.g. collets or threaded spindles). Collets are available in a wide selection of imperial and metric shanks for all machines. Please refer to pages 66-67 for an overview of the collets and spindle extensions.

Should you have any additional questions, your PFERD sales team will be happy to help.

### Advantages

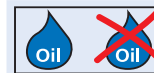
- Compact, ergonomic designed shape.
- Low weight.
- Technologically advanced.
- High power to weight performance.
- Versatile in use.
- Single speed RPM.
- No danger from overloading, can be loaded up to machine standstill.
- Housing insulated against low temperatures and vibration.
- Low-maintenance.
- Easy to service.
- Cost effective.

### Use of oil in power tool operation

Turbine and sliding vane motors are labelled as follows:



Use only without oil.



Operates with or without oil.



Use only with oil.

### Advantages of oil-free compressed air

- User-friendly, protecting both people and the workshop environment.
- Reduces operation costs, because oil and fittings can be dispensed with.
- Avoids oily residue on the workpiece.

#### 4. Oil mist lubrication

An adequate oil mist lubrication is of crucial importance for proper machine operation, should the machine require oil.

#### 5. Machines running on oil-free compressed air

Machines marked oil-free can be used without oil mist lubrication. Units which can operate with or without oil have a minimal reduction in RPM/output performance when used without oil.

#### 6. Maintenance unit

It is recommended to install a complete maintenance unit (dirt filter + pressure reducer + oiler) at a distance not exceeding 16.4 ft from the machine. The size of the filter pores should be 3 - 5 µm. In humid environments, air-powered machines should not be operated without oil.

#### 7. In-line microfilter

Small high-speed grinders (approx. 40,000 RPM and over) should be used with an in-line filter instead of the regular dirt trap, should the maintenance unit's dirt filter pores be larger than 5 µm. For in-line microfilters, see page 32.

#### 8. Air supply hose

The supply hose must have an inner diameter that at least corresponds to those stated for the drives.

#### 9. Valves and fittings

Always use extra fittings such as hose nozzles, self-closing valve couplings etc. with the largest possible inside diameter. It is recommended to use the minimum necessary valve couplings in order to prevent unnecessary pressure losses.

#### 10. Noise level

Air tool operators must always wear hearing protection, as contact noise exceeds 85 dB(A) in many cases, even though the idling noise of the machine remains well below this level.



#### 11. Vibrations

PFERD air tools meet the requirements of the EC machinery directive regarding vibrations from hand-held or hand-guided machines. This is achieved through:

- Precise concentricity
- Vibration damping intermediate layers
- Vibration-insulated housings

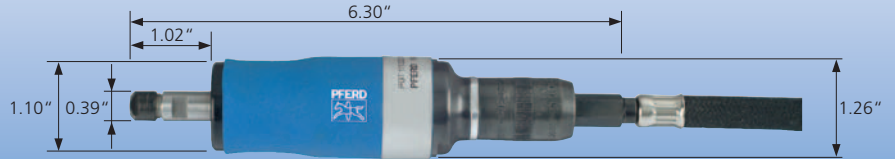
#### 12. Maintenance and Safety

We recommend servicing the drives at regular intervals.



PGT 1/1000

Rotational speed: 100,000 RPM  
Output: 0.1 HP / 75 Watts



### PFERDERGONOMICS®



### Tool features

- P** Pneumatic
- G** Straight grinder
- T** Turbine motor – use without oil only!
- 1** 0.1 HP output (75 W)
- 1000** 100,000 RPM rotational speed

### Tool benefits

- For fine milling, grinding and engraving work.
- Spindle bearing ensures high concentricity.
- Light, easy to handle.
- Holds like a pen.
- Front exhaust deflects chips.

### Accessories included

- 6.5' air supply hose (with 1/4" male threaded connection)
- 2 keys
- 1/8" collet 93007 (collet group 1)



**Use only without oil.**

In-line filter 95512 recommended



PFERDMEDIA

To see it in action, please visit [pferdusa.com/90002](http://pferdusa.com/90002)

| EDP number | Model number | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|--------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90002      | PGT 1/1000   | 6                     | front             | ring          | 62                  | 13/64                               | 0.53        |

### Collets

| Group 1    | For shank diameter |          |       |
|------------|--------------------|----------|-------|
|            | 3/32 inch          | 1/8 inch | 3 mm  |
| EDP number | 93006              | 93007    | 93003 |

For collet details, see table on page 66.

### Keys

| Width | Qty | EDP number |
|-------|-----|------------|
| 7 mm  | 2   | 93327      |

### Replacement hose

| Description  | EDP number |
|--|------------|
| Loose replacement hose with special coupling threads | 97028      |

### In-line filter

| Description     | EDP number |
|-----------------|------------|
| SF 24 T8-IG 1/4 | 95512      |

### Recommended PFERD products

| Catalogue 202   | Catalogue 203  |
|---|--|
| <b>Tungsten carbide burs</b><br>up to 1/8" diameter<br>with 1/8" shank diameter | <b>Mounted points</b><br>up to 1/8" diameter<br>with 1/8" shank diameter |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

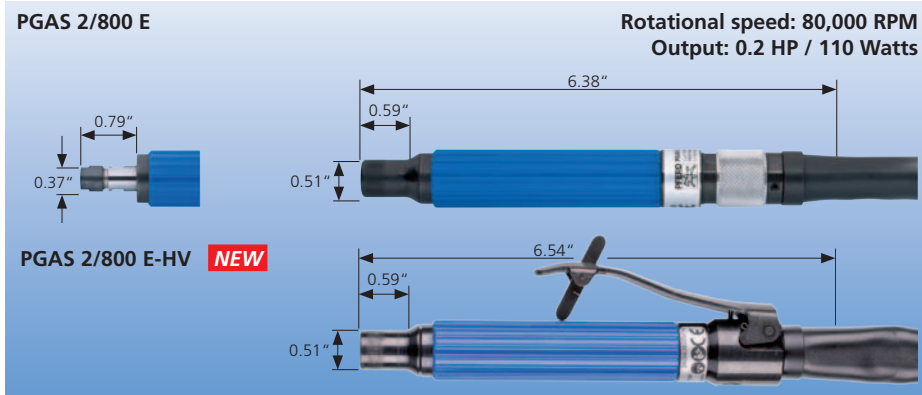
Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

# Air grinders

## Straight grinders



**Rotational speed: 80,000 RPM**  
**Output: 0.2 HP / 110 Watts**

**Tool features**

- P** Pneumatic
- G** Straight grinder
- A** Rear exhaust hose
- S** Silencer
- 2** 0.2 HP output (110 Watts)
- 800** 80,000 RPM rotational speed
- E** Elastic suspended spindle
- HV** Safety lever throttle

**Accessories included**

- 6.5' air supply hose, 3' exhaust hose (without nozzle)
- 2 keys
- Detachable spindle cap
- 1/8" collet 93007 (collet group 1)

**Tool benefits**

- Rubber suspended spindle for reduced vibration.
- For fine milling, grinding and engraving work.
- Protective spindle cap can be removed for work in narrow geometries.
- Holds like a pen.
- Rear exhaust prevents oil and debris from blowing onto workpiece.

**Oil** Use only with oil.  
1 - 2 drops per minute  
In-line filter 95513 recommended

**PFERDERGONOMICS®**

**PFERDEFFICIENCY®**

**PFERDMEDIA**

To see it in action, please visit [pferdusa.com/90006](http://pferdusa.com/90006)

| EDP number | Model number    | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|-----------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90006      | PGAS 2/800 E    | 10-11                 | rear              | ring          | 70                  | 15/64                               | 0.46        |
| 90008      | PGAS 2/800 E-HV | 10-11                 | rear              | lever         | 70                  | 15/64                               | 0.46        |

### Collets

| Group 1           | For shank diameter |          |       |
|-------------------|--------------------|----------|-------|
|                   | 3/32 inch          | 1/8 inch | 3 mm  |
| <b>EDP number</b> | 93006              | 93007    | 93003 |

For collet details, see table on page 66.

### Keys

| Width | Qty | EDP number |
|-------|-----|------------|
| 8 mm  | 2   | 93328      |

### Recommended PFERD products

| Catalogue 202  | Catalogue 203*  |
|--|---|
| <b>Tungsten carbide burs</b><br>up to 1/8" diameter with 1/8" shank diameter | <b>Mounted points</b><br>up to 1/4" diameter with 1/8" shank diameter |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

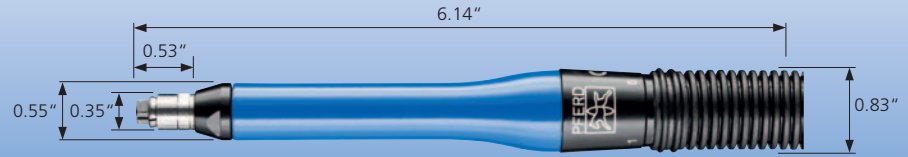




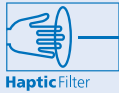
PGAS 1/700

**NEW**

Rotational speed: 70,000 RPM  
Output: 0.1 HP / 100 Watts



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PFERDMEDIA

To see it in action, please visit  
[pferdusa.com/90010](http://pferdusa.com/90010)



### Tool features

- P** Pneumatic
- G** Straight grinder
- A** Rear exhaust hose
- S** Silencer
- 1** 0.1 HP output (100 Watts)
- 700** 70,000 RPM rotational speed

**Note:** Also available in lever throttle version  
PGAS 1/700 HV on request, EDP 90011.

### Accessories included

- 6.5' air supply hose, 2.5' exhaust hose (with 1/4" NPT male threaded connection)
- 2 keys
- 1/8" collet 93239 (collet group 15)

### Tool benefits

- Very slim design. Optimal for precision applications.
- Ideal for fine engraving, deburring and polishing tasks.
- Can be held like a pen.
- Rear exhaust prevents oil and debris from blowing onto workpiece.



**Use only with oil.**  
**1 drop per minute**

*In-line filter 95513 recommended*

| EDP number | Model number | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|--------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90010      | PGAS 1/700   | 4                     | rear              | ring          | 76                  | 13/64                               | 0.22        |

### Collets




| Group 15   | For shank diameter |          |       |
|------------|--------------------|----------|-------|
|            | 3/32 inch          | 1/8 inch | 3 mm  |
| EDP number | 93240              | 93239    | 93238 |

For collet details, see table on page 66.

### Keys

| Width  | Qty | EDP number |
|--------|-----|------------|
| 6/8 mm | 2   | 93325      |

### Recommended PFERD products

| Catalogue 202   | Catalogue 203*  | Catalogue 204*   |
|---|---|--|
| <b>Tungsten carbide burs</b><br>up to 1/8" diameter<br>with 1/8" shank diameter  | <b>Mounted points</b><br>up to 1/2" diameter<br>with 1/8" shank diameter  | <b>Poliflex® fine grinding points</b><br>Bond LR<br>up to 5/16" diameter<br>with 1/8" shank diameter  |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

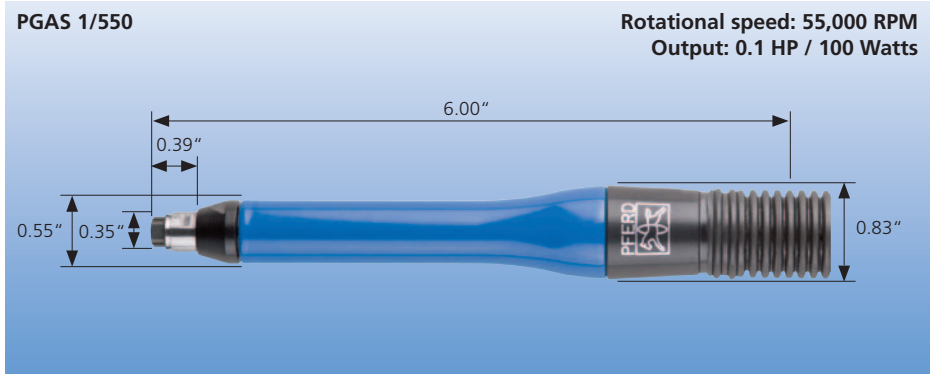
Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

# Air grinders

## Straight grinders



**Tool features**

- P** Pneumatic
- G** Straight grinder
- A** Rear exhaust hose
- S** Silencer
- 1** 0.1 HP output (100 Watts)
- 550** 55,000 RPM rotational speed

**Accessories included**

- 6.5' air supply hose, 2.5' exhaust hose (with 1/4" NPT male threaded connection)
- 2 keys
- 1/8" collet 93239 (collet group 15)

**Tool benefits**

- Very slim design. Optimal for precision applications.
- Ideal for fine engraving, deburring and polishing tasks.
- Can be held like a pen.
- Rear exhaust prevents oil and debris from blowing onto workpiece.

**Use only with oil.**  
**1 drop per minute**  
*In-line filter 95513 recommended*

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HapticFilter

**PFERDMEDIA**

To see it in action, please visit [pferdusa.com/90009](http://pferdusa.com/90009)

| EDP number | Model number | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|--------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90009      | PGAS 1/550   | 4                     | rear              | ring          | 74                  | 13/64                               | 0.22        |

### Collets

| Group 15          | For shank diameter |          |       |
|-------------------|--------------------|----------|-------|
|                   | 3/32 inch          | 1/8 inch | 3 mm  |
| <b>EDP number</b> | 93240              | 93239    | 93238 |

For collet details, see table on page 66.

### Keys

| Width  | Qty | EDP number |
|--------|-----|------------|
| 6/8 mm | 2   | 93325      |

### Recommended PFERD products

| Catalogue 202  | Catalogue 203*  | Catalogue 204*   |
|--|---|--|
| <b>Tungsten carbide burs</b><br>up to 1/8" diameter<br>1/8" shank diameter | <b>Mounted points</b><br>up to 5/16" diameter<br>with 1/8" shank diameter | <b>Poliflex® fine grinding points</b><br>Bond LR<br>up to 5/16" diameter<br>with 1/8" shank diameter |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.



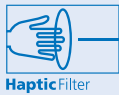
PGAS 3/440 HV

**NEW**

Rotational speed: 44,000 RPM  
Output: 0.3 HP / 220 Watts



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### Tool features

- P** Pneumatic
- G** Straight grinder
- A** Rear exhaust hose
- S** Silencer
- 3** 0.3 HP output (220 Watts)
- 440** 44,000 RPM rotational speed
- HV** Safety lever throttle

### Tool benefits

- Smallest and lightest straight grinder in this performance class.
- Slim and rugged design.
- Rear exhaust directs air and debris away from work.
- Ergonomic grip for optimum control, particularly in axial direction.

### Accessories included

- 6.5' air supply hose, 2.5' exhaust hose (without nozzle)
- 2 keys
- 1/4" collet 93074 (collet group 6)



Use only with oil.  
2 drops per minute.

*In-line filter 95514 recommended*



PFERDMEDIA

To see it in action, please visit  
[pferdusa.com/90014](http://pferdusa.com/90014)

| EDP number | Model number  | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|---------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90014      | PGAS 3/440 HV | 12                    | rear              | lever         | 72                  | 5/16                                | 0.75        |

### Collets

| Group 6    | For shank diameter |          |          |       |       |       |
|------------|--------------------|----------|----------|-------|-------|-------|
|            | 3/32 Inch          | 1/8 Inch | 1/4 Inch | 3 mm  | 6 mm  | 8 mm  |
| EDP number | 93067              | 93072    | 93074    | 93057 | 93062 | 93064 |

For collet details, see table on page 66.

### Keys

|  | Width | Qty | EDP number |
|--|-------|-----|------------|
|  | 11 mm | 1   | 93335      |
|  | 14 mm | 1   | 93340      |

### Recommended PFERD products

| Catalogue 202  | Catalogue 204*  |
|--|---|
| <b>Tungsten carbide burs</b><br>up to 3/16" diameter<br> | <b>Mounted flap wheels</b><br>3/8" dia.<br>   |
| <b>Mounted points</b><br>up to 3/4" diameter<br>         | <b>Poliflex® fine grinding points</b><br>Bond <b>GR</b><br>up to 1/4" dia.<br>Bond <b>LR</b><br>up to 3/8" dia.<br> |
| <b>Mounted points</b><br>up to 3/4" diameter<br>         | <b>Abrasive spiral bands</b><br>up to 1/2" diameter<br>   |
|  | <b>POLICAP® abrasive caps</b><br>3/16" diameter<br>   |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

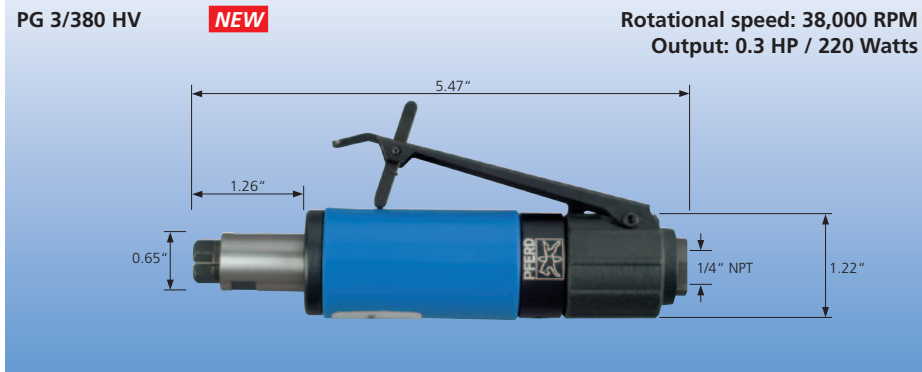
Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang. Comply with ANSI B7.1-2000 standards and OSHA regulations.

# Air grinders

## Straight grinders



**Tool features**

- P** Pneumatic
- G** Straight grinder
- 3** 0.3 HP output (220 Watts)
- 380** 38,000 RPM rotational speed
- HV** Safety lever throttle

**Accessories included**

- 2 keys
- 1/4" collet 93074 (collet group 6)
- 1/4" NPT female threaded connection

**Tool benefits**

- Compact design, convenient in use.
- Easy to handle, and to guide.
- Low vibration, protecting people, tools and machine.

**Use only with oil.**  
2 drops per minute  
*In-line filter 95514 recommended*

**PFERDERGONOMICS®**

HapticFilter

**PFERDMEDIA**

To see it in action, please visit [pferdusa.com/90018](http://pferdusa.com/90018)

| EDP number | Model number | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|--------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90018      | PG 3/380 HV  | 12                    | front             | lever         | 78                  | 3/8                                 | 0.68        |

### Collets

| Group 6           | For shank diameter |          |          |       |       |       |  |
|-------------------|--------------------|----------|----------|-------|-------|-------|--|
|                   | 3/32 Inch          | 1/8 Inch | 1/4 Inch | 3 mm  | 6 mm  | 8 mm  |  |
| <b>EDP number</b> | 93067              | 93072    | 93074    | 93057 | 93062 | 93064 |  |

For collet details, see table on page 66.

### Keys

|  | Width | Qty | EDP number |
|--|-------|-----|------------|
|  | 11 mm | 1   | 93335      |
|  | 14 mm | 1   | 93340      |

### Recommended PFERD products

| Catalogue 202  | Catalogue 204*  |
|--|---|
| <b>Tungsten carbide burs</b><br>3/16" to 1/4" diameter<br>                         | <b>Abrasive spiral bands</b><br>3/8" to 5/8" diameter<br>   |
| <b>Mounted points</b><br>1/2" to 1" diameter<br>                                   | <b>Poliflex® fine grinding points</b><br>Bond <b>GR</b><br>1/4" diameter<br>Bond <b>LR</b><br>1/2" diameter<br> |
| <b>Catalogue 203*</b><br><b>POLICAP® abrasive caps</b><br>1/4", 9/32" diameter<br> | <b>Mounted flap wheels</b><br>3/8" diameter<br>1/8" shank diameter<br>  |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

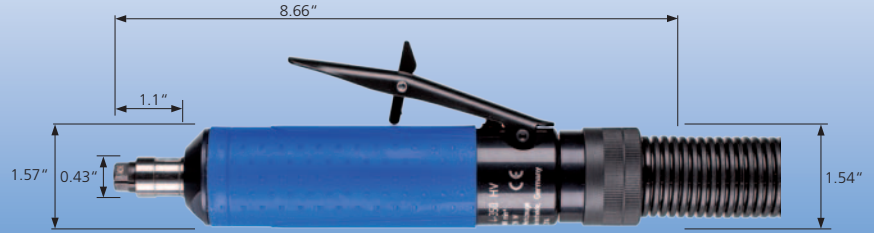
\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.



PGAS 4/350 E-HV **NEW**

Rotational speed: 35,000 RPM  
Output: 0.4 HP / 300 Watts



**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



**Tool features**

- P** Pneumatic
- G** Straight grinder
- A** Rear exhaust hose
- S** Silencer
- 4** 0.4 HP output (300 Watts)
- 350** 35,000 RPM rotational speed
- E** Elastic suspended spindle
- HV** Safety lever throttle

**Tool benefits**

- Compact design, convenient in use.
- Low vibration, protecting people, tools and machine.
- Elastic suspended spindle results in comfortable grinding and extended product life.

**Accessories included**

- 2 keys
- 8' air supply hose, 3' exhaust hose (with 1/4" NPT male threaded connection)
- 1/4" collet 93074 (collet group 6)



**Use only with oil.**  
**2 drops per minute**  
In-line filter 95514 recommended



PFERDMEDIA

To see it in action, please visit [pferdusa.com/90020](http://pferdusa.com/90020)

| EDP number | Model number    | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|-----------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90020      | PGAS 4/350 E-HV | 15-16                 | rear              | lever         | 73                  | 5/16                                | 1.10        |

**Collets**

| Group 6           | For shank diameter |          |          |       |       |       |  |
|-------------------|--------------------|----------|----------|-------|-------|-------|--|
|                   | 3/32 Inch          | 1/8 Inch | 1/4 Inch | 3 mm  | 6 mm  | 8 mm  |  |
| <b>EDP number</b> | 93067              | 93072    | 93074    | 93057 | 93062 | 93064 |  |

For collet details, see table on page 66.

**Keys**

|  | Width | Qty | EDP number |
|--|-------|-----|------------|
|  | 11 mm | 1   | 93335      |
|  | 14 mm | 1   | 93340      |

**Recommended PFERD products**

| Catalogue 202  | Catalogue 204*  |
|--|---|
| <p><b>Tungsten carbide burs</b><br/>3/16" to 1/4" diameter</p> | <p><b>Abrasive spiral bands</b><br/>3/8" to 5/8" diameter</p>               |
| <p><b>Mounted points</b><br/>1/2" to 1" diameter</p>           | <p><b>POLICAP® abrasive caps</b><br/>1/4" to 9/32" diameter</p>             |
|  | <p><b>Mounted flap wheels</b><br/>3/8" diameter<br/>1/8" shank diameter</p> |
|  | <p><b>Poliflex® fine grinding points</b><br/>Bond GR<br/>1/4" diameter</p>  |
|  | <p>Bond LR<br/>1/2" to 3/8" diameter</p>                                    |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

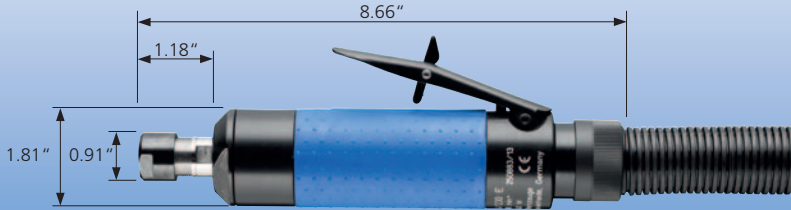
# Air grinders

## Straight grinders



PGAS 7/250 E-HV **NEW**

Rotational speed: 25,000 RPM  
Output: 0.7 HP / 540 Watts



### Tool features

- P** Pneumatic
- G** Straight grinder
- A** Rear exhaust hose
- S** Silencer
- 7** 0.7 HP output (540 Watts)
- 250** 25,000 RPM rotational speed
- E** Elastic suspended spindle
- HV** Safety lever throttle

### Tool benefits

- Compact design, convenient in use.
- Handles lightly, like a pen.
- Low vibration, protecting people, tools and machine.
- Elastic suspended spindle results in comfortable grinding and extended product life.

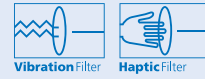
### Accessories included

- 2 keys
- 8' air supply hose, 3' exhaust hose (with 1/4" NPT male threaded connection)
- 1/4" collet 93249 (collet group 16)



**Use only with oil.**  
4 - 5 drops per minute  
*In-line filter 95514 recommended*

### PFERDERGONOMICS®



### PFERDEFFICIENCY®



### PFERDMEDIA

To see it in action, please visit [pferdusa.com/90037](http://pferdusa.com/90037)

| EDP number | Model number    | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|-----------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90037      | PGAS 7/250 E-HV | 25                    | rear              | lever         | 74                  | 5/16                                | 1.92        |

### Collets

| Group 16   | For shank diameter |          |       |       |       |
|------------|--------------------|----------|-------|-------|-------|
|            | 1/8 Inch           | 1/4 inch | 6 mm  | 8 mm  | 10 mm |
| EDP number | 93250              | 93249    | 93246 | 93247 | 93248 |

For collet details, see table on page 66.

### Keys

| Width | Qty | EDP number |
|-------|-----|------------|
| 17 mm | 1   | 93350      |
| 20 mm | 1   | 93353      |

### Recommended PFERD products

| Catalogue 202  | Catalogue 204*  | Catalogue 206   |
|--|---|---|
| <b>Tungsten carbide burs</b><br>1/8" to 5/16" diameter | <b>POLICAP® abrasive caps</b><br>3/8" diameter  | <b>Type 1 die grinder cut-off wheels</b><br>2" diameter |
| <b>Mounted points</b><br>1/2" to 1-3/8" diameter       | <b>Poliflex® products</b><br>Bond GR<br>3/8" diameter<br>Bond LR<br>3/4" to 5/8" diameter | <b>Type 1 snagging wheels</b><br>2" diameter            |
| <b>abrasive spiral bands</b><br>up to 7/8" diameter    | <b>Felt polishing points</b><br>5/16" to 1/4" diameter                                    |   |

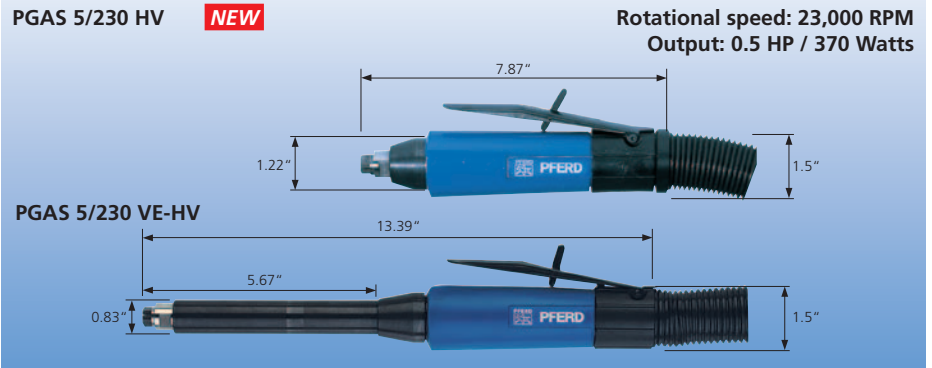
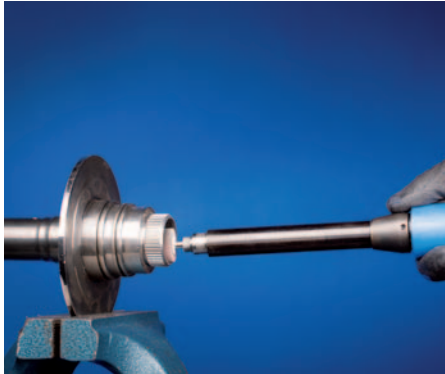
**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

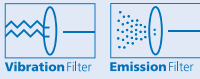
Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.



### PFERDERGONOMICS®



### PFERDEFFICIENCY®



### Tool features

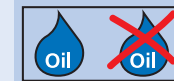
- P** Pneumatic
- G** Straight grinder
- A** Rear exhaust hose
- S** Silencer
- 5** 0.5 HP output (370 Watts) with oil  
0.46 HP output (340 Watts) without oil  
23,000 RPM rotational speed with oil  
18,000 RPM rotational speed without oil
- 230**
- V** Extended model
- E** Elastic suspended spindle
- HV** Safety lever throttle

### Tool benefits

- High power output geared to lower speed.
- Ideal for fine grinding and polishing products.
- Extended shaft for reaching into tight spaces and long interiors.
- Can operate without oil; avoids oil contamination of workpiece and other surfaces, and reduces workplace emissions.
- Elastic suspended spindle results in comfortable grinding and extended product life.

### Accessories included

- 2 keys
- 6.5' air supply hose, 2.5' exhaust hose (without nozzle)
- 1/4" collet 93074 (collet group 6)



**Use with or without oil.**  
**3 - 4 drops per minute.**  
*In-line filter 95514 recommended*



### PFERDMEDIA

To see it in action, please visit  
[pferdusa.com/90035](http://pferdusa.com/90035)

| EDP number | Model number     | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|------------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90038      | PGAS 5/230 HV    | 42                    | rear              | lever         | 79                  | 11/32                               | 1.37        |
| 90035      | PGAS 5/230 VE-HV | 42                    | rear              | lever         | 80                  | 11/32                               | 1.85        |

### Collets

| Group 6    | For shank diameter |          |          |       |       |       |
|------------|--------------------|----------|----------|-------|-------|-------|
|            | 3/32 Inch          | 1/8 Inch | 1/4 Inch | 3 mm  | 6 mm  | 8 mm  |
| EDP number | 93067              | 93072    | 93074    | 93057 | 93062 | 93064 |

For collet details, see table on page 66.

### Keys

| Width | Qty | EDP number |
|-------|-----|------------|
| 11 mm | 1   | 93335      |
| 14 mm | 1   | 93340      |

### Recommended PFERD products

| Catalogue 202   | Catalogue 204*  | Catalogue 204*  | Catalogue 206 |
|---|---|---|---------------|
| <b>Tungsten carbide burs</b><br>1/4" to 1/2" diameter | <b>POLICAP® abrasive caps</b><br>3/8" diameter  | <b>Felt polishing points</b><br>5/16" to 1/4" diameter  |               |
| <b>Catalogue 203*</b>                                 | <b>Mounted flap wheels</b><br>5/8" dia.<br>1/8" shank diameter  | <b>Type 1 die grinder cut-off wheels</b><br>2" diameter |               |
| <b>Mounted points</b><br>1/2" to 1-5/8" diameter      | <b>Poliflex® fine grinding points</b><br>Bond <b>GR</b><br>3/8" diameter<br>Bond <b>LR</b><br>3/4" to 5/8" diameter | <b>Type 1 snagging wheels</b><br>2" diameter            |               |
| <b>Catalogue 204*</b>                                 |   |   |               |
| <b>Abrasive spiral bands</b><br>up to 7/8" diameter   |   |   |               |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

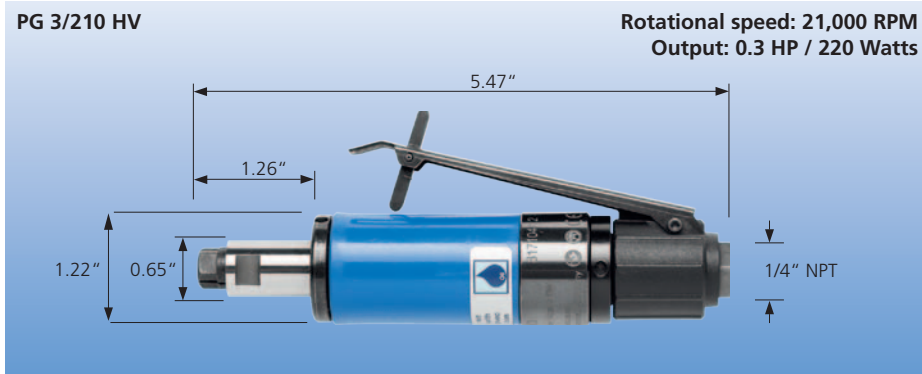
Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

# Air grinders

## Straight grinders



Rotational speed: 21,000 RPM  
Output: 0.3 HP / 220 Watts



### Tool features

- P** Pneumatic
- G** Straight grinder
- 3** 0.3 HP output (220 Watts)
- 210** 21,000 RPM rotational speed
- HV** Safety lever throttle

### Accessories included

- 2 keys
- 1/4" collet 93074 (collet group 6) for collet details, see table on page 62
- 1/4" NPT female threaded connection
- For information on EDGE cut burs see catalogue "Carbide burs, router bits and bi-metal hole saws" (section 202)!

### Tool benefits

- For fine milling and grinding work with good performance.
- Light and easy to handle, even using just one hand.
- High speed stability and power output.
- Low vibration protects user and workpiece.
- With guide sleeve, this is the optimal power tool for grinding with **EDGE cut TC burs!**



**Use only with oil.**  
2 - 3 drops per minute.  
*In-line filter 95514 recommended*

### PFERDERGONOMICS®



PFERDMEDIA

To see it in action, please visit  
[pferdusa.com/90036](http://pferdusa.com/90036)

| EDP number | Model number | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|--------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90036      | PG 3/210 HV  | 17                    | front             | lever         | 81                  | 3/8                                 | 0.95        |

### Guide plate for EDGE cut burs

**NEW**

| Plate outer diameter | EDP number |
|----------------------|------------|
| 2 3/8" / 60 mm       | 95295      |

### Guide sleeve for EDGE cut burs

**NEW**

| Sleeve tip diameter | EDP number |
|---------------------|------------|
| 1" / 25 mm          | 95294      |

### Keys

| Width | Qty | EDP number |
|-------|-----|------------|
| 11 mm | 1   | 93335      |
| 14 mm | 1   | 93340      |

### Recommended PFERD products

| Catalogue 202  | Catalogue 204*  |
|--|---|
| <b>Tungsten carbide burs</b><br>1/4" to 5/8" diameter<br>EDGE cut <b>NEW</b> | <b>POLICAP® abrasive caps</b><br>3/8" diameter<br><b>Mounted flap wheels</b><br>5/8" dia.<br>1/8" shank diameter<br><b>Poliflex® fine grinding points</b><br>Bond GR<br>3/8" diameter<br>Bond LR<br>3/4" to 5/8" diameter |
| <b>Mounted points</b><br>1" to 1-1/2" diameter                               | <b>Felt polishing points</b><br>5/16" to 3/8" diameter  |
| <b>Abrasive spiral bands</b><br>7/8" to 1-1/8" diameter                      | <b>Catalogue 206</b><br><b>Type 1 die grinder cut-off wheels</b><br>2" diameter<br><b>Type 1 snagging wheels</b><br>2" diameter   |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.



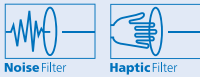


**PGAS 8/100 HV**

Rotational speed: 10,000 RPM  
Output: 0.8 HP / 600 Watts



**PFERDERGONOMICS®**



**PFERDEFFICIENCY®**



**Tool features**

- P** Pneumatic
- G** Straight grinder
- A** Rear exhaust hose
- S** Silencer
- 8** 0.8 HP output (600 Watts)
- 100** 10,000 RPM rotational speed
- HV** Safety lever throttle

**Tool benefits**

- Consistent high power and low speed due to centrifugal governor.
- Compact, easy to handle machine shape, light-weight design.

**Accessories included**

- 2 keys
- 10' air supply hose, 3' exhaust hose (with 1/4" male threaded connection)
- 1/4" collet 93084 (collet group 7)



**Use only with oil.**

**1 - 5 drops per minute.**

*In-line filter 95515 recommended*



**PFERDMEDIA**

To see it in action, please visit [pferdusa.com/90064](http://pferdusa.com/90064)

| EDP number | Model number  | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|---------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90064      | PGAS 8/100 HV | 6-30                  | rear              | lever         | 64                  | 11/32                               | 2.2         |

**Collets**

| Group 7           | For shank diameter |          |          |       |       |       |  |
|-------------------|--------------------|----------|----------|-------|-------|-------|--|
|                   | 1/8 Inch           | 1/4 Inch | 3/8 Inch | 3 mm  | 6 mm  | 8 mm  |  |
| <b>EDP number</b> | 93081              | 93084    | 93085    | 93081 | 93082 | 93083 |  |

For collet details, see table on page 66.

**Keys**

|  | Width | Qty | EDP number |
|--|-------|-----|------------|
|  | 9/16" | 1   | 93383      |
|  | 3/4"  | 1   | 93384      |

**Recommended PFERD products**

| Catalogue 202   | Catalogue 204*  | Catalogue 208  |
|---|---|--|
| <b>Tungsten carbide burs</b><br>3/8" to 3/4" diameter<br>                   | <b>Felt polishing points</b><br>3/8" to 3/4" diameter<br>   | <b>Copper centre wheels</b><br>up to 3" diameter<br>                       |
| <b>Mounted points</b><br>3/4" to 2" diameter<br>                            | <b>POLISTAR abrasive stars</b><br>3/4", 1-1/4" dia.<br>     | <b>Stem mounted end brushes</b><br>up to 1" diameter<br>                   |
| <b>POLICAP® abrasive caps</b><br>5/8" diameter<br>                          | <b>POLINOX® mounted flap wheels</b><br>1-1/2" dia.<br>      | <b>Stem mounted wheel brushes</b><br>up to 4" diameter<br>                 |
| <b>Mounted flap wheels</b><br>1-3/16" to 1-1/2" diameter<br>                | <b>POLINOX® unitized wheels</b><br>2" dia.<br>              | <b>Stem mounted crimped cup and bevel brushes</b><br>up to 4" diameter<br> |
| <b>Poliflex® fine grinding points</b><br>Bond GR<br>7/8" to 1" diameter<br> | <b>Type 1 die grinder cut-off wheels</b><br>2" diameter<br> | <b>Miniature brushes</b><br>   |
|   | <b>Type 1 snagging wheels</b><br>2" diameter<br>            | <b>Pilot bonding brushes</b><br>   |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4" .

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

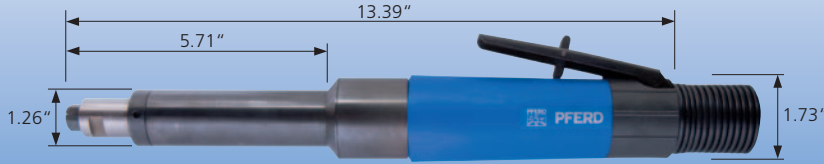
# Air grinders

## Straight grinders



**PGAS 10/40 V-HV**

**Rotational speed: 4,000 RPM**  
**Output: 1.2 HP / 900 Watts**



### Tool features

- P** Pneumatic
- G** Straight grinder
- A** Rear exhaust hose
- S** Silencer
- 10** 1.2 HP output (900 Watts)
- 40** 4,000 RPM rotational speed
- V** Extended model
- HV** Safety lever throttle

### Accessories included

- 2 keys
- 10' air supply hose, 5.5' exhaust hose (without nozzle)
- 1/4" collet 93094 (collet group 8)

### Tool benefits

- High power output straight grinder geared to lower speed.
- Ideal for fine grinding and polishing products.
- Safety lever throttle (HV) protects against inadvertent start-up.
- Rear exhaust with silencer.
- Consistent high power and low speed due to centrifugal governor.



**Use only with oil.**  
**6 - 7 drops per minute.**  
*In-line filter 95515 recommended*



**PFERDMEDIA**

To see it in action, please visit  
[pferdusa.com/90083](http://pferdusa.com/90083)

**PFERDEFFICIENCY®**



| EDP number | Model number    | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|-----------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90083      | PGAS 10/40 V-HV | 42                    | rear              | lever         | 77                  | 11/32                               | 3.75        |

### Collets

| Group 8           | For shank diameter |          |       |       |       |
|-------------------|--------------------|----------|-------|-------|-------|
|                   | 1/4 inch           | 3/8 inch | 6 mm  | 8 mm  | 10 mm |
| <b>EDP number</b> | 93094              | 93095    | 93091 | 93092 | 93093 |

For collet details, see table on page 66.

### Keys

|  | Width | Qty | EDP number |
|--|-------|-----|------------|
|  | 14 mm | 1   | 93340      |
|  | 17 mm | 1   | 93350      |

### Recommended PFERD products

| Catalogue 204*   | Catalogue 208  |
|--|--|
| <b>Coated &amp; non-woven mounted flap wheels</b><br>3" diameter<br> | <b>Tube brushes</b><br>                                      |
| <b>POLICLEAN® mounted wheels</b><br>2" to 3" diameter<br>            | <b>SINGLETWIST® end brushes</b><br>                          |
| <b>Felt wheels</b><br>1-1/4" to 1-3/4" diameter<br>                  | <b>M-BRAD® copper centre wheels</b><br>up to 3" diameter<br> |
| <b>Felt polishing points</b><br>1" to 1-1/4" diameter<br>            | <b>Pencil end brushes</b><br>                                |
|  | <b>Side and bottom cleaning brushes</b><br>                  |
|  | <b>Circular end brush</b><br>                                |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

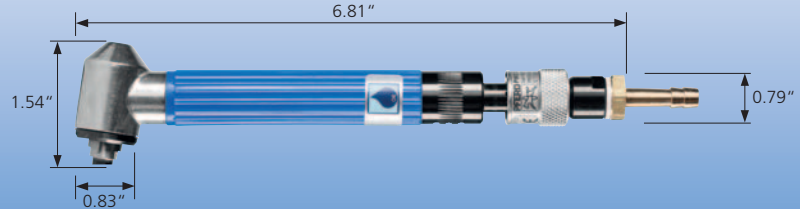
\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.



**PWS 1/800**

**Rotational speed: 80,000 RPM**  
**Output: 0.1 HP / 75 Watts**



**PFERDMEDIA**

To see it in action, please visit  
[pferdusa.com/90502](http://pferdusa.com/90502)

**Tool features**

- P** Pneumatic
- W** Angle grinder
- S** With collet
- 1** 0.1 HP output (75 Watts)
- 800** 80,000 RPM rotational speed

**Tool benefits**

- Smallest, high speed angle grinder in this performance class for industrial applications.
- Durable design, without angular gears.
- Adjustable side exhaust.

**Accessories included**


- 2 keys
- 1/8" collet 93012 (collet group 2)
- 1 hose nozzle



**Use only with oil.**  
**1 drop per minute.**  
*In-line filter 95513 recommended*

| EDP number | Model number | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|--------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90502      | PWS 1/800    | 6                     | rear/side         | push/pull     | 78                  | 15/64                               | 0.25        |

**Collets**

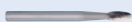

|  | Group 2 | For shank diameter |          |       |
|---|---------|--------------------|----------|-------|
|   |         | 3/32 Inch          | 1/8 Inch | 3 mm  |
| <b>EDP number</b>   |         | 93013              | 93012    | 93011 |

For collet details, see table on page 66.

**Keys**

|  | Width | Qty | EDP number |
|---|-------|-----|------------|
|   | 6 mm  | 1   | 93326      |
|   | 8 mm  | 1   | 93328      |

**Recommended PFERD products**

| Catalogue 202  | Catalogue 203*  |
|--|---|
| <p><b>Tungsten carbide burs</b><br/>up to 1/8" diameter<br/>with 1/8" shank diameter</p>  | <p><b>Mounted points</b><br/>up to 1/4" diameter<br/>with 1/8" shank diameter</p>  |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

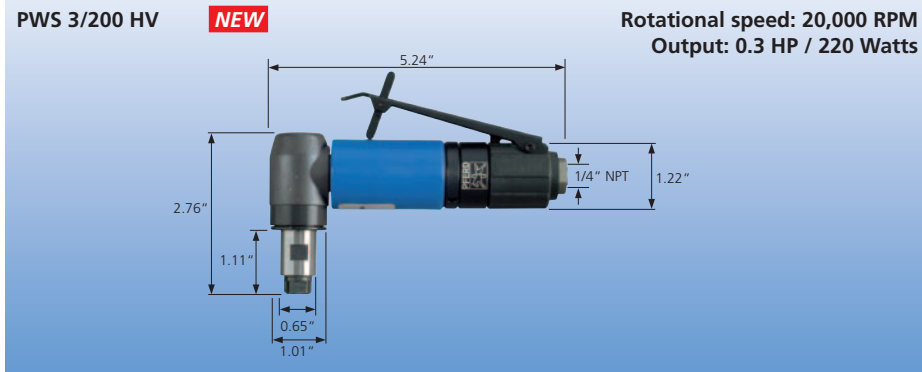
Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

# Air grinders

## Angle grinders



Rotational speed: 20,000 RPM  
Output: 0.3 HP / 220 Watts



### Tool features

- P** Pneumatic
- W** Angle grinder
- S** With collet
- 3** 0.3 HP output (220 Watts)
- 200** 20,000 RPM rotational speed
- HV** Safety lever throttle

### Accessories included

- 2 keys
- 1/4" collet 93074 (collet group 6)
- 1/4" NPT female threaded connection

### Tool benefits

- Slim angle head for work in narrow workpieces.
- Long-life angle transmission.
- High spindle concentricity.
- Easy to handle, compact shape.

**Note:** Rear exhaust version PWSA 3/220 HV is available on request. EDP 90512



**Use only with oil.**  
1 - 2 drops per minute.  
*In-line filter 95514 recommended*

### PFERDERGONOMICS®



### PFERDMEDIA

To see it in action, please visit [pferdusa.com/90514](http://pferdusa.com/90514)

| EDP number | Model number | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|--------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90514      | PWS 3/200 HV | 12                    | front             | lever         | 75                  | 3/8                                 | 0.82        |

### Collets

| Group 6           | For shank diameter |          |          |       |       |       |  |
|-------------------|--------------------|----------|----------|-------|-------|-------|--|
|                   | 3/32 Inch          | 1/8 Inch | 1/4 Inch | 3 mm  | 6 mm  | 8 mm  |  |
| <b>EDP number</b> | 93067              | 93072    | 93074    | 93057 | 93062 | 93064 |  |

For collet details, see table on page 66.

### Keys

|  | Width | Qty | EDP number |
|--|-------|-----|------------|
|  | 11 mm | 1   | 93335      |
|  | 14 mm | 1   | 93340      |

### Recommended PFERD products

| Catalogue 202   | Catalogue 204*  |
|---|---|
| <b>Tungsten carbide burs</b><br>1/4" to 3/8" diameter<br> | <b>POLICAP® abrasive caps</b><br>3/8" diameter<br>  |
| <b>Mounted points</b><br>3/4" to 1-5/8" diameter<br>      | <b>Mounted flap wheels</b><br>3/4" to 1" diameter<br>   |
| <b>Abrasive spiral bands</b><br>up to 1" diameter<br>     | <b>Poliflex® fine grinding points</b><br>Bond <b>GR</b> up to 1/2" diameter<br>Bond <b>LR</b> up to 1" diameter<br> |
| <b>Mounted points</b><br>3/4" to 1-5/8" diameter<br>      | <b>Felt polishing points</b><br>5/16" to 3/8" diameter<br>  |
| <b>Abrasive spiral bands</b><br>up to 1" diameter<br>     | <b>COMBIDISC® abrasive discs</b><br>1-1/2" to 2" diameter<br>   |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

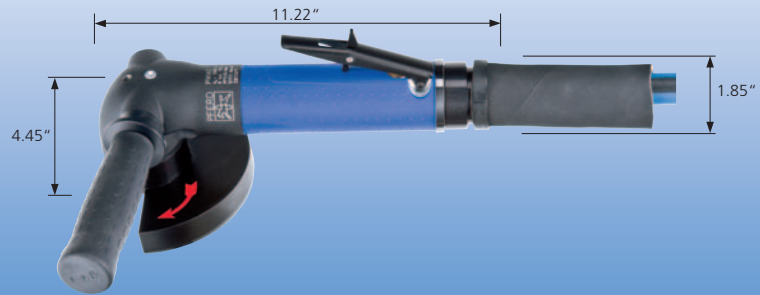
\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.



**PWAS 13/120 AVH** NEW

Rotational speed: 12,000 RPM  
Output: 1.3 HP / 1,100 Watts



### PFERDERGONOMICS®



### PFERDEFFICIENCY®



#### Tool features

- P** Pneumatic
- W** Angle grinder
- A** Rear exhaust hose
- S** Silencer
- 13** 1.3 HP output (1,100 Watts)
- 120** 12,000 RPM rotational speed
- AVH** Autobalancer and anti-vibration handle

#### Tool benefits

- Autobalancer for smooth, comfortable grinding.
- Side anti-vibration handle.
- Spindle locking pin for tool change with just one key.
- 5/8-11 threaded spindle for mounting of hubbed products.
- Consistent high power and low speed due to centrifugal governor.

#### Accessories included

- 2 keys
- 8' air supply hose, 3' exhaust hose (with 1/2" male threaded connection)
- Flanges, 5" guard, and anti-vibration handle



**Use only with oil.**  
**1 - 2 drops per minute.**  
*In-line filter 95516 recommended*



PFERDMEDIA

To see it in action, please visit  
[pferdusa.com/90531](http://pferdusa.com/90531)

| EDP number | Model number    | Air consumption [cfm] | Exhaust direction | Throttle type | Fits arbor hole [inches] | Spindle thread | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|-----------------|-----------------------|-------------------|---------------|--------------------------|----------------|---------------------|-------------------------------------|-------------|
| 90531      | PWAS 13/120 AVH | 32                    | rear              | lever         | 7/8                      | 5/8-11 UNC     | 80                  | 1/2                                 | 4.63        |

#### Mounting accessories

| Diagram number | Description                                     | Qty | EDP number |
|----------------|---|-----|------------|
| 1              | 5/8" clamping nut, dia. 1.81" x 0.36            | 1   | 95995      |
| 2              | 5/8" spacer, dia. 0.79" x 0.26"                 | 1   | 97971      |
| 3              | Flange screw, M6 x 0.79, head dia. 0.46"        | 1   | 97970      |
| 4              | 5/8" spacer, dia. 0.79" x 0.33"                 | 1   | 97972      |
| 5              | Flange screw, M6 x 0.79, head dia. 0.71" x 0.13 | 1   | 97973      |

#### Keys

| Diagram number | Width   | Qty | EDP number |
|----------------|---------|-----|------------|
| 1              | 4 mm    | 1   | 93303      |
| 2              | 35x5 mm | 1   | 93395      |

#### Recommended PFERD products

| Catalogue 204   | Catalogue 206  | Catalogue 208   |
|---|--|---|
| <b>COMBICLICK® fibre discs (requires matching backing pad)</b><br>4-1/2" to 5" diameter<br> | <b>Reinforced grinding wheels/discs</b><br>4-1/2" to 5" diameter<br> | <b>High speed mini wheel brushes</b><br>up to 4 1/2" diameter<br> |
| <b>Fibre discs (requires matching backing pad)</b><br>4-1/2" to 5" diameter<br>             | <b>Cut-off wheels</b><br>4-1/2" to 5" diameter<br>                   | <b>Knot wheel brushes</b><br>up to 5" diameter<br>                |
|   | <b>POLIFAN® flap discs</b><br>4-1/2" to 5" diameter<br>              | <b>Stringer bead brushes</b><br>up to 6" diameter<br>             |
|   |  | <b>Cup brushes</b><br>up to 3 1/2" diameter<br>                   |
|   |  | <b>Bevel brushes</b><br>up to 5" diameter<br>                     |

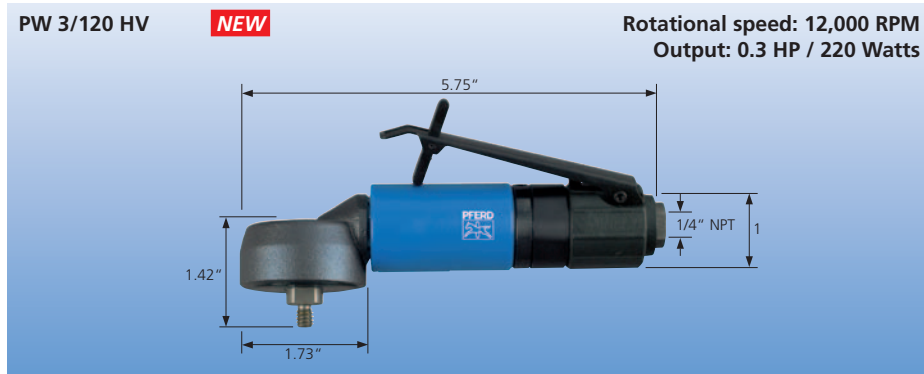
**Note:** Product recommendations are based on general peripheral and rotational speeds.

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

# Air grinders

## Angle grinders for COMBIDISC® products



**Tool features**

- P** Pneumatic
- W** Angle grinder
- 3** 0.3 HP output (220 Watts)
- 120** 12,000 RPM rotational speed
- HV** Safety lever throttle

**Accessories included**

- 1 key
- 1/4" NPT female threaded connection

**Tool benefits**

- Special 1/4-20 UNC spindle for mounting any COMBIDISC® product (use backing pad without shank).
- Flat angle head facilitates work in hard-to-reach areas.
- High torque.
- Easy to handle, compact shape.

**Use only with oil.**  
2 drops per minute.  
*In-line filter 95514 recommended*

**PFERDERGONOMICS®**

HapticFilter

**PFERDMEDIA**

To see it in action, please visit [pferdusa.com/90521](http://pferdusa.com/90521)

| EDP number | Model number | Air consumption [cfm] | Exhaust direction | Throttle type | Spindle thread | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|--------------|-----------------------|-------------------|---------------|----------------|---------------------|-------------------------------------|-------------|
| 90521      | PW 3/120 HV  | 12                    | front             | lever         | 1/4-20 UNC     | 79                  | 3/8                                 | 4.63        |

### Spindle extension (20 mm)

| Model number         | Product mounting                         | EDP number |
|----------------------|--|------------|
| SPV 20 CD 1/4-20 UNC | COMBIDISC® holder without threaded shank | 95808      |

### Keys

| Width | Qty | EDP number |
|-------|-----|------------|
| 11 mm | 1   | 93335      |

### Recommended PFERD products

**Catalogue 204**

|   |  |   |  |
|---|--|---|--|
| <p><b>COMBIDISC® Mini-POLIFAN® discs</b><br/>2" to 3" diameter</p> <p><b>COMBIDISC® abrasive discs</b><br/>1-1/2" to 2" diameter</p> <p><b>COMBIDISC® diamond discs</b><br/>1" to 1-1/2" diameter</p> |  | <p><b>COMBIDISC® non-woven discs</b><br/>1-1/2" diameter</p> <p><b>COMBIDISC® unitized discs</b><br/>3" diameter</p> <p><b>COMBIDISC® textile discs</b><br/>2" diameter</p> |  |
|---|--|---|--|

**Note:** Product recommendations are based on general peripheral and rotational speeds.

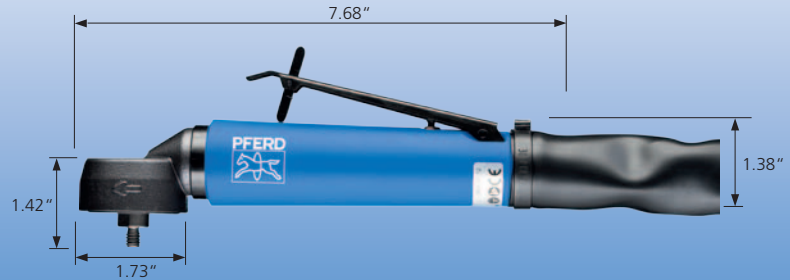
Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

Comply with ANSI B7.1-2000 standards and OSHA regulations.



PWAS 4/45 HV-CD **NEW**

Rotational speed: 4,500 RPM  
Output: 0.4 HP / 250 Watts



**PFERDEFFICIENCY®**



PFERDMEDIA



To see it in action, please visit [pferdusa.com/90551](http://pferdusa.com/90551)

### Tool features

- P** Pneumatic
- W** Angle grinder
- A** Rear exhaust hose
- S** Silencer
- 4** 0.4 HP output (250 Watts)
- 45** 4,500 RPM rotational speed
- HV** Safety lever throttle
- CD** Designed specifically for use with COMBIDISC® products

### Tool benefits

- Special 1/4-20 UNC spindle for mounting COMBIDISC® products (use backing pad without shank).
- Centrifugal governor provides constant rotational speed.
- Designed for low speed products such as textile and non-woven discs.

### Accessories included

- 1 key
- 6.5' air supply, 2.5' exhaust hose (without nozzle)



**Use only with oil.**  
2 - 3 drops per minute.  
*In-line filter 95514 recommended*

| EDP number | Model number    | Air consumption [cfm] | Exhaust direction | Throttle type | Spindle thread | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|-----------------|-----------------------|-------------------|---------------|----------------|---------------------|-------------------------------------|-------------|
| 90551      | PWAS 4/45 HV-CD | 17 - 18               | rear              | lever         | 1/4-20 UNC     | 70                  | 5/16                                | 1.12        |

### Spindle extension (20 mm)

| Model number         | Product mounting                         | EDP number |
|----------------------|--|------------|
| SPV 20 CD 1/4-20 UNC | COMBIDISC® holder without threaded shank | 95808      |

### Keys

| Width | Qty | EDP number |
|-------|-----|------------|
| 11 mm | 1   | 93335      |

### Recommended PFERD products

#### Catalogue 204

**COMBIDISC® diamond discs**  
2" to 3" diameter



**COMBIDISC® non-woven discs**  
3" diameter



**COMBIDISC® textile discs**  
3" diameter



**COMBIDISC® felt discs**  
2" diameter



**COMBIDISC® POLICLEAN® discs**  
2" to 3" diameter



**COMBIDISC® brush**  
2" diameter



**Note:** Product recommendations are based on general peripheral and rotational speeds.

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

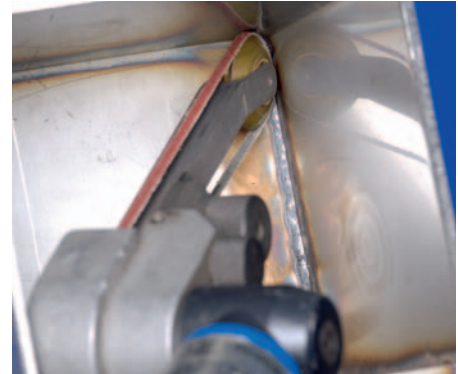
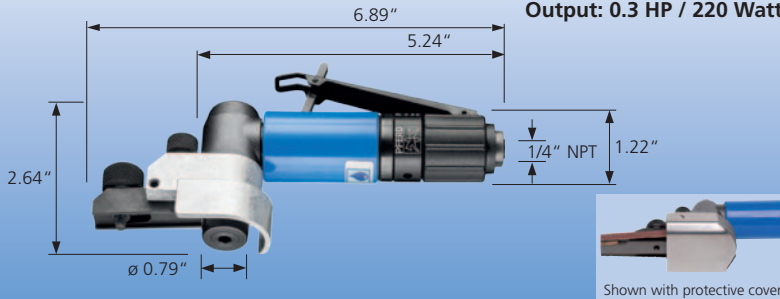
# Air grinders

## Belt grinder



PBS 3/200 HV oVA **NEW**

Rotational speed: 20,000 RPM  
For belts 12" length x 1/8"-3/8" width  
Output: 0.3 HP / 220 Watts



### Tool features

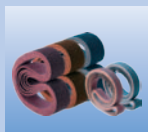
- P** Pneumatic
- B** Belt grinder
- S** With collet
- 3** 0.3 HP output (220 Watts)
- 200** 20,000 RPM rotational speed
- HV** Safety lever throttle
- oVA** Belt attachment arm not included (please order separately, see below)

### Accessories included

- 3 keys
- 1/4" NPT female threaded connection
- Protective cover 95001

### Tool benefits

- Light, ergonomic one-handed belt grinder.
- Thin attachment arms allow work in cut outs, recesses and fillet welds, even on particularly small workpieces.
- Long-life angled transmission.
- Please order belt attachment arms separately.



For further information and ordering data on abrasive and non-woven belts, please refer to our "Fine grinding and finishing products" catalogue (section 204).



**Use only with oil.**  
1 - 2 drops per minute.  
In-line filter 95514 recommended

PFERDERGONOMICS®



PFERDMEDIA

To see it in action, please visit [pferdusa.com/90711](http://pferdusa.com/90711)

| EDP number | Description      | Air consumption [cfm] | Exhaust direction | Throttle type | Belt speed [SFPM] | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|------------------|-----------------------|-------------------|---------------|-------------------|---------------------|-------------------------------------|-------------|
| 90711      | PBS 3/200 DH oVA | 12                    | front             | lever         | 4,134             | 79                  | 3/8                                 | 1.10        |
| 95001      | Protective Cover | -                     | -                 | -             | -                 | -                   | -                                   | -           |

### Belt grinder attachment arms

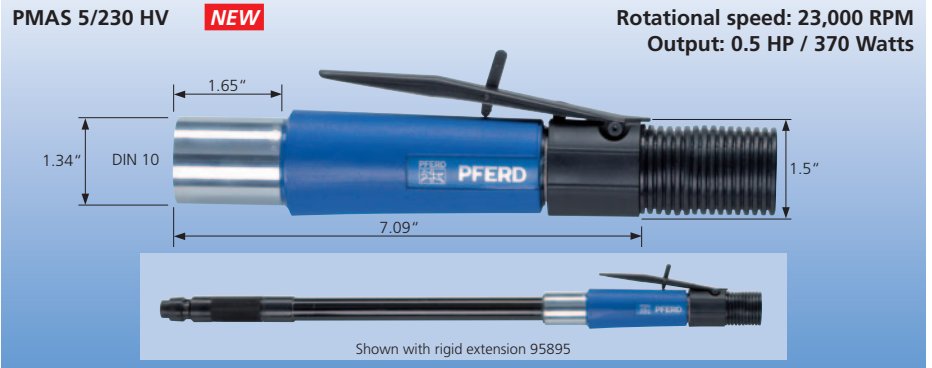
- Durable, quality steel design.
- Use of the full roller width possible.
- Extremely slim fixtures on the roller.
- Asymmetrical arms for flush grinding.
- Belt arm can be rotated 360°.
- Belt tracking can be adjusted.
- BSVAK 9/25-1 with conical guide roller (angle flat width 0.04").
- Belt length 12".

### Keys

| Width | Qty | EDP number |
|-------|-----|------------|
| 3 mm  | 1   | 93302      |
| 5 mm  | 1   | 93304      |
| 14 mm | 1   | 93340      |

| EDP number | Model number       | Width x roll dia. [inches] | Width x roll dia. [mm] | Suitable belt width [inches] | Use for   | Photo |
|------------|--------------------|----------------------------|------------------------|------------------------------|---|-------|
| 95006      | BSVAK 9/25 x 305   | 0.35 x 0.98                | 8.8 x 25               | 1/8, 1/4, 3/8, 1/2           | Finishing jobs, deburring, matting, fine grinding and seamless blending of inner radii/channels, especially on pipe couplings                         |       |
| 95005      | BSVAK 9/25-1 x 305 | 0.35 x 0.98                | 8.8 x 25               | 1/8, 1/4, 3/8, 1/2           | Finishing jobs in narrow inner radii/channels, especially on pipe couplings made of stainless steel (INOX) with very small welded seams (TIG welding) |       |
| 95009      | BSVAK 4/16 x 305   | 0.15 x 0.63                | 3.8 x 16               | 1/8, 1/4, 3/8                | Leveling, deburring, matting, fine grinding, cleaning and seamless blending of stainless steel in narrow, small areas                                 |       |
| 95008      | BSVAK 9/9 x 305    | 0.35 x 0.35                | 8.8 x 9                | 3/8, 1/2                     | Leveling, chamfering, matting, fine grinding, cleaning and seamless blending on small areas   |       |
| 95007      | BSVAK 9/16 x 305   | 0.35 x 0.63                | 8.8 x 16               | 3/8, 1/2                     | Leveling, chamfering, matting, fine grinding, cleaning and seamless blending on small areas   |       |





### PFERDERGONOMICS®



### PFERDMEDIA

To see it in action, please visit [pferdusa.com/90681](http://pferdusa.com/90681)

### Tool features

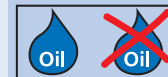
- P** Pneumatic
- M** Drive motor
- A** Rear exhaust hose
- S** Silencer
- 5** 0.5 HP output (370 Watts) with oil  
0.46 HP output (340 Watts) without oil
- 230** 23,000 RPM rotational speed with oil  
18,000 RPM rotational speed without oil
- HV** Safety lever throttle

### Accessories included

- 2 keys
- 6.5' air supply hose, 2.5' exhaust hose

### Tool benefits

- Drive motor for rigid extensions (see below).
- High power output geared to lower speed.
- Ideal for work in interiors and difficult-to-reach areas.
- Can operate without oil, avoiding oil contamination of workpiece and other surfaces, and reducing workplace emissions.



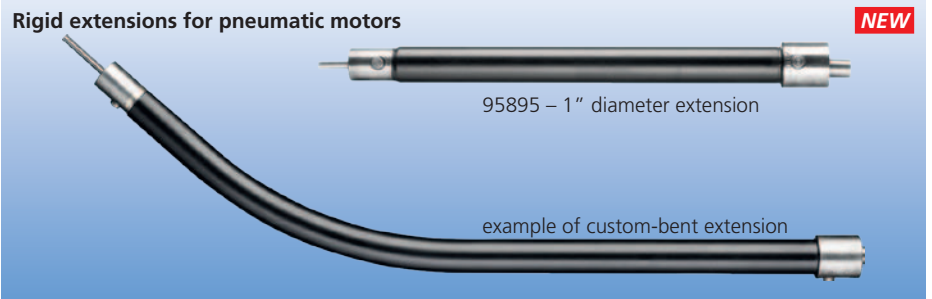
Use with or without oil.  
3 - 4 drops per minute.  
In-line filter 95514 recommended

| EDP number | Model number  | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|---------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90681      | PMAS 5/230 HV | 22                    | rear              | lever         | 80                  | 3/8                                 | 1.43        |

| Width | Qty | EDP number |
|-------|-----|------------|
| 4 mm  | 2   | 93310      |

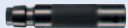
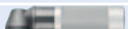

Rigid extensions, combined with air-powered motors, provide the ideal solution for tough applications, such as cleaning or milling work on hard-to-reach workpieces in foundries. Rigid extensions are frequently used in series production, as they are created to exactly fit the workpiece geometry.

Custom lengths and bending radii to meet customer requirements are available on request.



| EDP number | Model number  | Drive-side connection [DIN] | Handpiece-side connection [G] | Diameter x length |             | Max. bend radius [in] | Weight [lb] |
|------------|---------------|-----------------------------|-------------------------------|-------------------|-------------|-----------------------|-------------|
|            |               |                             |                               | nominal [in]      | metric [mm] |                       |             |
| 95895      | STV 27 L 250  | 10                          | 22                            | 1 x 10            | 27 x 250    | 10                    | 1.21        |
| 95896      | STV 27 L 500  | 10                          | 22                            | 1 x 20            | 27 x 500    | 10                    | 2.05        |
| 95897      | STV 27 L 1000 | 10                          | 22                            | 1 x 40            | 27 x 1,000  | 10                    | 3.74        |

### Handpieces

| EDP number | Model number     | Handpiece connection [G] | Max. input RPM | Diameter x length |             | Gear ratio | Included collet diameter [in.] | Collet group | Weight [lb] | Photo   |
|------------|------------------|--------------------------|----------------|-------------------|-------------|------------|--------------------------------|--------------|-------------|---|
|            |                  |                          |                | nominal [in]      | metric [mm] |            |                                |              |             |   |
| 94315      | HA 7 ZGA G22     | 22                       | 25,000         | 1 x 5             | 27 x 130    | -          | 1/4                            | 11           | 0.71        |  |
| 94488      | WZ 7 B STV G22   | 22                       | 17,100         | 2 x 6             | 55 x 157    | 1.3:1      | 1/4                            | 6            | 1.57        |  |
| 94489      | WZ 7 45° STV G22 | 22                       | 17,100         | 2 1/4 x 7         | 57 x 175    | 1.3:1      | 1/4                            | 6            | 1.65        |  |

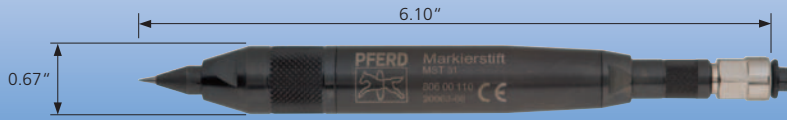
# Air grinders

## Marking pen



### Marking pen MST 31

Frequency: 30,000 - 36,000 strokes/min



#### Tool features

**MST** Marking Pen

**31** 31,000 strokes per minute

#### Accessories included

- Tungsten carbide engraving needle
- 6.5' air supply hose (with 1/4" NPT female threaded connection)

#### Tool benefits

- For engraving markings in metal, glass, plastics and even heat-treated tool steel (with fine needle).
- Patented pneumatic engraving pen working at about three times the frequency of competitive products.
- Frequency: 500 - 600 strokes/sec.
- Does not transmit harmful vibrations to the hand.



PFERDMEDIA

To see it in action, please visit [pferdusa.com/90700](http://pferdusa.com/90700)



Use only with a little oil.

1 drop every 5 minutes.

*In-line filter 95512 recommended*

| EDP number | Model number | Needle gauge | Air consumption [cfm] | Exhaust direction | Throttle type | Sound level [dB(A)] | Air supply hose inner dia. [inches] | Weight [lb] |
|------------|--------------|--------------|-----------------------|-------------------|---------------|---------------------|-------------------------------------|-------------|
| 90700      | MST 31 F     | fine         | 1                     | front             | ring          | 62                  | 4                                   | 0.33        |
| 90701      | MST 31 M     | medium       | 1                     | front             | ring          | 62                  | 4                                   | 0.33        |
| 90702      | MST 31 G     | coarse       | 1                     | front             | ring          | 62                  | 4                                   | 0.33        |

### Replacement hose



Please order tungsten carbide replacement needles separately.

The fine needle is for engraving hardened surfaces such as heat-treated tool steels.

The coarse needle is for softer surfaces such as plastics and aluminum.

### Tungsten carbide engraving needles for marking pens

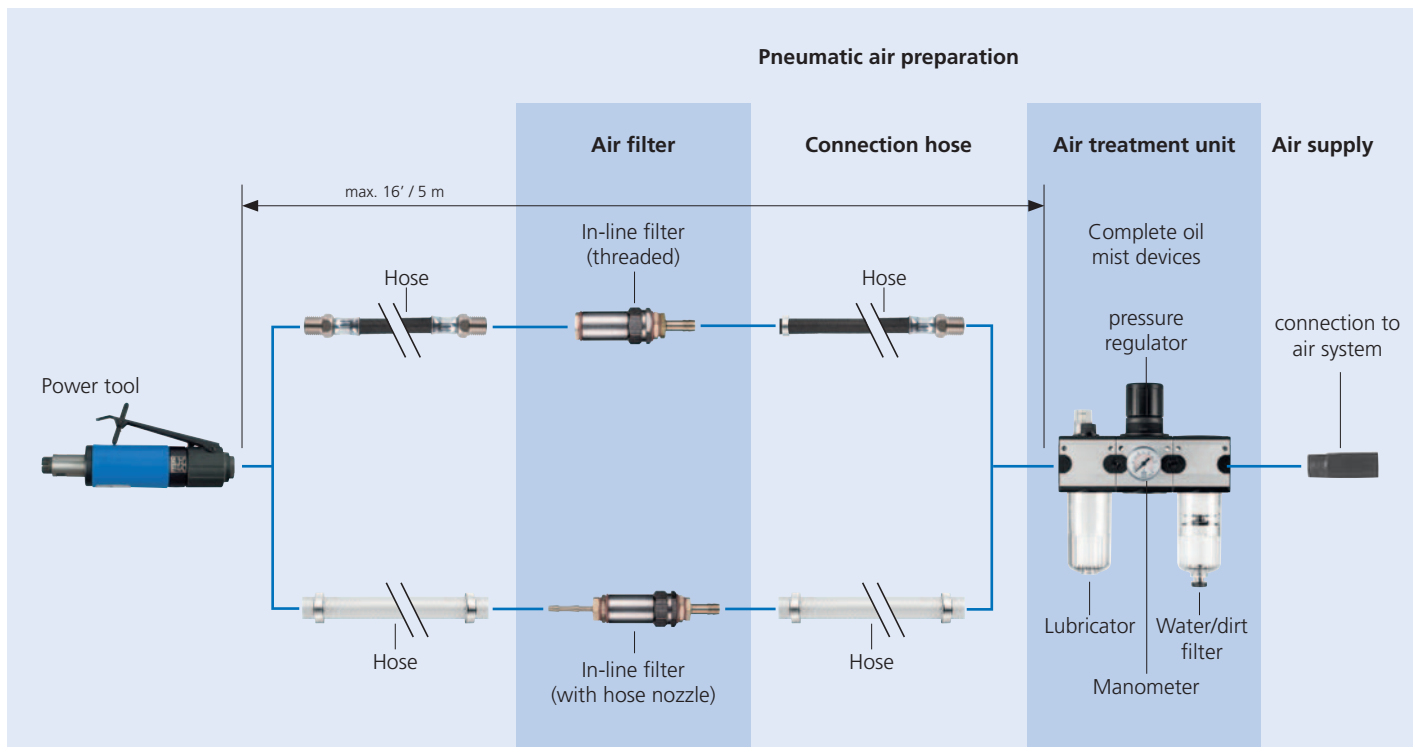


| EDP number | Description  |
|------------|--|
| 95200      | Loose replacement hose with special coupling nipples, length: 6.6 feet |
| 95500      | Replacement needle, fine gauge   |
| 95501      | Replacement needle, medium gauge                                       |
| 95502      | Replacement needle, coarse gauge                                       |

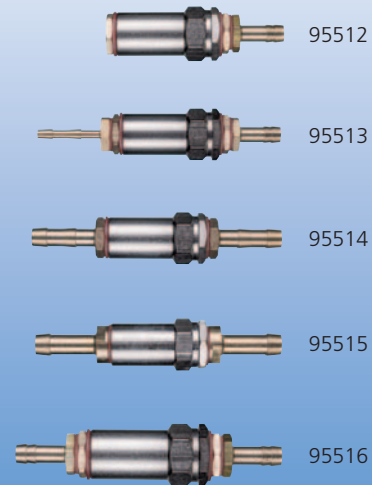




### Optimal air supply system attachment



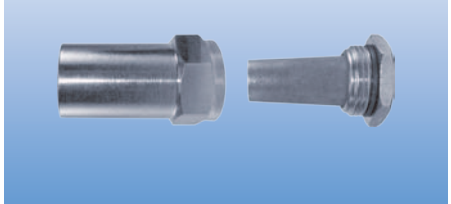
#### In-line filters



Use of an in-line fine filter combined with the recommended oiling frequency will extend your air tool maintenance cycles.

The filter reduces the amount of dirt particles in the supply air. The filter should be dismantled and cleaned on a regular basis.

#### Dismantled filter



| EDP number | Model number    | Power tool side        | Air supply hose dia. |      | Connection hose dia. |      | Pore size [µm] |
|------------|-----------------|------------------------|----------------------|------|----------------------|------|----------------|
|            |                 |                        | [inches]             | [mm] | [inches]             | [mm] |                |
| 95512      | SF 24 T8-IG 1/4 | 1/4" threaded (female) | 5/16                 | 8    | 5/16                 | 8    | 5              |
| 95513      | SF 24 T8-T5     | 5 mm                   | 3/16                 | 5    | 5/16                 | 8    | 5              |
| 95514      | SF 24 T8-T8     | 8 mm                   | 5/16                 | 8    | 5/16                 | 8    | 5              |
| 95515      | SF 24 T9-T9     | 9 mm                   | 3/8                  | 9    | 3/8                  | 9    | 5              |
| 95516      | SF 30 T12-T12   | 12 mm                  | 1/2                  | 12   | 1/2                  | 12   | 5              |



# Electric grinders and accessories

## General information

Electric power tools are versatile machines. They offer a high power output in relation to their size and weight, and are particularly well-suited for use with grinding products that require a constant rotational speed.

### Areas of application

Electric grinders can be used for nearly every application. They are used in many industries for different processes. The stepless rotational speed adjustment allows the use of various types of products on one single power tool.

Electric grinders are not suitable for use

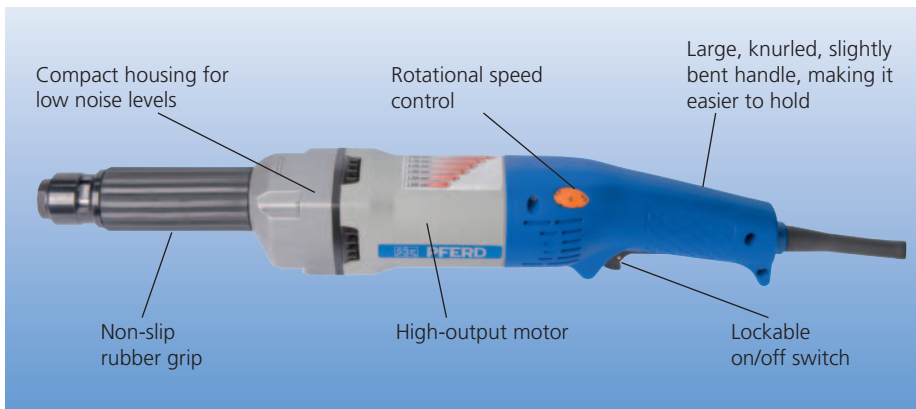
- in boiler construction, or
- in very dusty conditions (especially work on aluminum).

### Advantages

- Compact, ergonomic design
- Low weight
- Technically tried and tested
- High power output
- Universally usable
- Simple power supply
- Low maintenance
- Easy to service
- Economical

### The PFERD product range

PFERD provides a wide range of electric grinders: Straight grinders, angle grinders and belt grinders, as well as drum grinders and fillet weld grinders. PFERD electric grinders are of the highest technological standards and accord with the latest ergonomic knowledge and requirements. They were specially developed for economic use of grinding, milling, brushing, cut-off and polishing products, and cover a wide range of rotational speeds (750 - 33,000 RPM) and power outputs (300 - 900 Watts). PFERD electric grinders have an electronic speed control for constant rotational speed values.



### Criteria for selecting the optimum electric grinder



#### 1. Design, shape and size

Each type of application places specific demands on the shape and size of the power tool. The different designs can be used for various applications: The ideal power tool should be selected for the task at hand depending on the dimensions, accessibility, type and frequency of the application.

#### 2. Rotational speed

The power tool should always be selected according to the rotational speed and cutting speed recommendations for the product. Please refer to catalogues 202 - 208 for these recommendations.

### Equipment/special features

#### ■ Smooth start-up:

The electronically-regulated smooth start-up ensures a jolt-free start-up of the drive.

#### ■ Undervoltage protection/ restart protection:

Should the power supply fail, PFERD electric grinders do not start up again inadvertently. The drive will only restart after it has been switched off and on again.

#### ■ Current limiting/blocking protection:

On double nominal current input, the grinders switch off for approximately 0.2 seconds. By removing the load, the grinder is able to take up the initial rotational speed again.

#### ■ Temperature overload protection:

When a critical temperature is reached, the safety electronic system switches into cooling mode. The drive cannot be placed under load when in cooling mode. The drive will only start at the set operating speed after it has been switched on and off.

### Standards, safety, general guidelines

PFERD electric grinders

- bear the CE mark,
- are insulated and comply with protection class II.



PFERD electric grinders comply with the

- EC Machinery Directive,
- EC Low-Voltage Directive and
- Electromagnetic Compatibility.

National regulations must be observed.

#### 3. Power output

The power output of the drive is the decisive factor for maintaining the RPM under load. The load is determined by the material to be machined, the cutting characteristics of the product and the contact pressure.

#### 4. Mounting types

Depending on the PFERD product selected, different mounting types are available, e.g. collets or threaded spindles. Matching collets are allocated to every drive. Please refer to pages 66-67 for an overview of collets and spindle extensions.

If you have any further questions, your PFERD sales representative will be happy to help you.



UGER 11/330 SI 120 V

Speed range: 15,000 - 33,000 RPM  
Output: 0.9 HP / 650 Watts



### PFERDERGONOMICS®



### PFERDEFFICIENCY®



### Tool features

- U** Electric
- G** Straight grinder
- ER** Electronic speed regulation
- 11** 1,050 watt consumption
- 330** 33,000 RPM max. rotational speed
- SI** Double insulated
- 120 V** 120 Volt

### Tool benefits

- Particularly suitable for milling and grinding work with tungsten carbide burs and mounted points.
- Digital electronic speed control with stepless speed adjustment.
- Smooth start-up for the protection of people, tools and machine.
- Electronic overload switch-off, restart protection on power failure.
- Durable, comfortable ergonomic design.
- Optimum machine guidance due to long spindle housing.

### Accessories included

- 2 keys
- 1/4" collet 93094 (collet group 8)
- 10' power cable

### PFERDMEDIA



To see it in action, please visit [pferdusa.com/91003](http://pferdusa.com/91003)

| EDP number | Model number         | Rotational speed [RPM] | Voltage 50-60 Hz | Power consumption [watts] | Power output [watts] | Max. Amps | Sound level [dB(A)] | Weight [lb] |
|------------|----------------------|------------------------|------------------|---------------------------|----------------------|-----------|---------------------|-------------|
| 91003      | UGER 11/330 SI 120 V | 15,000 - 33,000        | 120              | 1,050                     | 650                  | 8.5       | 81                  | 4.96        |

### Collets

| Group 8    | For shank diameter |          |       |       |       |
|------------|--------------------|----------|-------|-------|-------|
|            | 1/4 inch           | 3/8 inch | 6 mm  | 8 mm  | 10 mm |
| EDP number | 93094              | 93095    | 93091 | 93092 | 93093 |

For collet details, see table on page 66.

### Keys

|  | Width | Qty | EDP number |
|--|-------|-----|------------|
|  | 14 mm | 1   | 93340      |
|  | 18 mm | 1   | 93370      |

### Recommended PFERD products

| Catalogue 202  | Catalogue 204*  | Catalogue 208  |
|--|---|--|
| <b>Tungsten carbide burs</b><br>1/8" to 5/8" diameter<br>        | <b>Felt polishing points</b><br>1/4" to 1/2" diameter<br>   | <b>Copper centre wheels</b><br>up to 3" diameter<br>               |
| <b>Mounted points</b><br>1/2" to 2" diameter<br>                 | <b>Abrasive spiral bands</b><br>3/8" to 1-1/2" diameter<br> | <b>Stem mounted wheel brushes</b><br>up to 4 diameter<br>          |
| <b>POLICAP® abrasive caps</b><br>9/32" to 1/2" diameter<br>      | <b>Type 1 die grinder cut-off wheels</b><br>                | <b>Stem mounted bevel brushes</b><br>up to 4" diameter<br>         |
| <b>Mounted flap wheels</b><br>5/8" to 1" diameter<br>            | <b>Type 1 snagging wheels</b><br>                           | <b>Stem mounted crimped end brushes</b><br>up to 1/2" diameter<br> |
| <b>Poliflex® fine grinding points</b><br>1/4" to 1" diameter<br> |   | <b>Stem mounted knot end brushes</b><br>up to 1" diameter<br>      |
|  |   | <b>Pilot bonding brushes</b><br>                                   |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

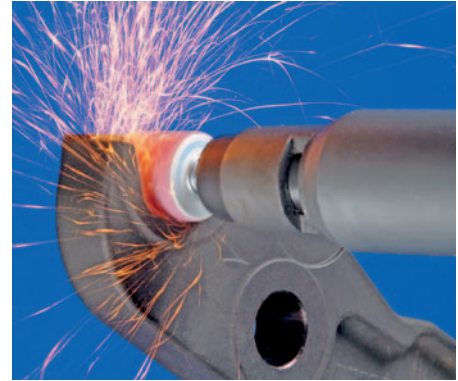
# Electric grinders

## Straight grinders



UGER 5/250 SI 120 V

Speed range: 11,000 - 25,000 RPM  
Output: 0.4 HP / 300 Watts



### Tool features

- U** Electric
- G** Straight grinder
- ER** Electronic speed regulation
- 5** 500 watt consumption
- 250** 25,000 RPM max. rotational speed
- SI** Double insulated
- 120 V** 120 Volt

### Accessories included

- 2 keys
- 1/4" collet 93182 (collet group 11)
- 10' power cable

### Tool benefits

- Powerful, easy to handle.
- Digital electronic speed control ensures constant RPM even under load.
- Soft start feature protects people, tools and machine.
- Restart protection on power failure.
- Electronic shutdown device deactivates motor in case of extreme overload.
- Side switch for maximum ease of use.
- Sturdy, maintenance friendly design.

PFERDERGONOMICS®



PFERDMEDIA

To see it in action, please visit [pferdusa.com/91005](http://pferdusa.com/91005)

| EDP number | Model number        | Rotational speed [RPM] | Voltage 50-60 Hz | Power consumption [watts] | Power output [watts] | Max. Amps | Sound level [dB(A)] | Weight [lb] |
|------------|---------------------|------------------------|------------------|---------------------------|----------------------|-----------|---------------------|-------------|
| 91005      | UGER 5/250 SI 120 V | 11,000 - 25,000        | 120              | 500                       | 300                  | 4.6       | 73                  | 2.98        |

### Collets

| Group 11   | For shank diameter |          |          |       |       |       |  |
|------------|--------------------|----------|----------|-------|-------|-------|--|
|            | 3/32 inch          | 1/8 inch | 1/4 inch | 3 mm  | 6 mm  | 8 mm  |  |
| EDP number | 93174              | 93179    | 93182    | 93157 | 93163 | 96166 |  |

For collet details, see table on page 66.

### Keys

|  | Width | Qty | EDP number |
|--|-------|-----|------------|
|  | 14 mm | 1   | 93340      |
|  | 18 mm | 1   | 93370      |

### Recommended PFERD products

| Catalogue 202   | Catalogue 204*  | Catalogue 208  |
|---|---|--|
| <b>Tungsten carbide burs</b><br>1/4" to 3/4" diameter<br>         | <b>Felt polishing points</b><br>5/16" to 9/16" diameter<br> | <b>Copper centre wheels</b><br>up to 3" diameter<br>               |
| <b>Mounted points</b><br>3/4" to 2" diameter<br>                  | <b>Abrasive spiral bands</b><br>5/8" to 2" diameter<br>     | <b>Stem mounted crimped wheel brushes</b><br>up to 3 diameter<br>  |
| <b>POLICAP® abrasive caps</b><br>3/8" to 5/8" diameter<br>        | <b>Type 1 die grinder cut-off wheels</b><br>                | <b>Stem mounted crimped end brushes</b><br>up to 1/2" diameter<br> |
| <b>Mounted flap wheels</b><br>5/8" to 1-3/8" diameter<br>         | <b>Type 1 snagging wheels</b><br>                           | <b>Miniature brushes</b><br>                                       |
| <b>Poliflex® fine grinding points</b><br>5/16" to 1" diameter<br> |   | <b>Pilot bonding brushes</b><br>                                   |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

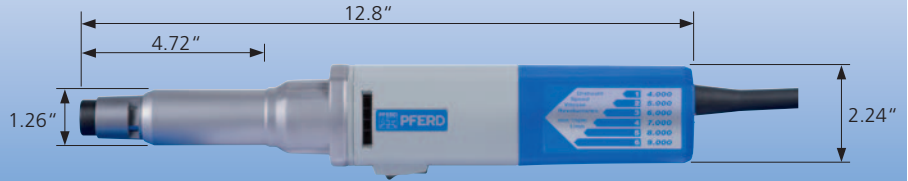
Comply with ANSI B7.1-2000 standards and OSHA regulations.



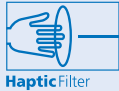


**UGER 5/90 SI 120 V**

Speed range: 4,000 - 9,000 RPM  
Output: 0.4 HP / 300 Watts



### PFERDERGONOMICS®



### PFERDMEDIA



To see it in action, please visit  
[pferdusa.com/91010](http://pferdusa.com/91010)

### Tool features

- U** Electric
- G** Straight grinder
- ER** Electronic speed regulation
- 5** 500 watt consumption
- 90** 9,000 RPM max. rotational speed
- SI** Double insulated
- 120 V** 120 Volt

### Accessories included

- 2 keys
- 1/4" collet 93182 (collet group 11)
- 10' power cable

### Tool benefits

- Multi-purpose machine, suitable for use with many different lower-speed products, especially POLINOX®/POLIVLIES® products (cat. 204).
- Powerful, easy to handle.
- Digital electronic speed control ensures constant RPM even under load.
- Soft start feature protects people, tools and machine.
- Restart protection on power failure.
- Electronic shutdown device deactivates motor in case of extreme overload.
- Side switch for maximum ease of use.
- Sturdy, maintenance friendly design.

| EDP number | Model number       | Rotational speed [RPM] | Voltage 50-60 Hz | Power consumption [watts] | Power output [watts] | Max. Amps | Sound level [dB(A)] | Weight [lb] |
|------------|--------------------|------------------------|------------------|---------------------------|----------------------|-----------|---------------------|-------------|
| 91010      | UGER 5/90 SI 120 V | 4,000 - 9,000          | 120              | 500                       | 300                  | 4.6       | 76                  | 3.17        |

### Collets

| Group 11   | For shank diameter |          |          |       |       |       |
|------------|--------------------|----------|----------|-------|-------|-------|
|            | 3/32 inch          | 1/8 inch | 1/4 inch | 3 mm  | 6 mm  | 8 mm  |
| EDP number | 93174              | 93179    | 93182    | 93157 | 93163 | 96166 |

For collet details, see table on page 66.

### Keys

|  | Width | Qty | EDP number |
|--|-------|-----|------------|
|  | 14 mm | 1   | 93340      |
|  | 18 mm | 1   | 93370      |

### Recommended PFERD products

| Catalogue 202  | Catalogue 204*  | Catalogue 208   |
|--|---|---|
| <b>Tungsten carbide burs</b><br>5/8" to 3/4" diameter<br>              | <b>Overlap slotted discs</b><br>up to 2" diameter<br>             | <b>Copper centre wheels</b><br>up to 4" diameter<br>              |
| <b>Mounted points</b><br>1-1/2" to 2" diameter<br>                     | <b>POLINOX® unitized wheels</b><br>                               | <b>Stem mounted crimped wheel brushes</b><br>up to 3 diameter<br> |
| <b>Abrasive spiral bands</b><br>1-3/4" to 2-5/8" diameter<br>          | <b>Poliflex® fine grinding points</b><br>Bond GR, 1" diameter<br> | <b>Stem mounted crimped end brushes</b><br>                       |
| <b>Coated &amp; non-woven flap wheels</b><br>1-1/2" to 3" diameter<br> | <b>POLICLEAN® mounted wheels</b><br>2" to 3" diameter<br>         | <b>Miniature brushes</b><br>                                      |
|  | <b>Felt polishing points</b><br>3/4" to 1" diameter<br>           | <b>Pencil end brushes</b><br>                                     |
|  | <b>Felt wheels</b><br>1-1/4" to 1-3/4" diameter<br>               | <b>Side and bottom cleaning brushes</b><br>                       |
|  |   | <b>Circular end brushes</b><br>                                   |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

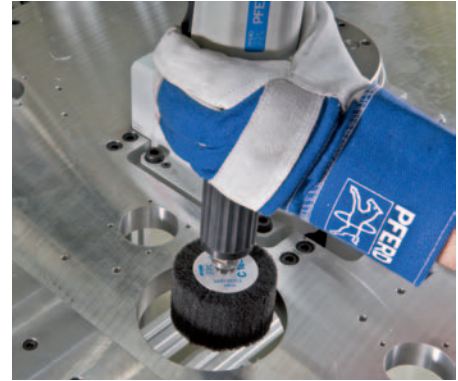
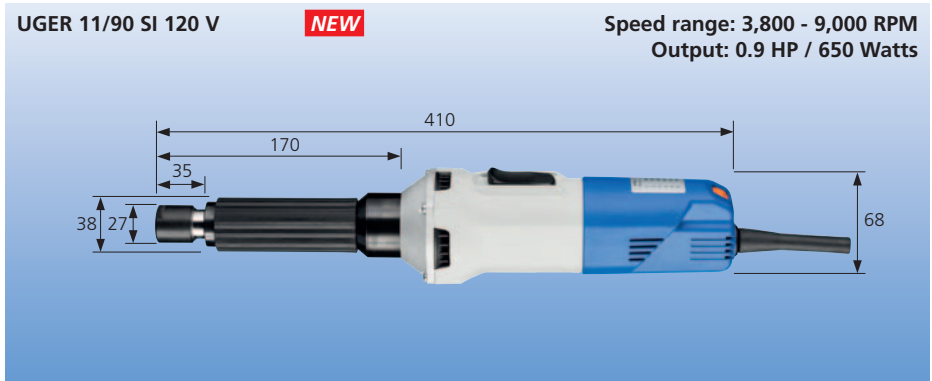
Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

# Electric grinders

## Straight grinders



|   |   |
|---|---|
| <p><b>Tool features</b></p> <p><b>U</b> Electric</p> <p><b>G</b> Straight grinder</p> <p><b>ER</b> Electronic speed regulation</p> <p><b>11</b> 1,050 watt consumption</p> <p><b>90</b> 9,000 RPM max. rotational speed</p> <p><b>SI</b> Double insulated </p> <p><b>120 V</b> 120 Volt</p> <p><b>Accessories included</b></p> <ul style="list-style-type: none"> <li>■ 2 keys</li> <li>■ 1/4" collet 93211 (collet group 12)</li> <li>■ 10' power cable</li> </ul> | <p><b>Tool benefits</b></p> <ul style="list-style-type: none"> <li>■ Powerful, easy to handle.</li> <li>■ Digital electronic speed control ensures constant RPM even under load.</li> <li>■ Soft start feature protects people, tools and machine.</li> <li>■ Restart protection on power failure.</li> <li>■ Electronic shutdown device deactivates motor in case of extreme overload.</li> <li>■ Side switch for maximum ease of use.</li> <li>■ Sturdy, maintenance friendly design.</li> <li>■ Designed for use with low-speed products such as non-woven flap wheels.</li> </ul> |
|---|---|

**PFERDERGONOMICS®**

HapticFilter

**PFERDMEDIA**

To see it in action, please visit [pferdusa.com/91012](http://pferdusa.com/91012)

| EDP number | Model number        | Rotational speed [RPM] | Voltage 50-60 Hz | Power consumption [watts] | Power output [watts] | Max. Amps | Sound level [dB(A)] | Weight [lb] |
|------------|---------------------|------------------------|------------------|---------------------------|----------------------|-----------|---------------------|-------------|
| 91012      | UGER 11/90 SI 120 V | 3,800 - 9,000          | 120              | 1,050                     | 650                  | 8.5       | 85                  | 5.22        |

### Collets

| Group 12          | For shank diameter |          |          |       |       |       |       |  |
|-------------------|--------------------|----------|----------|-------|-------|-------|-------|--|
|                   | 1/4 inch           | 3/8 inch | 1/2 inch | 6 mm  | 8 mm  | 10 mm | 12 mm |  |
| <b>EDP number</b> | 93211              | 93215    | 93218    | 93196 | 93199 | 93201 | 93203 |  |

For collet details, see table on page 66.

### Keys

|  | Width | Qty | EDP number |
|--|-------|-----|------------|
|  | 19 mm | 1   | 93352      |
|  | 22 mm | 1   | 93380      |

### Recommended PFERD products

| Catalogue 202  | Catalogue 204*  | Catalogue 208  |
|--|---|--|
| <p><b>Tungsten carbide burs</b><br/>5/8" to 3/4" diameter</p>              | <p><b>Overlap slotted discs</b><br/>up to 2" diameter</p>             | <p><b>Copper centre wheels</b><br/>up to 4" diameter</p>                       |
| <p><b>Mounted points</b><br/>1-1/2" to 2" diameter</p>                     | <p><b>POLINOX® unitized wheels</b></p>                                | <p><b>Stem mounted wheel brushes</b><br/>up to 3 diameter</p>                  |
| <p><b>Abrasive spiral bands</b><br/>1-3/4" to 2-5/8" diameter</p>          | <p><b>Poliflex® fine grinding points</b><br/>Bond GR, 1" diameter</p> | <p><b>Stem mounted crimped cup and bevel brushes</b><br/>up to 4" diameter</p> |
| <p><b>Coated &amp; non-woven flap wheels</b><br/>1-1/2" to 3" diameter</p> | <p><b>POLICLEAN® mounted wheels</b><br/>2" to 3" diameter</p>         | <p><b>Stem mounted crimped end brushes</b></p>                                 |
|  | <p><b>Felt polishing points</b><br/>3/4" to 1" diameter</p>           | <p><b>Pencil end brushes</b></p>   |
|  | <p><b>Felt wheels</b><br/>1-1/4" to 1-3/4" diameter</p>               | <p><b>Side and bottom cleaning brushes</b></p>                                 |

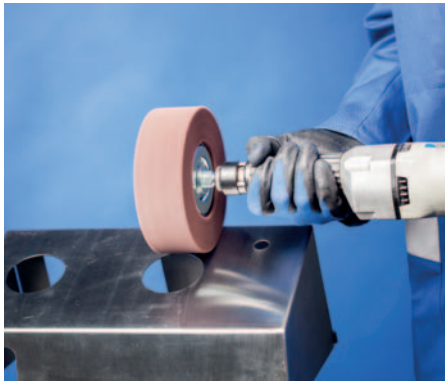
**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.



**UGER 15/60 SI 120 V**

Speed range: 2,800 - 5,900 RPM  
Output: 1.2 HP / 900 Watts



**PFERDEFFICIENCY®**



Energy Saving Time Saving



**PFERDMEDIA**

To see it in action, please visit [pferdusa.com/91016](http://pferdusa.com/91016)

**Tool features**

- U** Electric
- G** Straight grinder
- ER** Electronic speed regulation
- 15** 1,340 watt consumption
- 60** 5,900 RPM max. rotational speed
- SI** Double insulated
- 120 V** 120 Volt

**Accessories included**

- 2 keys
- 1/2" collet 93218 (collet group 12)
- 10' power cable

**Tool benefits**

- For heavy milling and grinding work.
- Stepless RPM adjustment.
- High torque.
- Digital electronic for a constant RPM.
- Smooth start-up for the protection of people, tools and machine.
- Restart protection on power failure.
- Electronic shutdown device deactivates motor in case of extreme overload.

| EDP number | Model number        | Rotational speed [RPM] | Voltage 50-60 Hz | Power consumption [watts] | Power output [watts] | Max. Amps | Sound level [dB(A)] | Weight [lb] |
|------------|---------------------|------------------------|------------------|---------------------------|----------------------|-----------|---------------------|-------------|
| 91016      | UGER 15/60 SI 120 V | 2,800 - 5,900          | 120              | 1,340                     | 900                  | 12        | 86                  | 6.72        |

**Collets**

| Group 12          | For shank diameter |          |          |       |       |       |       |  |
|-------------------|--------------------|----------|----------|-------|-------|-------|-------|--|
|                   | 1/4 inch           | 3/8 inch | 1/2 inch | 6 mm  | 8 mm  | 10 mm | 12 mm |  |
| <b>EDP number</b> | 93211              | 93215    | 93218    | 93196 | 93199 | 93201 | 93203 |  |

For collet details, see table on page 66.

**Keys**

| Width | Qty | EDP number |
|-------|-----|------------|
| 22 mm | 2   | 93380      |

**Recommended PFERD products**

| Catalogue 204*   | Catalogue 204*  | Catalogue 208  |
|--|---|--|
| <b>POLIROLL cartridge rolls</b><br>1" dia.<br><b>Mounted flap wheels</b><br>2-1/2" to 3" diameter<br><b>Unmounted flap wheels</b><br>4" to 8" diameter<br><b>POLINOX® mounted flap wheels</b><br>2" to 4" diameter<br><b>POLINOX® unitized wheels</b><br>3" to 6" diameter | <b>POLICLEAN® mounted wheels</b><br>3" to 6" diameter<br><b>Felt polishing points</b><br>9/16" to 1-1/4" diameter<br><b>Felt wheels</b><br>1-1/4" to 2-1/4" diameter<br><b>Cloth rings</b><br>3" to 4" diameter | <b>SINGLETWIST® end brushes</b><br><b>M-BRAD® copper centre wheels</b><br>up to 3" diameter<br><b>Composite mounted disc brushes</b><br><b>Pencil end brushes</b><br><b>Side and bottom cleaning brushes</b> |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

# Electric grinders

## Straight grinders



UGER 15/30 SI 120 V

Speed range: 750 - 3,000 RPM  
Output: 1.2 HP / 900 Watts



### Tool features

- U** Electric
- G** Straight grinder
- ER** Electronic speed regulation
- 15** 1,340 watt consumption
- 30** 3,000 RPM max. rotational speed
- SI** Double insulated
- 120 V** 120 Volt

### Accessories included

- 2 keys
- 1/2" collet 93218 (collet group 12)
- 10' power cable

### Tool benefits

- For heavy milling and grinding work.
- Stepless RPM adjustment.
- High torque.
- Digital electronic for a constant RPM.
- Smooth start-up for the protection of people, tools and machine.
- Restart protection on power failure.
- Electronic shutdown device deactivates motor in case of extreme overload.

### PFERDEFFICIENCY®



PFERDMEDIA

To see it in action, please visit [pferdusa.com/91019](http://pferdusa.com/91019)

| EDP number | Model number        | Rotational speed [RPM] | Voltage 50-60 Hz | Power consumption [watts] | Power output [watts] | Max. Amps | Sound level [dB(A)] | Weight [lb] |
|------------|---------------------|------------------------|------------------|---------------------------|----------------------|-----------|---------------------|-------------|
| 91019      | UGER 15/30 SI 120 V | 750 - 3,000            | 120              | 1,340                     | 900                  | 12        | 86                  | 6.72        |

### Collets

| Group 12   | For shank diameter |          |          |       |       |       |       |  |
|------------|--------------------|----------|----------|-------|-------|-------|-------|--|
|            | 1/4 inch           | 3/8 inch | 1/2 inch | 6 mm  | 8 mm  | 10 mm | 12 mm |  |
| EDP number | 93211              | 93215    | 93218    | 93196 | 93199 | 93201 | 93203 |  |

For collet details, see table on page 66.

### Keys

| Width | Qty | EDP number |
|-------|-----|------------|
| 22 mm | 2   | 93380      |

### Recommended PFERD products

| Catalogue 204*   | Catalogue 204*  | Catalogue 208  |
|--|---|--|
| <b>Unmounted flap wheels</b><br>6" to 8" diameter<br>          | <b>POLICLEAN® mounted wheels</b><br>4" to 6" diameter<br> | <b>SINGLETWIST® end brushes</b><br>                          |
| <b>POLIFLAP® wheels</b><br>                                    | <b>Felt wheels</b><br>1-1/4" to 8" diameter<br>           | <b>M-BRAD® copper centre wheels</b><br>up to 3" diameter<br> |
| <b>POLINOX® mounted flap wheels</b><br>4" diameter<br>         | <b>Cloth rings</b><br>3" to 8" diameter<br>               | <b>Composite mounted disc brushes</b><br>                    |
| <b>POLINOX® unmounted flap wheels</b><br>6" to 8" diameter<br> |   | <b>Pencil end brushes</b><br>                                |
|  |   | <b>Side and bottom cleaning brushes</b><br>                  |
|  |   | <b>Tube brushes</b><br>                                      |
|  |   | <b>Coil spring brushes</b><br>                               |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

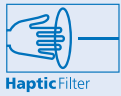


**UWER 5/200 SI 120 V**

Speed range: 9,000 - 20,000 RPM  
Output: 0.4 HP / 300 Watts



**PFERDERGONOMICS®**



**Tool features**

- U** Electric
- W** Angle grinder
- ER** Electronic speed regulation
- 5** 500 watt consumption
- 200** 20,000 RPM max. rotational speed
- SI** Double insulated
- 120 V** 120 Volt

**Accessories included**

- 1 key
- 10' power cable

**Tool benefits**

- For grinding and finishing work using COMBIDISC® products (use backing pad without shank).
- High output, convenient to use.
- Spindle with 1/4"-20 UNC thread.
- Digital electronic speed control ensures constant RPM even under load.
- Restart protection on power failure.



PFERDMEDIA

To see it in action, please visit [pferdusa.com/91200](http://pferdusa.com/91200)

| EDP number | Model number        | Rotational speed [RPM] | Voltage 50-60 Hz | Power consumption [watts] | Power output [watts] | Spindle thread | Max. Amps | Sound level [dB(A)] | Weight [lb] |
|------------|---------------------|------------------------|------------------|---------------------------|----------------------|----------------|-----------|---------------------|-------------|
| 91200      | UWER 5/200 SI 120 V | 9,000 - 20,000         | 120              | 500                       | 300                  | 1/4-20         | 4.6       | 83                  | 2.98        |

**Spindle extension (20 mm)**

| Model number         | Product mounting                         | EDP number |
|----------------------|--|------------|
| SPV 20 CD 1/4-20 UNC | COMBIDISC® holder without threaded shank | 95808      |

**Keys**

| Width | Qty | EDP number |
|-------|-----|------------|
| 14 mm | 1   | 93340      |

**Recommended PFERD products**

| Catalogue 204   |   |  |
|---|---|--|
| <p><b>COMBIDISC® Mini-POLIFAN® discs</b><br/>2" to 3" diameter</p> <p><b>COMBIDISC® abrasive discs</b><br/>1" to 2" diameter</p> <p><b>COMBIDISC® diamond discs</b><br/>1" to 1-1/2" diameter</p> | <p><b>COMBIDISC® brush</b><br/>2" diameter</p> <p><b>COMBIDISC® non-woven discs</b><br/>surface conditioning, hard type<br/>1-1/2" diameter</p> | <p><b>COMBIDISC® unitized discs</b><br/>2" to 3" diameter</p> <p><b>COMBIDISC® textile discs</b><br/>2" diameter</p> |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

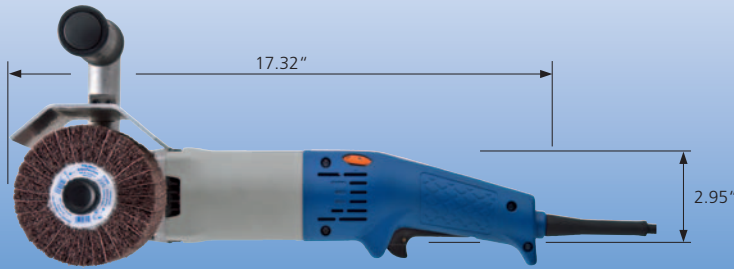
# Electric grinders

## Linear finishing tool



UWER 15/35 SI D19 120 V **NEW**

Speed range: 850 - 3,800 RPM  
Output: 1.2 HP / 900 Watts



### Tool features

- U** Electric
- W** Angle grinder
- ER** Electronic speed regulation
- 15** 1,340 watt consumption
- 35** 3,800 RPM max. rotational speed
- SI** Double insulated
- D19** for grinding and finishing drums
- 120 V** 120 Volt

### Accessories included

- 1 key
- Quick mounting screw
- Hand guard
- Lateral handle
- Removable drive spindle
- 10' power cable

Also available as a kit, please see catalogue 204.

### Tool benefits

- Low speed burnisher with stepless RPM adjustment.
- Ideal for creating linear scratch patterns on large surfaces.
- Drive spindle includes 5/8-11 thread **and** spindle extension with two keyways for increased force transmission; Easy mounting of drums with either threaded or keyed arbor holes.
- Electronic speed regulation for constant RPM even under load.
- Smooth start-up for the protection of people, tools and machine.
- Restart protection on power failure.
- Electronic shutdown device deactivates motor in case of extreme overload.
- Spindle lock for easy tool change.

### PFERDEFFICIENCY®



PFERDMEDIA

To see it in action, please visit [pferdusa.com/91217](http://pferdusa.com/91217)

| EDP no. | Model number            | Rotational speed [RPM] | Voltage 50-60 Hz | Power consumption [watts] | Power output [watts] | Max. Amps | Sound level [dB(A)] | Max. drum diameter [in] | Max. drum width x arbor hole [in] | Drive spindle [in] | Weight [lb] |
|---------|-------------------------|------------------------|------------------|---------------------------|----------------------|-----------|---------------------|-------------------------|-----------------------------------|--------------------|-------------|
| 91217   | UWER 15/35 SI D19 120 V | 850 - 3,800            | 120              | 1,340                     | 900                  | 12        | 86                  | 5                       | 4 x 3/4                           | 3/4 x 3.9          | 6.61        |

### Keys

| Width | Qty | EDP number |
|-------|-----|------------|
| 17 mm | 1   | 93350      |

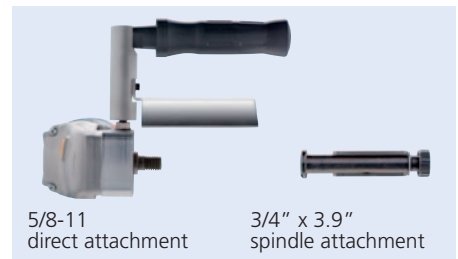


### Linear finishing kit

#### UWER 15/35 SI TK 120 V

For further product and ordering information for this kit, please see "Fine grinding and finishing products" catalogue (section 204).

EDP 49999



### Recommended PFERD products

#### Catalogue 204

#### POLINOX® grinding drums

5/8-11 hub and keyed arbor hole



#### Pneumatic drum for belts

with threaded spindle extension 5/8-11



#### Coated and non-woven belts

with pneumatic drum for belts



#### Flap drums

keyed arbor hole



**Note:** Product recommendations are based on general peripheral and rotational speeds.

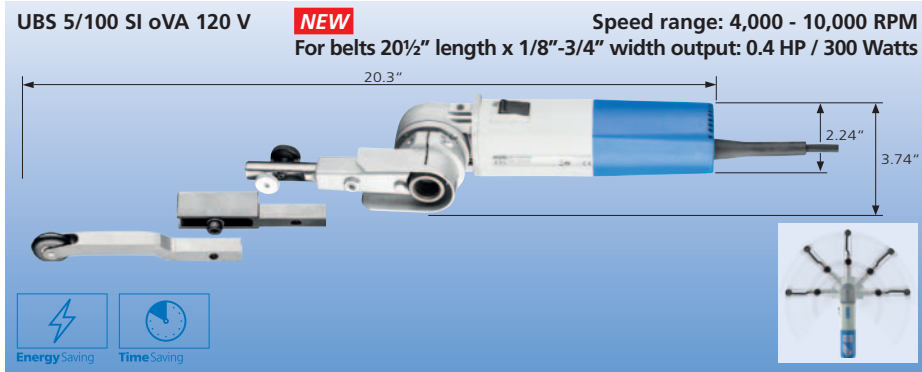
Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

Comply with ANSI B7.1-2000 standards and OSHA regulations.



# Electric grinders

## Belt grinder



**Tool features**

- U** Electric
- BS** Belt grinder
- 5** 500 watt consumption
- 100** 10,000 RPM max. rotational speed
- SI** Double insulated
- oVA** Belt attachment arm not included (please order separately, see below)
- 120 V** 120 Volt

**Accessories included**

- 1 key
- 10' power cable

**Tool benefits**

- Stepless speed variation.
- Digital electronic speed control ensures constant RPM even under load.
- Soft start feature protects mechanical and electronic components.
- Restart protection on power failure.
- Electronic overload shut-off feature.
- Belt grinder attachment is pivotable on the machine and allows flexible adjustment to individual working situations.
- Sturdy, easy maintenance machine.

**PFERDMEDIA**

To see it in action, please visit [pferdusa.com/91410](http://pferdusa.com/91410)

For further information and ordering data on abrasive and non-woven belts, please refer to our "Fine grinding and finishing products" catalogue (section 204).

| EDP number | Model number           | Rotational speed [RPM] | Voltage 50-60 Hz | Power consumption [watts] | Power output [watts] | Max. Amps | Sound level [dB(A)] | Weight [lb] |
|------------|------------------------|------------------------|------------------|---------------------------|----------------------|-----------|---------------------|-------------|
| 91410      | UBS 5/100 oVA SI 120 V | 4,000 - 10,000         | 120              | 500                       | 300                  | 4.6       | 77                  | 3.97        |

**Belt grinder attachment arms**

- Durable, quality steel design.
- Use of the full roller width possible.
- Extremely slim fixtures on the roller.
- Asymmetrical arms for flush grinding.
- Belt arm can be rotated 360°.
- Belt tracking can be adjusted.
- BSVA 9/25-1 with conical guide roller (angle flat width 0.04").
- Belt length 20-1/2" (24" with BSAD adapter).

**Keys**

|  | Width | Qty | EDP number |
|--|-------|-----|------------|
|  | 4 mm  | 1   | 93303      |

| EDP number | Model number      | Width x roll dia. [inches] | Width x roll dia. [mm] | Suitable belt width [inches] | Use for   | Photo |
|------------|-------------------|----------------------------|------------------------|------------------------------|---|-------|
| 95016      | BSAD 41/36 x 610  | -                          | -                      | -                            | Adapter to extend the belt length from 20-1/2" to 24"   |       |
| 95020      | BSVA 9/25 x 520   | 0.35 x 0.98                | 9 x 25                 | 1/8, 1/4, 3/8, 1/2, 5/8      | Finishing jobs, deburring, matting, fine grinding and seamless blending of inner radii/channels, especially on pipe couplings                         |       |
| 95021      | BSVA 9/25-1 x 520 | 0.35 x 0.98                | 9 x 25                 | 1/8, 1/4, 3/8, 1/2           | Finishing jobs in narrow inner radii/channels, especially on pipe couplings made of stainless steel (INOX) with very small welded seams (TIG welding) |       |
| 95018      | BSVA 4/16 x 520   | 0.15 x 0.63                | 4 x 16                 | 1/4                          | Leveling, deburring, matting, fine grinding, cleaning, blending of stainless steel in narrow, small areas   |       |
| 95019      | BSVA 9/16 x 520   | 0.35 x 0.63                | 9 x 16                 | 1/2                          | Leveling, chamfering, matting, fine grinding, cleaning and seamless blending on small areas   |       |
| 95022      | BSVA 12/19 x 520  | 0.45 x 0.75                | 12 x 19                | 1/2, 5/8                     | Leveling, chamfering, matting, fine grinding, cleaning and seamless blending on wide areas  |       |
| 95023      | BSVA 18/23 x 520  | 0.71 x 0.91                | 18 x 23                | 3/4                          | Leveling, chamfering, matting, fine grinding, cleaning and seamless blending on wide convex surfaces  |       |





EMER 5/250 SI 120 V

**NEW**

Speed range: 11,000 - 25,000 RPM  
Output: 0.4 HP / 300 Watts



### PFERDEFFICIENCY®



PFERDMEDIA

To see it in action, please visit  
[pferdusa.com/91421](http://pferdusa.com/91421)

### Tool features

- E** Electric
- M** Drive motor
- ER** Electronic speed regulation
- 5** 500 watt consumption
- 250** 25,000 RPM max. rotational speed
- SI** Double insulated
- 120 V** 120 Volt

### Accessories included

- 2 keys (EDP 93312)
- 10' power cable

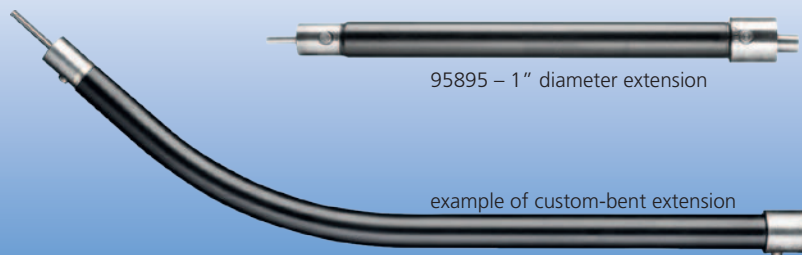
### Tool benefits

- Stepless rotational speed adjustment.
- Digital electronics for rotational speed.
- Overload protection.
- Smooth start-up for protection of people, tools and machine.
- Restart protection in case of power failure.

| EDP number | Model number        | Rotational speed [RPM] | Voltage 50-60 Hz | Power consumption [watts] | Power output [watts] | Max. Amps | Sound level [dB(A)] | Weight [lb] |
|------------|---------------------|------------------------|------------------|---------------------------|----------------------|-----------|---------------------|-------------|
| 91421      | EMER 5/250 SI 120 V | 11,000 - 25,000        | 120              | 500                       | 300                  | 4.6       | 80                  | 1.43        |

### Rigid extensions for electric motors

**NEW**



95895 - 1" diameter extension

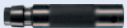


example of custom-bent extension

Rigid extensions, combined with electric drive motors, provide the ideal solution for tough applications, such as cleaning or milling work on hard-to-reach workpieces in foundries. Rigid extensions are frequently used in series production, as they are created to exactly fit the workpiece geometry.

Custom lengths and bending radii to meet customer requirements are available on request.

| EDP number | Model number  | Drive-side connection [DIN] | Handpiece-side connection [G] | Diameter x length |             | Max. bend radius [in] | Weight [lb] |
|------------|---------------|-----------------------------|-------------------------------|-------------------|-------------|-----------------------|-------------|
|            |               |                             |                               | nominal [in]      | metric [mm] |                       |             |
| 95895      | STV 27 L 250  | 10                          | 22                            | 1 x 10            | 27 x 250    | 10                    | 1.21        |
| 95896      | STV 27 L 500  | 10                          | 22                            | 1 x 20            | 27 x 500    | 10                    | 2.05        |
| 95897      | STV 27 L 1000 | 10                          | 22                            | 1 x 40            | 27 x 1,000  | 10                    | 3.74        |

### Handpieces

| EDP number | Model number     | Handpiece connection [G] | Max. input RPM | Diameter x length |             | Gear ratio | Included collet diameter [in.] | Collet group | Weight [lb] | Photo   |
|------------|------------------|--------------------------|----------------|-------------------|-------------|------------|--------------------------------|--------------|-------------|---|
|            |                  |                          |                | nominal [in]      | metric [mm] |            |                                |              |             |   |
| 94315      | HA 7 ZGA G22     | 22                       | 25,000         | 1 x 5             | 27 x 130    | -          | 1/4                            | 11           | 0.71        |  |
| 94488      | WZ 7 B STV G22   | 22                       | 17,100         | 2 x 6             | 55 x 157    | 1.3:1      | 1/4                            | 6            | 1.57        |  |
| 94489      | WZ 7 45° STV G22 | 22                       | 17,100         | 2 1/4 x 7         | 57 x 175    | 1.3:1      | 1/4                            | 6            | 1.65        |  |

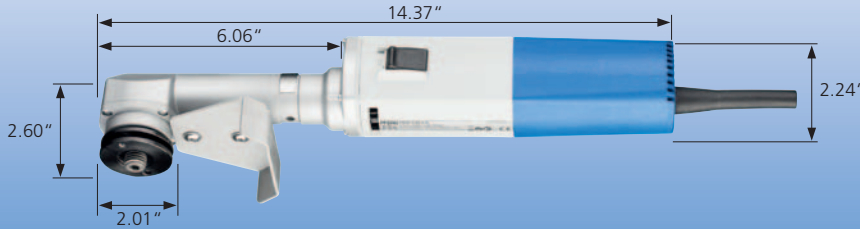
# Electric grinders

## Fillet weld grinder



**KNER 5/34 SI 120 V**

**Speed range: 1,500 - 3,400 RPM**  
**Output: 0.4 HP / 300 Watts**



### Tool features

- KN** Fillet weld grinder
- ER** Electronic speed regulation
- 5** 500 watt consumption
- 34** 3,400 RPM max. rotational speed
- SI** Double insulated
- 120 V** 120 Volt

### Accessories included

- 3 keys
- Mounting flanges
- Hand guard
- 10' power cable

### Tool benefits

- Designed for use with products up to 6" in diameter for fine grinding and finishing of fillet welds.
- Great for work with radial products in corners and narrow spaces.
- Stepless rotational speed adjustment.
- Digital regulation for constant rotational speed.
- Overload protection.
- Restart protection in case of power failure.
- Light, very easy to handle, good power output.

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| EDP number | Model number       | Rotational Speed [RPM] | Voltage 50-60 Hz | Power consumption [watts] | Power output [watts] | Max. Amps | Spindle thread | Fits arbor hole [inches] | Sound level [dB(A)] | Weight [lb] |
|------------|--------------------|------------------------|------------------|---------------------------|----------------------|-----------|----------------|--------------------------|---------------------|-------------|
| 91235      | KNER 5/34 SI 120 V | 1,500 - 3,400          | 120              | 500                       | 300                  | 4.6       | 5/8-11 UNC     | 7/8", 1"                 | 77                  | 3.53        |

### Mounting flanges

| Description              | EDP number |
|--------------------------|------------|
| Backing flange WSPF 5/8" | 97974      |
| Clamping nut SPM 5/8"    | 97975      |

### Keys

| Diagram number | Width     | EDP number |
|----------------|-----------|------------|
| 1              | 4 mm      | 93310      |
| 2              | 5 mm      | 93304      |
| 3              | 35 x 5 mm | 93395      |

### Recommended PFERD products

#### Catalogue 204\*

#### POLINOX® unitized wheels

6" diameter



#### Felt flap discs

4-1/2" - 5" diameter



#### POLIVLIES® flap discs

5" diameter with 7/8" arbor hole

#### POLINOX® unmounted flap wheels with thread

4" - 5" diameter



**Note:** Product recommendations are based on general peripheral and rotational speeds.

Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

Comply with ANSI B7.1-2000 standards and OSHA regulations.



# Flexible shaft drives

## General information

Flexible shaft drives cover a wide rotational speed range and can be adjusted steplessly electronically, or via gears, to match individual product requirements. Flexible shaft drives have very high power outputs. They can also be used with compact handpieces or extensions to work in hard-to-reach areas.

### Areas of application

Flexible shaft drives can be used for almost all jobs. They are used successfully in many industrial sectors for different processes. The rotational speed adjustment allows the use of various products on one single drive.

### Standards, safety, general guidelines

#### Electrical safety

According to current safety standards for hand-guided electric power tools, a distinction is made between three safety classes.

PFERD flexible shaft drives comply with two of these safety classes.

### The PFERD product range

PFERD offers various types of flexible shaft drives, as well as a comprehensive range of matching flexible shafts, handpieces, angle drives, drum drives and special drives.

PFERD flexible shaft drives and their accessories are extremely robust, technically tried and tested and are built according to the latest ergonomic knowledge and specifications. This product range was developed especially for the economic use of grinding, milling, brushing, cut-off and polishing products and covers a wide rotational speed range (0 - 28,800 RPM) and power range (300 - 880 watts).

### Advantages

- Very light, compact and ergonomic handpieces
- Robust motor drives designed for continuous use (Mammoth)
- Multi-purpose motors (RUER)
- Technically tried and tested
- Very high power output
- Highly versatile
- Simple power supply
- Low maintenance
- Easy to service
- Economical

PFERD guarantees a safe use of their machines though compliance with the valid machine laws.

PFERD electric grinders bear the CE mark.



Any special or country-specific regulations must be observed.

#### 1. Grounded electric drives (protection class I)

This design is indicated by the protective grounding symbol  $\oplus$ :

- Mammoth MD 10 (page 53)

#### 2. Double insulated electric drives (protection class II)

This design is indicated by the insulation symbol  $\square$  and the model number suffix "SI":

- RUER 5/250 SI (page 50)
- RUER 10/250 SI (page 51)
- RUER 15/30 SI 120 V (page 52)

### Criteria for selecting the optimum flexible shaft drive

#### 1. Design, shape and size

Every type of application places specific demands on the shape and size of the power tool. The different designs can be used for various applications: The ideal power tool should be selected for the task at hand depending on the dimensions, accessibility, type and frequency of the application.

#### 2. Rotational speed

The power tool should always be selected according to the rotational speed and cutting speed recommendations for the product. Please refer to catalogues 202 - 208 for these recommendations.

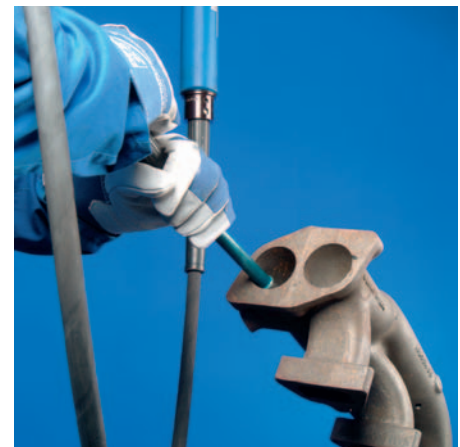
#### 3. Power output

The power output of the drive is the decisive factor for maintaining the rotational speed under load. The load is determined by the stock removal properties of the material to be machined, the cutting characteristics of the product, the product diameter, the contact surface, and the contact pressure.

#### 4. Holder requirements

Depending on the PFERD product selected, different holders are available, e.g. collets or threaded spindles. Matching collets are allocated to every drive. Please refer to pages 66-67 for an overview of the collets and drive spindle extensions.

If you have any further questions, your PFERD sales representative will be happy to help you.



### Flexible shafts (BW)

Flexible shafts consist of a combination of three components:

- Flexible core (SE),
- Flexible casing (SCH),
- Handpiece (HA).

### Flexible core (SE)

The flexible core consists of 4 to 10 layers of wire, conforming to DIN 2076, and is specially designed for high-speed clockwise rotation. The coupling is securely press-fitted to the core. After approximately 100 operating hours, the flexible core must be re-lubricated. The core and casing must be degreased and new, special shaft grease must be applied.

### Flexible casing (SCH)

The flexible casing consists of oil-resistant rubber; the interior being a flat steel spiral and the outside being solid rubber. The connection couplings are pressed on firmly and encased in a rubber sheath as reinforcement.

### Handpiece (HA)

The handpieces are light and easy to handle in relation to their power output transmission, and cover a wide rotational speed range. Because of low noise emission, continuous operation with little fatigue is possible. Replaceable collets or the special shank adapter for Morse cones allow various tools to be mounted. The sliding connection allows quick handpiece changes.

### Repair

It is not possible to repair cores and flexible casings. We recommend replacement with ready-to-use new parts.

### Bend radius

When using flexible shafts, please ensure that the shafts are not bent to smaller than the recommended bend radius, which is listed for each flexible shaft.

### Flexible shaft speeds and safety

Please use the chart below to determine the correct combination of power output, rotational speed, and flexible shaft core diameter.

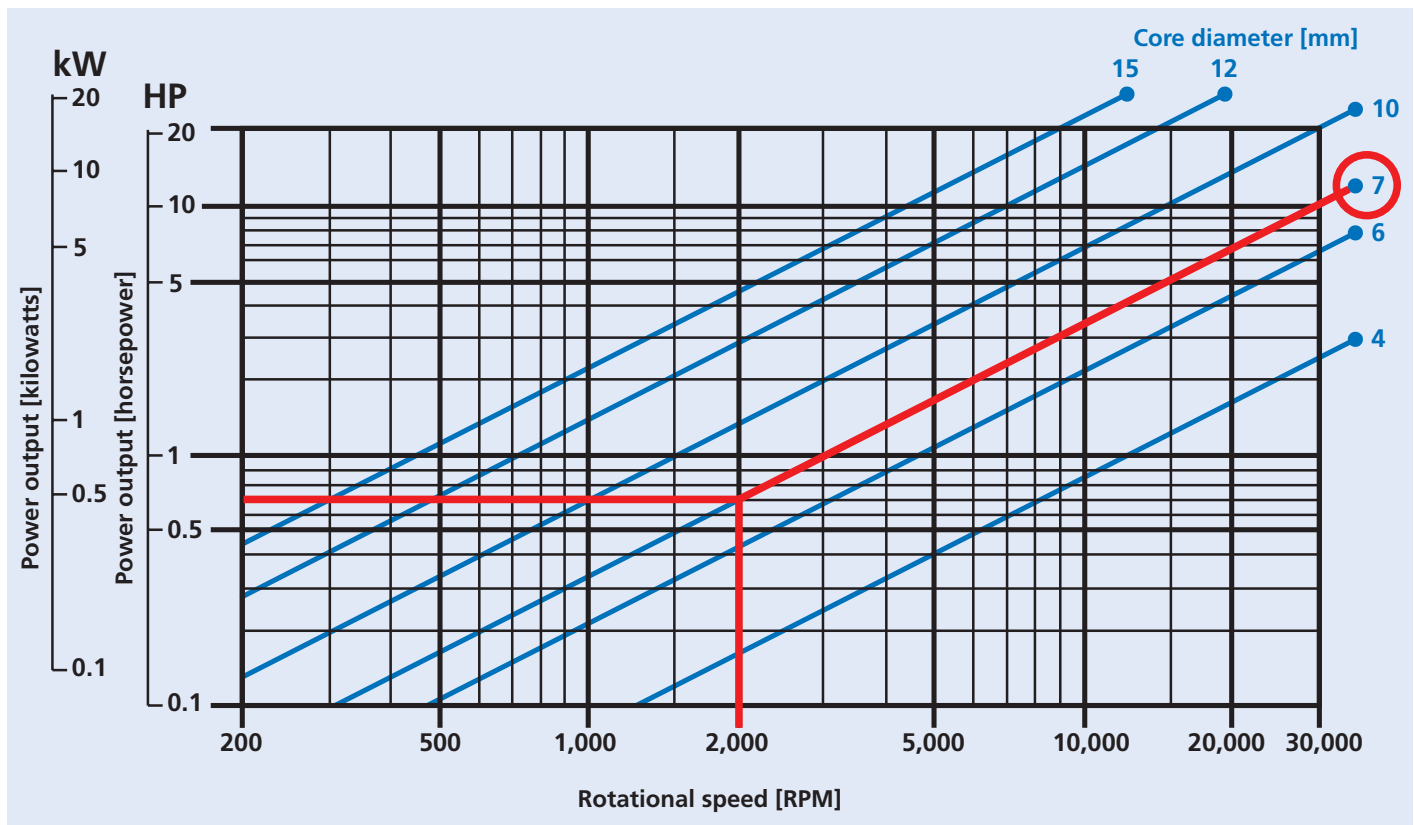
Staying within these guidelines will prevent excessive power transmission to the product contact area, which could result in "feedback" to the core, damaging it permanently and risking serious injury to the operator.

### Example (see graph below):

Flexible shaft core diameter: **7 mm**  
 Motor drive power output: **0.7 HP / 500 W**  
 Recommended rotational speed: **2,000 RPM**

| Flexible shaft core diameter [mm] | Model number         | Recommended rotational speed range [RPM] | Catalogue page |
|-----------------------------------|----------------------|--|----------------|
| 4                                 | BW 4 ZG DIN 10       | 24,000 - 40,000                          | 55             |
|                                   | BW 4 PST-T DIN 10/M4 | 1,500 - 7,650                            | 60             |
| 6                                 | BW 6 ZG DIN 10       | 11,000 - 25,000                          | 55             |
|                                   | BW 7 ZGU DIN 10 2 m  | 11,000 - 25,000                          | 57             |
| 7                                 | BW 7 PST-T DIN 10/M5 | 1,500 - 4,250                            | 60             |
|                                   | BW 10 ZG DIN 10      | 750 - 18,000                             | 59             |
| 10                                | BW 10 ZG DIN 10 2 m  | 750 - 18,000                             | 59             |

Note: 12 and 15 mm shafts available by special order



# Flexible shaft drives

## Portable variable speed machines



**RUER 5/250 SI 120 V**  
**Speed range: 11,000 - 25,000 RPM**  
**Output: 0.4 HP / 300 Watts**



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[pferdusa.com/92201](http://pferdusa.com/92201)



### Tool features

- RU** Universal electric motor (1-phase)
- ER** Electronic speed regulation
- 5** 500 Watt consumption
- 250** 25,000 RPM max. rotational speed
- SI** Double insulated
- 120 V** 120 Volt

### Accessories included

- 2 keys (EDP 93312)
- 10' power cable

*Supplied without flexible shaft, please order separately (see below for information).  
 Additional accessories available on page 61.*

### Tool benefits

- High output for fine milling, grinding and polishing tasks. Lightweight, slim handpieces allow comfortable use.
- Stepless speed variation.
- Digital electronic speed control ensures constant RPM even under load.
- Protected by tube frame in any position.
- Soft start feature protects mechanical and electronic components.
- Restart protection on power failure.
- Electronic overload shut-off.



Drive + flexible shaft + handpiece

### Flexible shaft drive

| EDP number | Model number        | Dimensions L x W x H [inches] | Flexible shaft connection [DIN] | Rotational speed [RPM] | Voltage 50-60 Hz | Power consumption [Watts] | Power output [Watts] | Max. Amps | Sound level [dB(A)] | Weight [lb] |
|------------|---------------------|-------------------------------|---------------------------------|------------------------|------------------|---------------------------|----------------------|-----------|---------------------|-------------|
| 92201      | RUER 5/250 SI 120 V | 11.22 x 2.24 x 4.02           | 10                              | 11,000 - 25,000        | 120              | 500                       | 300                  | 4.6       | 73                  | 4.72        |

### Flexible shafts

| EDP number | Model number    | Suitability rating | Speed range [RPM] | Maximum power output* [Watts] | Tool connection [DIN] | Handpiece connection | Included handpiece | Catalogue detail page |
|------------|-----------------|--------------------|-------------------|-------------------------------|-----------------------|----------------------|--------------------|-----------------------|
| 94001      | BW 4 ZG DIN 10  | high               | 24,000 - 40,000   | 300 - 500                     | 10                    | G 16                 | 94301              | 55                    |
| 94005      | BW 6 ZG DIN 10  | high               | 10,000 - 25,000   | 750 - 1,500                   | 10                    | G 16                 | 94301              | 55                    |
| 94015      | BW 7 ZGU DIN 10 | medium             | 12,000 - 25,000   | 880 - 1,760                   | 10                    | G 22                 | 94315              | 57                    |


\*Please refer to page 49 for information on flexible shaft speeds, power outputs, and operational safety.

### Handpieces


| EDP number | Model number     | Description           | Max. RPM | Shaft connection | Included collet size | Catalogue detail page | Photo |
|------------|------------------|-----------------------|----------|------------------|----------------------|-----------------------|-------|
| 94301      | HA 4 ZGB G 16    | straight handpiece    | 40,000   | G 16             | 1/4"                 | 64                    |       |
| 94351      | WZ 4 A G 16      | angle handpiece (90°) | 20,000   | G 16             | 1/8"                 | 64                    |       |
| 94315      | HA 7 ZGA G 22    | straight handpiece    | 25,000   | G 22             | 1/4"                 | 64                    |       |
| 94375      | WZ 7 45° G 22    | angle handpiece (45°) | 17,100   | G 22             | 1/4"                 | 64                    |       |
| 94355      | WZ 7 B G 22      | angle handpiece (90°) | 17,100   | G 22             | 1/4"                 | 64                    |       |
| 94385      | WT 7 E M 14 G 22 | angle grinder drive   | 25,000   | G 22             | M14 spindle          | 64                    |       |



**PFERDEFFICIENCY®**



Energy Saving



Time Saving




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**RUER 10/250 SI 120 V**  
Speed range: 11,000 - 25,000 RPM  
Output: 0.9 HP / 660 Watts



### Tool features

- RU** Universal electric motor (1-phase)
- ER** Electronic speed regulation
- 10** 1,050 Watt consumption
- 250** 25,000 RPM max. rotational speed
- SI** Double insulated 
- 120 V** 120 Volt

### Accessories included

- 2 keys (EDP 93312)
- 10' power cable

*Supplied without flexible shaft, please order separately (see below for information).  
Additional accessories available on page 61.*

### Tool benefits

- Designed for use in tool, die and mouldmaking, precision mechanics and DIY applications.
- Stepless speed variation.
- Digital electronic speed control ensures constant RPM even under load.
- Protected by tube frame in any position.
- Soft start feature protects mechanical and electronic components.
- Electronic overload shut-off.



### Flexible shaft drive






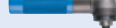



| EDP number | Model number         | Dimensions L x W x H [inches] | Flexible shaft connection [DIN] | Rotational speed [RPM] | Voltage 50-60 Hz | Power consumption [Watts] | Power output [Watts] | Max. Amps | Sound level [dB(A)] | Weight [lb] |
|------------|----------------------|-------------------------------|---------------------------------|------------------------|------------------|---------------------------|----------------------|-----------|---------------------|-------------|
| 92205      | RUER 10/250 SI 120 V | 11.81 x 2.95 x 5.51           | 10                              | 11,000 - 25,000        | 120              | 1,050                     | 660                  | 9.5       | 84                  | 6.86        |

### Flexible shafts

| EDP number | Model number    | Suitability rating | Speed range [RPM] | Maximum power output* [Watts] | Tool connection [DIN] | Handpiece connection | Included handpiece | Catalogue detail page |
|------------|-----------------|--------------------|-------------------|-------------------------------|-----------------------|----------------------|--------------------|-----------------------|
| 94001      | BW 4 ZG DIN 10  | medium             | 24,000 - 40,000   | 300 - 500                     | 10                    | G 16                 | 94301              | 55                    |
| 94005      | BW 6 ZG DIN 10  | medium             | 10,000 - 25,000   | 750 - 1,500                   | 10                    | G 16                 | 94301              | 55                    |
| 94015      | BW 7 ZGU DIN 10 | high               | 12,000 - 25,000   | 880 - 1,760                   | 10                    | G 22                 | 94315              | 57                    |
| 94020      | BW 10 ZG DIN 10 | medium             | 750 - 18,000      | 140 - 2,450                   | 10                    | G 28                 | 94320              | 59                    |

\*Please refer to page 49 for information on flexible shaft speeds, power outputs, and operational safety.

### Handpieces

| EDP number | Model number     | Description           | Max. RPM | Shaft connection | Included collet size | Catalogue detail page | Photo   |
|------------|------------------|-----------------------|----------|------------------|----------------------|-----------------------|---|
| 94301      | HA 4 ZGB G 16    | straight handpiece    | 40,000   | G 16             | 1/4"                 | 64                    |  |
| 94351      | WZ 4 A G 16      | angle handpiece (90°) | 20,000   | G 16             | 1/8"                 | 64                    |  |
| 94315      | HA 7 ZGA G 22    | straight handpiece    | 25,000   | G 22             | 1/4"                 | 64                    |  |
| 94375      | WZ 7 45° G 22    | angle handpiece (45°) | 17,100   | G 22             | 1/4"                 | 64                    |  |
| 94355      | WZ 7 B G 22      | angle handpiece (90°) | 17,100   | G 22             | 1/4"                 | 64                    |  |
| 94385      | WT 7 E M 14 G 22 | angle grinder drive   | 25,000   | G 22             | M14 spindle          | 64                    |  |
| 94320      | HA 10 ZGE G 28   | straight handpiece    | 18,000   | G 28             | 1/4"                 | 64                    |  |
| 94380      | WZ 10 45° G 28   | angle handpiece (45°) | 17,100   | G 28             | 1/4"                 | 64                    |  |
| 94360      | WZ 10 B G 28     | angle handpiece (90°) | 17,100   | G 28             | 1/4"                 | 64                    |  |

# Flexible shaft drives

## Portable variable speed machines



**RUER 15/30 SI 120 V**  
**Speed range: 1,400 - 3,000 RPM**  
**Output: 1.2 HP / 900 Watts**

**NEW**

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### Tool features

- RU** Universal electric motor (1-phase)
- ER** Electronic speed regulation
- 15** 1,340 Watt consumption
- 30** 3,000 RPM max. rotational speed
- SI** Double insulated
- 120 V** 120 Volt

### Accessories included

- 2 keys (EDP 93312)
- 10' power cable

*Supplied without flexible shaft, please order separately (see below for information).  
 Additional accessories available on page 61.*

### Tool benefits

- High torque, low speed machine for heavy milling and grinding.
- Stepless speed variation.
- Digital electronic speed control ensures constant RPM even under load.
- Protected by tube frame in any position.
- Soft start feature protects mechanical and electronic components.
- Restart protection on power failure.
- Electronic overload shut-off.



### Flexible shaft drive

| EDP number | Model number        | Dimensions L x W x H [inches] | Flexible shaft connection [DIN] | Rotational speed [RPM] | Voltage 50-60 Hz | Power consumption [Watts] | Power output [Watts] | Max. Amps | Sound level [dB(A)] | Weight [lb] |
|------------|---------------------|-------------------------------|---------------------------------|------------------------|------------------|---------------------------|----------------------|-----------|---------------------|-------------|
| 92210      | RUER 15/30 SI 120 V | 15.35 x 2.95 x 5.51           | 10                              | 1,400 - 3,000          | 120              | 1,340                     | 900                  | 12        | 86                  | 8.27        |

### Flexible shafts

| EDP number | Model number         | Suitability rating | Speed range [RPM] | Maximum power output*1 [Watts] | Tool connection [DIN] | Handpiece connection | Included handpiece | Catalogue detail page |
|------------|----------------------|--------------------|-------------------|--------------------------------|-----------------------|----------------------|--------------------|-----------------------|
| 94264      | BW 4 PST-T DIN 10/M4 | high               | 1,500 - 7,650     | special*2                      | 10                    | -                    | -                  | 60                    |
| 94274      | BW 7 PST-T DIN 10/M5 | high               | 1,500 - 4,250     | special*2                      | 10                    | -                    | -                  | 60                    |
| 94020      | BW 10 ZG DIN 10      | high               | 750 - 18,000      | 140 - 2,450                    | 10                    | G 28                 | 94320              | 59                    |

\*1 Please refer to page 49 for information on flexible shaft speeds, power outputs, and operational safety

\*2 Only for use with POLISTAR-TUBE abrasive stars, POLINOX® cross buffs, and threaded nylon tube brushes

### Handpieces

| EDP number | Model number   | Description                             | Max. RPM | Shaft connection | Included collet size | Catalogue detail page | Photo |
|------------|----------------|---|----------|------------------|----------------------|-----------------------|-------|
| 94320      | HA 10 ZGE G 28 | straight handpiece                      | 18,000   | G 28             | 1/4"                 | 64                    |       |
| 94380      | WZ 10 45° G 28 | angle handpiece (45°)                   | 17,100   | G 28             | 1/4"                 | 64                    |       |
| 94360      | WZ 10 B G 28   | angle handpiece (90°)                   | 17,100   | G 28             | 1/4"                 | 64                    |       |
| 94330      | HA 12 ZGA G 28 | straight handpiece                      | 18,000   | G 28             | 1/2"                 | 64                    |       |
| 94418      | FSH G 28       | rigid extension (can be bent up to 40°) | 12,000   | G 28             | 1/4"                 | 64                    |       |





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**PFERDMEDIA**



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**MD 10**  
**Speed range: 1,000 - 14,400 RPM\***  
**Output: 1.2 HP / 880 Watts**



*\*up to 28,800 RPM with overdrive unit*

### Tool features

- M** Mammoth motor
- D** Three-phase power (480 V, 60 HZ)
- 10** 1,200 Watt consumption



**Overdrive unit (EDP 92901)**  
**transmission ratio 1:3**  
 please see page 59 for detailed information

### Accessories included

- 2 keys (EDP 93312)
- 10' power cable (without plug)

*Supplied without flexible shaft, please order separately (see below for information).  
 Additional accessories available on page 61.*

### Tool benefits

- General-purpose drive for high-powered applications with all products up to 4" dia.
- Protective grounding ⚡
- Speed is adjustable via external gears: 1,000, 1,900, 2,500, 3,800, 6,800, 9,600, 14,400 RPM
- Restart protection in case of power failure.

### Flexible shaft drive

| EDP number | Model number | Dimensions L x W x H [inches] | Base dia. [inches] | Flexible shaft connection [DIN] | Rotational speed [RPM] | Voltage 60 Hz | Power consumption [Watts] | Power output [Watts] | Max. Amps | Sound level [dB(A)] | Weight [lb] |
|------------|--------------|-------------------------------|--------------------|---------------------------------|------------------------|---------------|---------------------------|----------------------|-----------|---------------------|-------------|
| 92001      | MD 10        | 18.11 x 6.30 x 15.75          | 9.45               | 10                              | 1,000 - 14,400         | 480           | 1,200                     | 880                  | 1.6       | 79                  | 36.4        |


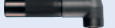



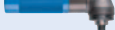


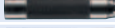
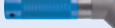

### Flexible shafts

| EDP number | Model number         | Suitability rating |                   |              | Max. power output*1 [Watts] | Tool connection [DIN] | Handpiece connection | Included handpiece | Catalogue detail page |
|------------|----------------------|--------------------|-------------------|--------------|-----------------------------|-----------------------|----------------------|--------------------|-----------------------|
|            |                      | ≤ 3,200 RPM        | 4,800 - 9,600 RPM | ≥ 12,000 RPM |                             |                       |                      |                    |                       |
| 94264      | BW 4 PST-T DIN 10/M4 | high               | –                 | –            | special*2                   | 10                    | –                    | –                  | 60                    |
| 94001      | BW 4 ZG DIN 10       | –                  | –                 | high         | 300 - 500                   | 10                    | G 16                 | 94301              | 55                    |
| 94005      | BW 6 ZG DIN 10       | –                  | medium            | high         | 750 - 1,500                 | 10                    | G 16                 | 94301              | 55                    |
| 94015      | BW 7 ZGU DIN 10      | –                  | medium            | high         | 880 - 1,760                 | 10                    | G 22                 | 94315              | 57                    |
| 94274      | BW 7 PST-T DIN 10/M5 | high               | medium            | –            | special*2                   | 10                    | –                    | –                  | 60                    |
| 94020      | BW 10 ZG DIN 10      | high               | high              | medium       | 140 - 2,450                 | 10                    | G 28                 | 94320              | 59                    |

\*1 Please refer to page 49 for information on flexible shaft speeds, power outputs, and operational safety.

\*2 Only for use with POLISTAR-TUBE abrasive stars, POLINOX® cross buffs, and threaded nylon tube brushes.

### Handpieces

| EDP number | Model number     | Description                             | Max. RPM | Shaft connection | Included collet size | Catalogue detail page | Photo   |
|------------|------------------|---|----------|------------------|----------------------|-----------------------|---|
| 94301      | HA 4 ZGB G 16    | straight handpiece                      | 40,000   | G 16             | 1/4"                 | 64                    |  |
| 94351      | WZ 4 A G 16      | angle handpiece (90°)                   | 20,000   | G 16             | 1/8"                 | 64                    |  |
| 94315      | HA 7 ZGA G 22    | straight handpiece                      | 25,000   | G 22             | 1/4"                 | 64                    |  |
| 94375      | WZ 7 45° G 22    | angle handpiece (45°)                   | 17,100   | G 22             | 1/4"                 | 64                    |  |
| 94355      | WZ 7 B G 22      | angle handpiece (90°)                   | 17,100   | G 22             | 1/4"                 | 64                    |  |
| 94385      | WT 7 E M 14 G 22 | angle grinder drive                     | 25,000   | G 22             | M14 spindle          | 64                    |  |
| 94320      | HA 10 ZGE G 28   | straight handpiece                      | 18,000   | G 28             | 1/4"                 | 64                    |  |
| 94380      | WZ 10 45° G 28   | angle handpiece (45°)                   | 17,100   | G 28             | 1/4"                 | 64                    |  |
| 94360      | WZ 10 B G 28     | angle handpiece (90°)                   | 17,100   | G 28             | 1/4"                 | 64                    |  |
| 94330      | HA 12 ZGA G 28   | straight handpiece                      | 18,000   | G 28             | 1/2"                 | 64                    |  |
| 94418      | FSH G 28         | rigid extension (can be bent up to 40°) | 12,000   | G 28             | 1/4"                 | 64                    |  |

# Flexible shaft drives

## Recommended products for flexible shafts 4 ZG/6 ZG



### Recommended PFERD products

The following products can be found in catalogues 202 - 208 of the TOOL MANUAL, and are recommended for use with flexible shafts 4 ZG and 6 ZG on the following page.

| RPM Output  | Catalogue 202                                   | Catalogue 203*                            | Catalogue 204*   |  | Catalogue 206   | Catalogue 208   |
|---|---|---|--|--|---|---|
| 28,800 RPM<br>Mammoth + overdrive unit  | Tungsten carbide burs<br>3/16" to 1/2" diameter | Mounted points<br>1/2" to 1-1/4" diameter | Abrasive spiral bands<br>3/8" to 3/4" diameter<br><b>POLICAP® abrasive caps</b><br>9/32" diameter<br><b>Mounted flap wheels</b><br>5/8" diameter   | <b>Poliflex® fine grinding points</b><br>Bond GR<br>up to 1/4" diameter<br>Bond LR<br>up to 1/2" diameter<br><b>Felt polishing points</b><br>1/4" diameter   | <b>Die grinder wheels</b><br>2" dia.<br><b>Snagging wheels</b><br>2" dia. |   |
| 20,400 RPM<br>Mammoth + overdrive unit,<br>RUER 5/250 SI 120 V,<br>RUER 10/250 SI 120 V | Tungsten carbide burs<br>1/4" to 3/8" diameter  | Mounted points<br>3/4" to 1-5/8" diameter | Abrasive spiral bands<br>3/4", 7/8", 1" diameter<br><b>POLIROLL</b><br>1/4", 5/16" diameter<br><b>POLICAP® abrasive caps</b><br>3/8", 7/16" diameter<br><b>Mounted flap wheels</b><br>5/8" to 1" diameter<br><b>POLISTAR coated abrasive stars</b><br>3/4" diameter  | <b>Poliflex® fine grinding points</b><br>Bond GR<br>3/8" diameter<br>Bond LR<br>3/4" to 5/8" diameter<br><b>Felt polishing points</b><br>1/4" to 3/8" diameter   | <b>Die grinder wheels</b><br>2" dia.<br><b>Snagging wheels</b><br>2" dia. |   |
| 18,000 RPM<br>RUER 5/250 SI 120 V,<br>RUER 10/250 SI 120 V                              | Tungsten carbide burs<br>5/16" to 5/8" diameter | Mounted points<br>3/4" to 2" diameter     | <b>COMBIDISC® abrasive discs</b><br>1" diameter<br><b>Abrasive spiral bands</b><br>7/8", 1", 1-1/8" dia.<br><b>POLIROLL cartridge rolls</b><br>3/8", 5/16" diameter<br><b>POLICAP® abrasive caps</b><br>1/2" diameter<br><b>Mounted flap wheels</b><br>3/4" to 1" diameter<br><b>POLISTAR coated abrasive stars</b><br>3/4" diameter | <b>POLIVLIES® star pads</b><br>1-1/2", 2", 3" dia.<br><b>POLINOX® cross buffs</b><br>1", 1-1/2" diameter<br><b>Poliflex® fine grinding points</b><br>Bond GR<br>up to 1/2" diameter<br>Bond LR<br>up to 3/4" diameter<br><b>Felt polishing points</b><br>1/4" to 3/8" diameter | <b>Die grinder wheels</b><br>2" dia.<br><b>Snagging wheels</b><br>2" dia. | <b>Knot wire wheels</b><br>3" to 3-1/4" dia.  |
| 14,400 RPM<br>Mammoth,<br>RUER 5/250 SI 120 V,<br>RUER 10/250 SI 120 V                  | Tungsten carbide burs<br>3/8" to 5/8" diameter  | Mounted points<br>3/4" to 2" diameter     | <b>COMBIDISC® abrasive discs</b><br>1-1/2", 2" diameter<br><b>Abrasive spiral bands</b><br>1-1/8", 1-1/2" diameter<br><b>POLIROLL cartridge rolls</b><br>1/2" diameter<br><b>POLICAP® abrasive caps</b><br>5/8" diameter<br><b>Mounted flap wheels</b><br>3/4" to 1-1/2" diameter  | <b>POLISTAR coated abrasive stars</b><br>3/4" diameter<br><b>POLINOX® cross buffs</b><br>1-1/2" diameter<br><b>Poliflex® fine grinding points</b><br>Bond GR<br>5/8" diameter<br>Bond LR<br>1" diameter<br><b>Felt polishing points</b><br>5/16" to 1/2" dia.                  |   | <b>Crimped wire wheels</b><br>up to 3" diameter<br><b>Knot wheels</b><br>3" to 4" diameter<br><b>Stem mounted end brushes</b><br>1/2" up to 1" diameter<br><b>Mounted cup and bevel brushes</b><br>up to 3" diameter<br><b>Pilot bonding brushes</b><br><b>Circular end brushes</b> |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

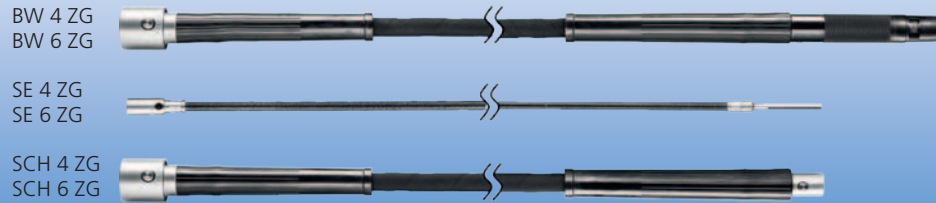
Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

**BW 4 ZG DIN 10**  
**BW 6 ZG DIN 10**

**Speed range: 24,000 - 40,000 RPM / Output: 300 - 500 Watts (0.4 - 0.7 HP)**  
**Speed range: 11,000 - 25,000 RPM / Output: 660 - 1,460 Watts (0.9 - 2.0 HP)**



### Please note

Observe listed rotational speed and power output ranges unless otherwise noted. Refer to page 49 for information on flexible shaft speeds, power outputs, and operational safety. Special shaft lengths are available on request.

### Flexible shaft 4 ZG

- For power output requirements of less than 300 watts (0.4 HP), the rotational speed range can be safely underrun.
- Do not bend the shaft to a radius of less than 4".

### Flexible shaft 6 ZG

- For power output requirements of less than 660 watts (0.9 HP), the rotational speed range can be safely underrun.
- Do not bend the shaft to a radius of less than 5-1/2".

| EDP number | Model number | Drive-side coupling |           |           | Handpiece-side coupling |           |           | Diameter x length |             | Weight [lb] |
|------------|--------------|---------------------|-----------|-----------|-------------------------|-----------|-----------|-------------------|-------------|-------------|
|            |              | connection          | dia. [in] | dia. [mm] | connection              | dia. [in] | dia. [mm] | nominal [in]      | metric [mm] |             |

### Flexible shaft (includes handpiece 94301)

|       |                |         |      |    |      |      |    |          |            |      |
|-------|----------------|---------|------|----|------|------|----|----------|------------|------|
| 94001 | BW 4 ZG DIN 10 | DIN 10* | 1.18 | 30 | G 16 | 0.63 | 16 | 1/2 x 55 | 13 x 1,390 | 1.32 |
| 94005 | BW 6 ZG DIN 10 | DIN 10  | 1.18 | 30 | G 16 | 0.63 | 16 | 5/8 x 65 | 16 x 1,643 | 2.54 |

### Replacement core

|       |                    |         |     |  |      |           |          |           |           |      |
|-------|--------------------|---------|-----|--|------|-----------|----------|-----------|-----------|------|
| 94801 | SE 4 ZG DIN 10/G16 | DIN 10* | M10 |  | G 16 | 0.14/0.10 | 3.5/2.45 | 3/16 x 52 | 4 x 1,329 | 0.26 |
| 94805 | SE 6 ZG DIN 10/G16 | DIN 10  | M10 |  | G 16 | 0.14/0.10 | 3.5/2.45 | 1/4 x 62  | 6 x 1,583 | 0.60 |

### Replacement casing

|       |                     |         |      |    |      |      |    |          |            |      |
|-------|---------------------|---------|------|----|------|------|----|----------|------------|------|
| 94501 | SCH 4 ZG DIN 10/G16 | DIN 10* | 1.18 | 30 | G 16 | 0.63 | 16 | 1/2 x 51 | 13 x 1,300 | 0.73 |
| 94505 | SCH 6 ZG DIN 10/G16 | DIN 10  | 1.18 | 30 | G 16 | 0.63 | 16 | 5/8 x 61 | 16 x 1,553 | 1.63 |

\*Cores and hoses with double-sided sliding coupling available by special order.

### Handpieces



HA 4 ZGB G16  
EDP 94301





WZ 4 A G16  
EDP 94351

| EDP number | Model number  | Description           | Diameter x length |             | Gear ratio | Max. input RPM | Shaft connection | Collet group | Included collet size | Included key |                | Weight [lb] |
|------------|---------------|-----------------------|-------------------|-------------|------------|----------------|------------------|--------------|----------------------|--------------|----------------|-------------|
|            |               |                       | nominal [in]      | metric [mm] |            |                |                  |              |                      | Pcs.         | [EDP]          |             |
| 94301      | HA 4 ZGB G 16 | straight handpiece    | 3/4 x 4           | 19 x 110    | -          | 40,000         | G 16             | 9            | 1/4"                 | 2            | 93337          | 0.31        |
| 94351      | WZ 4 A G 16   | angle handpiece (90°) | 1-3/4 x 4         | 43 x 111    | 1:1        | 20,000*        | G 16             | 10           | 1/8"                 | 1<br>1       | 93330<br>93335 | 0.60        |

\*max. 15,000 RPM when used with a 1/4" collet

### Collets

| Photo   | Collet group | Shank diameter and EDP number |       |       |       |       |
|---|--------------|-------------------------------|-------|-------|-------|-------|
|   |              | 3/32"                         | 1/8"  | 1/4"  | 3 mm  | 6 mm  |
|  | 9            | 93120                         | 93125 | 93127 | 93108 | 93114 |
|  | 10           | -                             | 93146 | 93148 | 93134 | 93140 |



Maintenance sets for flexible shafts; see page 62.

# Flexible shaft drives

## Recommended products for flexible shafts 7 ZGU



### Recommended PFERD products

The following products can be found in catalogues 202 - 208 of the TOOL MANUAL, and are recommended for use with flexible shafts 7 ZGU on the following page.

| RPM Output  | Catalogue 202                                  | Catalogue 203*                            | Catalogue 204*  |   | Catalogue 206   | Catalogue 208   |
|---|--|---|---|---|---|---|
| 24,000 RPM<br>RUER 5/250 SI 120 V<br>RUER 10/250 SI 120 V                               | Tungsten carbide burs<br>1/4" to 1/2" diameter | Mounted points<br>1/2" to 1-3/8" diameter | Abrasive spiral bands<br>up to 7/8" diameter<br><b>POLICAP® abrasive caps</b><br>9/32", 3/8" diameter<br><b>Mounted flap wheels</b><br>5/8" diameter  | <b>Poliflex® fine grinding points</b><br>Bond GR<br>up to 3/8" diameter<br>Bond LR<br>up to 5/8" diameter<br><b>Felt polishing points</b><br>1/4", 5/16" diameter   | <b>Die grinder wheels</b><br>2" dia.<br><b>Snagging wheels</b><br>2" dia. |   |
| 20,400 RPM<br>Mammoth + overdrive unit,<br>RUER 5/250 SI 120 V,<br>RUER 10/250 SI 120 V | Tungsten carbide burs<br>1/4" to 3/8" diameter | Mounted points<br>1/2" to 1-5/8" diameter | Abrasive spiral bands<br>3/4", 7/8", 1" diameter<br><b>POLIROLL</b><br>1/4", 5/16" diameter<br><b>POLICAP® abrasive caps</b><br>3/8" diameter<br><b>Mounted flap wheels</b><br>5/8" to 1" diameter<br><b>POLISTAR coated abrasive stars</b><br>3/4" diameter                  | <b>Poliflex® fine grinding points</b><br>Bond GR<br>3/8" diameter<br>Bond LR<br>3/4" to 5/8" diameter<br><b>Felt polishing points</b><br>1/4" to 3/8" diameter  | <b>Die grinder wheels</b><br>2" dia.<br><b>Snagging wheels</b><br>2" dia. |   |
| 14,400 RPM<br>Mammoth,<br>RUER 5/250 SI 120 V,<br>RUER 10/250 SI 120 V                  | Tungsten carbide burs<br>3/8" to 1/2" diameter | Mounted points<br>3/4" to 2" diameter     | <b>COMBIDISC® abrasive discs</b><br>1-1/2", 2" diameter<br><b>Abrasive spiral bands</b><br>1-1/8", 1-1/2" diameter<br><b>POLIROLL cartridge rolls</b><br>1/2" diameter<br><b>POLICAP® abrasive caps</b><br>5/8" diameter<br><b>Mounted flap wheels</b><br>3/4" to 1" diameter | <b>POLISTAR coated abrasive stars</b><br>3/4" diameter<br><b>POLINOX® cross buffs</b><br>1-1/2" diameter<br><b>Poliflex® fine grinding points</b><br>Bond GR<br>5/8" diameter<br>Bond LR<br>1" diameter<br><b>Felt polishing points</b><br>5/16" to 1/2" dia. |   | <b>Crimped wire wheels</b><br>up to 3" diameter<br><b>Knot wheels</b><br>3" to 4" diameter<br><b>Stem mounted end brushes</b><br>1/2" up to 1" diameter<br><b>Mounted cup and bevel brushes</b><br>up to 3" diameter<br><b>Pilot bonding brushes</b><br><b>Circular end brushes</b> |
| 11,400 RPM<br>Mammoth + overdrive unit,<br>RUER 10/250 SI 120 V                         | Tungsten carbide burs<br>3/8" to 5/8" diameter | Mounted points<br>1-1/2" to 2" diameter   | <b>COMBIDISC® Mini-POLIFAN® discs</b><br>3" diameter<br><b>COMBIDISC® abrasive discs</b><br>2", 3" diameter<br><b>COMBIDISC® non-woven discs</b><br>1-1/2", 2" diameter<br><b>COMBIDISC® TX discs</b><br>2", 3" diameter<br><b>COMBIDISC® POLICLEAN® discs</b><br>2" diameter |   |   | <b>Crimped wire wheels</b><br>up to 3" diameter<br><b>Knot wheels</b><br>3" to 4" diameter<br><b>Stem mounted end brushes</b><br>1/2" up to 1" diameter<br><b>Cup and bevel brushes</b><br>up to 4" diameter<br><b>Pilot bonding brushes</b><br><b>Circular end brushes</b>         |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

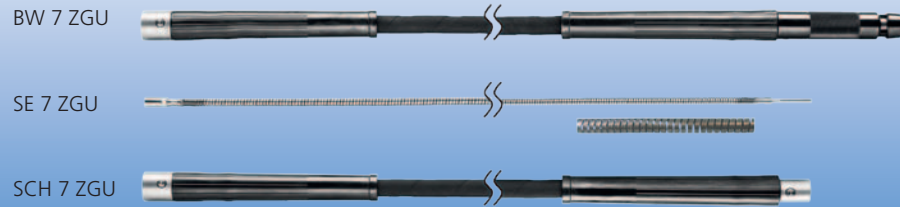
Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

### BW 7 ZGU DIN 10

Speed range: 11,000 - 25,000 RPM / Output: 800 - 1,760 Watts (1.1 - 2.4 HP)



#### Please note

Observe listed rotational speed and power output ranges unless otherwise noted. Refer to page 49 for information on flexible shaft speeds, power outputs, and operational safety. Special shaft lengths are available on request.

#### Flexible Shaft 7 ZGU

- For power output requirements of less than 800 watts (1.1 HP), the rotational speed range can be safely underrun.
- Do not bend the shaft to a radius of less than 5-1/2".

- The coil added to the core of this flexible shaft provides a very smooth running action, particularly at the higher end of the stated rotational speed range.

| EDP number                                       | Model number             | Drive-side coupling |           |           | Handpiece-side coupling |           |           | Diameter x length |             | Weight [lb] |
|--|--------------------------|---------------------|-----------|-----------|-------------------------|-----------|-----------|-------------------|-------------|-------------|
|  |                          | connection          | dia. [in] | dia. [mm] | connection              | dia. [in] | dia. [mm] | nominal [in]      | metric [mm] |             |
| <b>Flexible shaft (includes handpiece 94315)</b> |                          |                     |           |           |                         |           |           |                   |             |             |
| 94015  | BW 7 ZGU DIN 10 2 m      | DIN 10              | 1.18      | 30        | G 22                    | 0.87      | 22        | 3/4 x 85          | 18 x 2,154  | 4.41        |
| <b>Replacement core</b>                          |                          |                     |           |           |                         |           |           |                   |             |             |
| 94815  | SE 7 ZGU DIN 10/G22 2 m  | DIN 10              | M10       |           | G 22                    | 5/3.85    | 0.20/0.15 | 1/4 x 82          | 7 x 2,089   | 1.32        |
| <b>Replacement casing</b>                        |                          |                     |           |           |                         |           |           |                   |             |             |
| 94515  | SCH 7 ZGU DIN 10/G22 2 m | DIN 10              | 1.18      | 30        | G 22                    | 0.87      | 22        | 3/4 x 81          | 18 x 2,053  | 2.43        |

### Handpieces



HA 7 ZGA G22  
EDP 94315

WZ 7 45° G22  
EDP 94375

WZ 7 B G22  
EDP 94355

WT 7 E M14 G22  
EDP 94385

| EDP number | Model number | Description           | Diameter x length |             | Gear ratio | Max. input RPM | Shaft connection | Collet group | Included collet size | Included key |                | Weight [lb] |
|------------|--------------|-----------------------|-------------------|-------------|------------|----------------|------------------|--------------|----------------------|--------------|----------------|-------------|
|            |              |                       | nominal [in]      | metric [mm] |            |                |                  |              |                      | Pcs.         | [EDP]          |             |
| 94315      | HA 7 ZGA G22 | straight handpiece    | 1 x 5             | 27 x 130    | -          | 25,000         | G 22             | 11           | 1/4"                 | 1<br>1       | 93340<br>93370 | 0.71        |
| 94375      | WZ 7 45° G22 | angle handpiece (45°) | 2-1/4 x 7         | 57 x 175    | 1.3:1      | 17,100         | G 22             | 6            | 1/4"                 | 1            | 93335          | 1.47        |
| 94355      | WZ 7 B G22   | angle handpiece (90°) | 2 x 6             | 55 x 157    | 1.3:1      | 17,100         | G 22             | 6            | 1/4"                 | 1            | 93350          | 1.32        |
| 94385      | WT 7 E M14   | angle grinder drive   | 3 x 7             | 67 x 178    | 2.7:1      | 25,000         | G 22             | -            | M14 thd.             | 1<br>1       | 93350<br>93395 | 1.46        |

### Collets

| Photo | Collet group | Shank diameter and EDP number |       |       |       |       |       |
|-------|--------------|-------------------------------|-------|-------|-------|-------|-------|
|       |              | 3/32"                         | 1/8"  | 1/4"  | 3 mm  | 6 mm  | 8 mm  |
|       | 6            | 93067                         | 93072 | 93074 | 93057 | 93062 | 93064 |
|       | 11           | 93174                         | 93179 | 93182 | 93157 | 93163 | 93166 |

**Flexible shaft adapter BWA G22/DIN 10**  
For coupling flexible shafts or as connector for rigid extensions. **EDP 95893**

**Belt grinder attachment holder BSVH 41**  
For details on belt grinder attachment and arms, see page 65.

**Maintenance sets** for flexible shafts; see page 62.

# Flexible shaft drives

## Recommended products for flexible shafts 10 ZG



### Recommended PFERD products

The following products can be found in catalogues 202 - 208 of the TOOL MANUAL, and are recommended for use with flexible shaft 10 ZG on the following page.

| RPM Output                             | Catalogue 202   | Catalogue 203*                                 | Catalogue 204*   | Catalogue 208   |
|--|---|--|--|---|
| 14,400 RPM<br>Mammoth                  | <b>Tungsten carbide burs</b><br>3/8" to 1/2" diameter | <b>Mounted points</b><br>3/4" to 2" diameter   | <b>COMBIDISC® abrasive discs</b><br>1-1/2", 2" diameter<br><b>Abrasive spiral bands</b><br>1-1/8", 1-1/2" diameter<br><b>POLIROLL cartridge rolls</b><br>1/2" diameter<br><b>POLICAP® abrasive caps</b><br>5/8" diameter<br><b>Mounted flap wheels</b><br>3/4" to 1" diameter<br><b>POLISTAR coated abrasive stars</b><br>3/4" diameter<br><b>POLINOX® cross buffs</b><br>1-1/2" diameter<br><b>Poliflex® fine grinding points</b><br>Bond GR<br>5/8" diameter<br>Bond LR<br>1" diameter<br><b>Felt polishing points</b><br>5/16" to 1/2" diameter | <b>Crimped wire wheels</b><br>up to 3" diameter<br><b>Knot wheels</b><br>3" to 4" diameter<br><b>Stem mounted end brushes</b><br>1/2" up to 1" diameter<br><b>Mounted cup and bevel brushes</b><br>up to 3" diameter<br><b>Pilot bonding brushes</b><br><b>Circular end brushes</b> |
| 11,400 RPM<br>Mammoth + overdrive unit | <b>Tungsten carbide burs</b><br>3/8" to 5/8" diameter | <b>Mounted points</b><br>1-1/2" to 2" diameter | <b>COMBIDISC® Mini-POLIFAN® discs</b><br>3" diameter<br><b>COMBIDISC® abrasive discs</b><br>2", 3" diameter<br><b>COMBIDISC® non-woven discs</b><br>1-1/2", 2" diameter<br><b>COMBIDISC® TX discs</b><br>2", 3" diameter<br><b>COMBIDISC® POLICLEAN® discs</b><br>2" diameter  | <b>Crimped wire wheels</b><br>up to 3" diameter<br><b>Knot wheels</b><br>3" to 4" diameter<br><b>Stem mounted end brushes</b><br>1/2" up to 1" diameter<br><b>Cup and bevel brushes</b><br>up to 4" diameter<br><b>Pilot bonding brushes</b><br><b>Circular end brushes</b>         |
| 9,600 RPM<br>Mammoth                   | <b>Tungsten carbide burs</b><br>1/2" to 3/4" diameter |  | <b>Abrasive spiral bands</b><br>up to 2-3/8" dia.<br><b>Poliflex® fine grinding points</b><br>Bond GR<br>up to 1" dia.<br>Bond LR<br>up to 1-1/4" dia.<br><b>POLICAP® abrasive caps</b><br>up to 7/8" dia.<br><b>Mounted flap wheels</b><br>up to 1-1/2" dia.<br><b>POLIROLL cartridge rolls</b><br>up to 5/8" dia.<br><b>POLISTAR coated abrasive stars</b><br>up to 1-1/4" dia.<br><b>POLISTAR coated abrasive stars</b><br>3/4" dia.<br><b>POLINOX® unitized wheels</b><br>2" dia.<br><b>Felt polishing points</b><br>3/4" diameter             | <b>Crimped wire wheels</b><br>up to 4" diameter<br><b>Knot wheels</b><br>up to 6" diameter<br><b>Cup brushes</b><br>up to 4" diameter<br><b>Stem mounted end brushes</b><br>up to 1" diameter<br><b>Stem mounted miniature brushes</b><br><b>Circular end brushes</b>               |

**Note:** Product recommendations are based on general peripheral and rotational speeds.

Where no shank diameter is indicated, the shank diameter specification is 1/4".

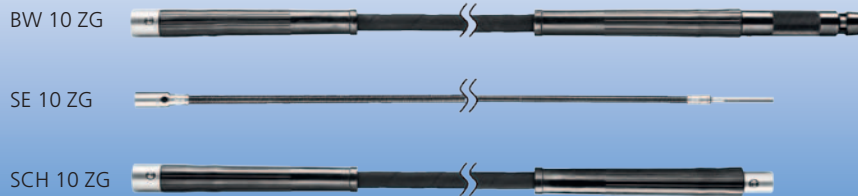
Please consult the appropriate catalogue section for technical information on specific recommended speeds based on application, abrasive grain, product size/shape, and workpiece material.

\*Shank-mounted product recommendations are based on 1/2" shank overhang.

Comply with ANSI B7.1-2000 standards and OSHA regulations.

### BW 10 ZG DIN 10

Speed range: 750 - 18,000 RPM / Output: 140 - 2,450 Watts (0.2 - 3.3 HP)



#### Please note

Observe listed rotational speed and power output ranges unless otherwise noted. Refer to page 49 for information on flexible shaft speeds, power outputs, and operational safety. Special shaft lengths are available on request.

#### Flexible shaft 10 ZG

- Rotational speed and power output ranges for this shaft should not be exceeded or underrun.
- Do not bend the shaft to a radius of less than 6-3/4".

- This shaft is available in both standard length (1.68 m / 66-1/4") and extended length (2 m / 86") versions. Please refer to the table below for dimensions and details.
- Cores and hoses with double-sided sliding coupling are available on request.

| EDP number | Model number | Drive-side coupling |           |           | Handpiece-side coupling |           |           | Diameter x length |             | Weight [lb] |
|------------|--------------|---------------------|-----------|-----------|-------------------------|-----------|-----------|-------------------|-------------|-------------|
|            |              | connection          | dia. [in] | dia. [mm] | connection              | dia. [in] | dia. [mm] | nominal [in]      | metric [mm] |             |

#### Flexible shaft (includes handpiece 94320)

|       |                     |        |      |    |      |      |    |          |            |      |
|-------|---------------------|--------|------|----|------|------|----|----------|------------|------|
| 94020 | BW 10 ZG DIN 10     | DIN 10 | 1.18 | 30 | G 28 | 1.10 | 28 | 7/8 x 66 | 22 x 1,683 | 5.51 |
| 94025 | BW 10 ZG DIN 10 2 m | DIN 10 | 1.18 | 30 | G 28 | 1.10 | 28 | 7/8 x 86 | 22 x 2,183 | 6.50 |

#### Replacement core

|       |                         |        |     |  |      |           |          |          |            |      |
|-------|-------------------------|--------|-----|--|------|-----------|----------|----------|------------|------|
| 94820 | SE 10 ZG DIN 10/G28     | DIN 10 | M10 |  | G 28 | 0.30/0.23 | 7.5/5.85 | 3/8 x 63 | 10 x 1,600 | 1.43 |
| 94825 | SE 10 ZG DIN 10/G28 2 m | DIN 10 | M10 |  | G 28 | 0.30/0.23 | 7.5/5.85 | 3/8 x 83 | 10 x 2,100 | 2.09 |

#### Replacement casing

|       |                          |        |      |    |      |      |    |          |            |      |
|-------|--------------------------|--------|------|----|------|------|----|----------|------------|------|
| 94520 | SCH 10 ZG DIN 10/G28     | DIN 10 | 1.18 | 30 | G 28 | 1.10 | 28 | 7/8 x 61 | 22 x 1,553 | 3.09 |
| 94525 | SCH 10 ZG DIN 10/G28 2 m | DIN 10 | 1.18 | 30 | G 28 | 1.10 | 28 | 7/8 x 80 | 22 x 2,053 | 3.42 |

#### Handpieces



| EDP number | Model number  | Description                | Diameter x length |             | Gear ratio | Max. input RPM | Shaft connection | Collet group | Included collet size | Included key Pcs. | Included key [EDP] | Weight [lb] |
|------------|---------------|----------------------------|-------------------|-------------|------------|----------------|------------------|--------------|----------------------|-------------------|--------------------|-------------|
|            |               |                            | nominal [in]      | metric [mm] |            |                |                  |              |                      |                   |                    |             |
| 94320      | HA 10 ZGE G28 | straight handpiece         | 1 x 6-3/4         | 33 x 170    | -          | 18,000         | G28              | 11           | 1/4                  | 2                 | 93370              | 1.14        |
| 94330      | HA 12 ZGA G28 | angle handpiece (45°)      | 1-1/4 x 6-1/2     | 33 x 162    | -          | 18,000         | G28              | 12           | 1/2                  | 2                 | 93380              | 1.12        |
| 94380      | WZ 10 45° G28 | angle handpiece (45°)      | 2-1/4 x 7         | 57 x 184    | 1.3:1      | 17,100         | G28              | 6            | 1/4                  | 1                 | 93335              | 1.41        |
| 94360      | WZ 10 B G28   | angle handpiece (45°)      | 2-1/4 x 6-1/2     | 55 x 166    | 1.3:1      | 17,100         | G28              | 6            | 1/4                  | 1                 | 93350              | 1.68        |
| 94418      | FSH G28       | special flexible handpiece | 1 x 20-1/2        | 24 x 525    | -          | 12,000         | G28              | 11           | 1/4                  | 2                 | 93370              | 2.20        |

#### Collets

| Photo | Collet group | Shank diameter and EDP number |       |       |       |       |       |       |       |       |  |
|-------|--------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|       |              | 3/32"                         | 1/8"  | 1/4"  | 3/8"  | 1/2"  | 3 mm  | 6 mm  | 8 mm  | 12 mm |  |
|       | 6            | 93067                         | 93072 | 93074 | -     | -     | 93057 | 93062 | 93064 | -     |  |
|       | 11           | 93174                         | 93179 | 93182 | -     | -     | 93157 | 93163 | 93166 | -     |  |
|       | 12           | -                             | -     | 93211 | 93215 | 93218 | -     | 93196 | 93199 | 93203 |  |



#### Flexible shaft adapter BWA G28/DIN 10

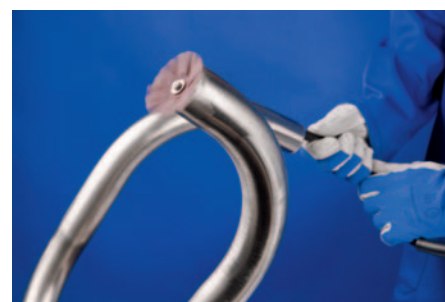
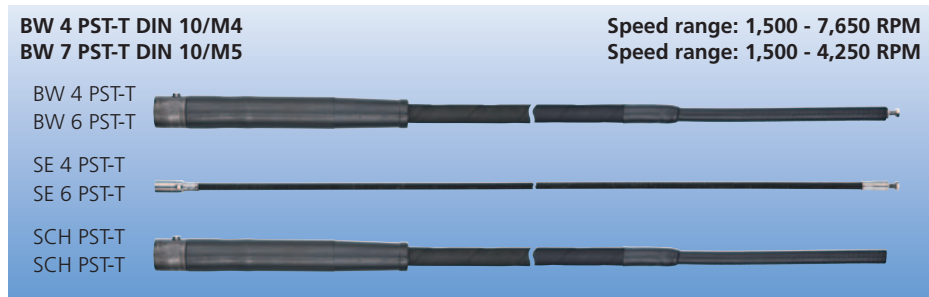
For coupling flexible shafts, or as a connector for rigid extensions. **EDP 95894**



**Maintenance sets** for flexible shafts; see page 62.

# Flexible shaft drives

## Special flexible shafts for tube and pipe applications



**BW 4 PST-T DIN 10/M4**  
**BW 7 PST-T DIN 10/M5**

**Speed range: 1,500 - 7,650 RPM**  
**Speed range: 1,500 - 4,250 RPM**

BW 4 PST-T  
BW 6 PST-T

SE 4 PST-T  
SE 6 PST-T

SCH PST-T  
SCH PST-T

### Flexible shaft PST-T

#### for inner grinding and cleaning of pipes

- These special flexible shafts **do not** have a handpiece for tool attachment and are particularly flexible near the product end.
- POLISTAR-TUBE abrasive stars (see catalogue 204 for more information) are mounted directly onto the threaded core of the flexible shaft with a mounting screw.
- POLINOX® cross buffs (see catalogue 204) and nylon tube brushes (see catalogue 208) are mounted with a screw-adapter for use.
- This combination is excellent for step-by-step finish grinding and cleaning of the insides of tubes, pipes, and pipe bends. Both ends of the pipe can be worked from the same access point.
- Flexible shaft motors with stepless speed regulation are recommended as drives for this system. Particularly the RUER 15/30 SI 120 V (see page 52 for details).

### Recommendations for use

- Before product is inserted into the pipe with the shaft, the tool should be pre-formed and adapted to the pipe diameter.
- Reduce the rotational speed of the product during insertion.
- Pipes with more than three pipe bends should be ground from both ends of the pipe if possible.
- When the product emerges from the pipe end, it can be pulled back while still in rotation. The rear of the POLISTAR-TUBE deburrs the pipe end and also grinds the inside of the pipe during the backward movement.
- All flexible shaft drives with a speed range of 1,500 - 7,650 RPM and flexible shaft connection DIN 10 can be used.

### Flexible shaft 4 PST-T DIN10/M4

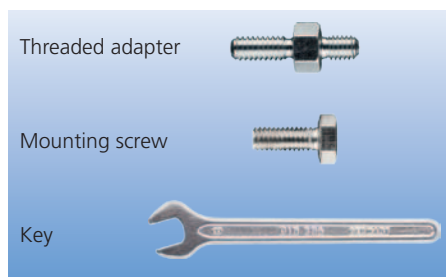
- For use with POLISTAR-TUBE diameters from 2" to 3-1/8", POLINOX® cross buff diameters from 3/4" to 2", and threaded nylon tube brushes with 8-32 UNC thread using the AD M4 adapter EDP 95810.
- Maintenance set 4 ZG for flexible shaft maintenance, EDP 96104.

### Flexible shaft 7 PST-T DIN10/M5

- Only for use with POLISTAR-TUBE diameters from 3-1/2" to 4", POLINOX® cross buff diameters from 3/4" to 2", and threaded nylon tube brushes with 8-32 UNC thread using the AD M5 adapter EDP 95811.
- Maintenance set 7 ZG for flexible shaft maintenance, EDP 96107.

*Please observe the recommended and max. permissible product rotational speeds when setting the motor speed.*

| EDP number                | Model number          | Drive-side coupling |           |           | Product mounting |           |           | Diameter x length |             | Weight [lb] |
|---------------------------|-----------------------|---------------------|-----------|-----------|------------------|-----------|-----------|-------------------|-------------|-------------|
|                           |                       | connection          | dia. [in] | dia. [mm] | thread           | dia. [in] | dia. [mm] | nominal [in]      | metric [mm] |             |
| <b>Flexible shaft</b>     |                       |                     |           |           |                  |           |           |                   |             |             |
| 94264                     | BW 4 PST-T DIN 10/M4  | DIN 10              | 1.18      | 30        | M4               | 0.16      | 4         | 1/2 x 61          | 13 x 1,550  | 1.06        |
| 94274                     | BW 7 PST-T DIN 10/M5  | DIN 10              | 1.18      | 30        | M5               | 0.20      | 5         | 3/4 x 81          | 18 x 2,052  | 2.91        |
| <b>Replacement core</b>   |                       |                     |           |           |                  |           |           |                   |             |             |
| 94978                     | SE 4 PST-T DIN 10/M4  | DIN 10              |           | M10       | M4               | 0.16      | 4         | 3/16 x 60-5/8     | 4 x 1,540   | 0.27        |
| 94988                     | SE 7 PST-T DIN 10/M5  | DIN 10              |           | M10       | M5               | 0.20      | 5         | 1/4 x 80          | 7 x 2,042   | 0.99        |
| <b>Replacement casing</b> |                       |                     |           |           |                  |           |           |                   |             |             |
| 94775                     | SCH 4 PST-T DIN 10/M4 | DIN 10              | 1.18      | 30        | -                | -         | -         | 1/2 x 60-1/2      | 13 x 1,550  | 0.79        |
| 94786                     | SCH 7 PST-T DIN 10/M5 | DIN 10              | 1.18      | 30        | -                | -         | -         | 3/4 x 81          | 18 x 2,052  | 1.92        |



| EDP number | Description                     | Product mounting | Suitable for flexible shaft [EDP no.] |
|------------|---------------------------------|------------------|---------------------------------------|
| 95810      | threaded adapter for M4 shaft   | 8-32 UNC thread  | 94264                                 |
| 95811      | threaded adapter for M5 shaft   | 8-32 UNC thread  | 94274                                 |
| 97557      | POLISTAR-TUBE M4 mounting screw | dia. 4 mm        | 94264                                 |
| 97558      | POLISTAR-TUBE M5 mounting screw | dia. 5 mm        | 94274                                 |
| 93327      | 7 mm key                        | -                | 94264                                 |
| 93328      | 8 mm key                        | -                | 94274                                 |



The **TS L 1400** table stand comes with a clamp for secure attachment to tables measuring up to 2.56" in thickness.

Telescope construction for manual height adjustment up to 5.51" max.



| EDP number | Model number | Suitable for flexible shaft drives                             | Weight [lb] |
|------------|--------------|--|-------------|
| 95520      | TS L 1400    | RUER 5/250 SI 120 V, RUER 10/250 SI 120 V, RUER 15/30 SI 120 V | 4.78        |

Transmits the operating speed at a 1:3 ratio. The rotational speed is dependent on the machine speed and the diameter of the flexible shaft.

Please note that the torque to be transmitted increases as the RPM increases. The power output is limited by the shaft diameter.

#### Safety note

The maximum input speed is 12,000 RPM

#### Maximum rotational speeds

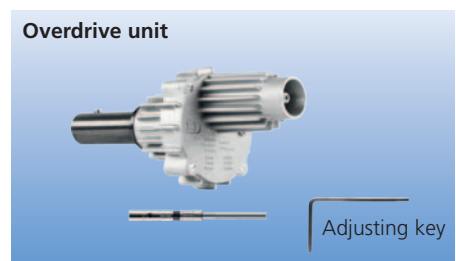
- 36,000 RPM for shaft 4 ZG
- 25,000 RPM for shaft 7 ZGU
- 18,000 RPM for shaft 10 ZG

#### Accessories included

Drive core EDP 92905

#### Ordering note

Replacement core EDP 92905 can be ordered separately, if required.



| EDP number | Model number            | Drive side connection/diameter | Flexible shaft connection/diameter | Suitable for flexible shaft drives | Weight [lb] |
|------------|-------------------------|--------------------------------|------------------------------------|------------------------------------|-------------|
| 92901      | ST 103 DIN 10           | DIN 10 / 30 mm                 | DIN 10 / 30 mm                     | Mammoth MD 10                      | 3.53        |
| 92905      | SE ST 103 DIN 10 (core) | DIN 10                         | DIN 10                             | Overdrive unit ST 103 DIN 10       | 0.15        |
| 93320      | Adjusting key           | -                              | -                                  | Mammoth MD 10                      | 0.15        |



# Flexible shaft drives

## Accessories for flexible shaft drives

### Flexible shaft grease



Special grease with special lubrication and adhesive properties for flexible shafts 4 ZG - 10 ZG.

After approx. 100 operating hours, the core of a flexible shaft must be re-lubricated. The core and hose must be degreased and the new special flexible shaft grease must be applied to the core.

| EDP number | Model number | Contents [lb] | Description   |
|------------|--------------|---------------|---|
| 96003      | FT 3         | 0.99          | For gear transmissions of flexible shaft machines, angle drives and angle handpieces. |
| 96004      | FT 4         | 1.10          | A special-grade lubricant with high lubricating and adhesion properties               |
| 96005      | FT 5         | 0.22          | For all ball bearings. Readily wets grease slingers to prevent dust contamination     |

### Maintenance sets for flexible shafts



After approx. 100 operating hours, the core of a flexible shaft has to be re-lubricated. The core and hose must be degreased and new special shaft grease must be applied to the core.

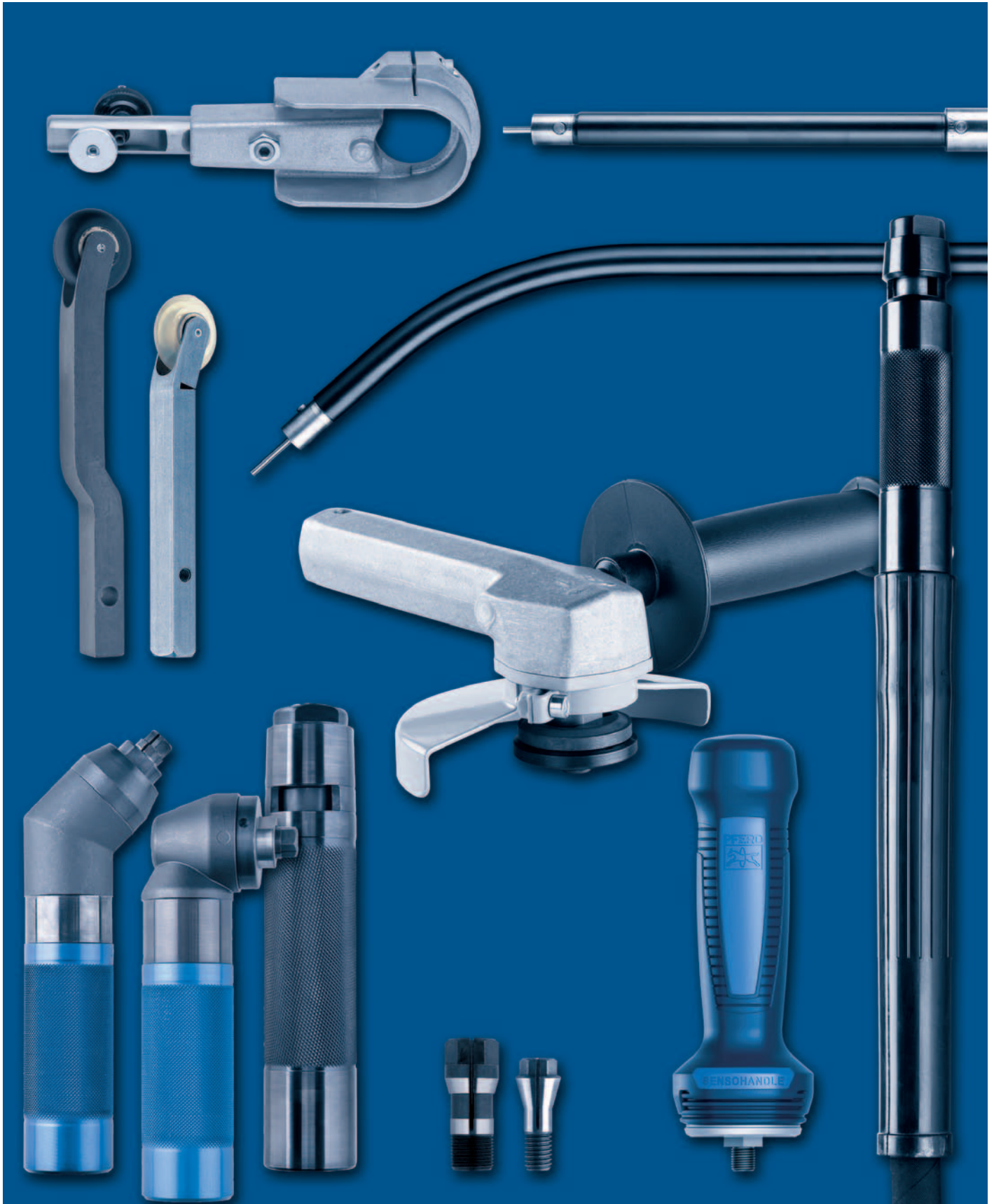
Maintenance sets consist of:

- **1 casing brush**  
For removing the old grease from the flexible casing.

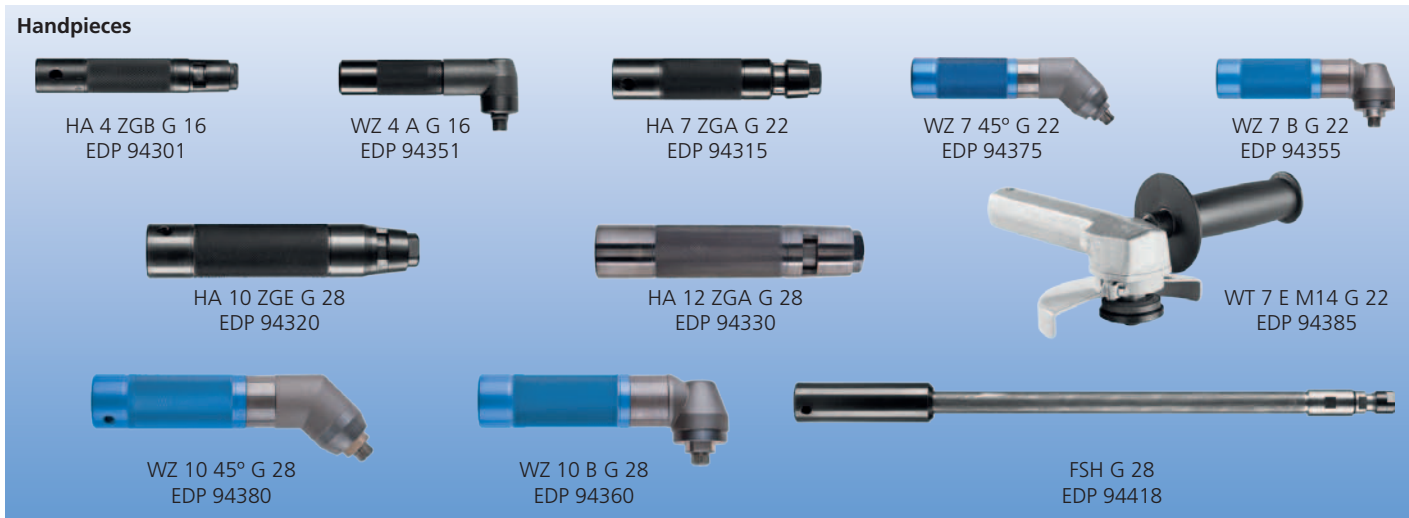
- **2 pieces of lint-free cleaning cloths (15.7 x 13 inches)**  
The core is freed of the old grease using a degreasing agent and a cleaning cloth (do not use cotton waste). Apply new grease on to the second cloth and pull the core through it.
- **1 can of shaft grease FT 4 (approx. 1.1 lbs)**  
Special grease with special lubrication and adhesive properties.

| EDP number | Model number   | Suitable for flexible shaft | Contents [pcs.]   |
|------------|----------------|-----------------------------|---|
| 96104      | P-set 4 ZG     | 4 ZG, 4 PST-T, 6 ZG         | 2 cleaning cloths, can of shaft grease FT 4, casing brush 4 ZG  |
| 96107      | P-set 7 ZG     | 7 ZGU, 7 PST-T              | 2 cleaning cloths, can of shaft grease FT 4, casing brush 7 ZGU |
| 96110      | P-set 10/12 ZG | 10 ZG                       | 2 cleaning cloths, can of shaft grease FT 4, casing brush 10 ZG |





### Handpieces



#### Flexible special handpiece FSH G28

- This handpiece can be bent once up to a bending radius of 8" (as per customer specification).
- Special lengths available by special order.

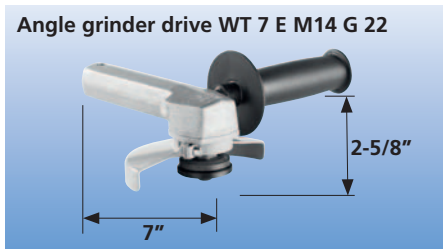
#### Angle grinder drive WT 7 E M14

- For compatible belt grinder attachment and belt arms, see page 65.

| EDP number | Model number    | Description                | Diameter x length |             | Gear ratio | Max. input RPM | Shaft connection | Collet group | Included collet size | Weight [lb] |
|------------|-----------------|----------------------------|-------------------|-------------|------------|----------------|------------------|--------------|----------------------|-------------|
|            |                 |                            | nominal [in]      | metric [mm] |            |                |                  |              |                      |             |
| 94301      | HA 4 ZGB G 16   | straight handpiece         | 3/4 x 4           | 19 x 110    | -          | 40,000         | G 16             | 9            | 1/4"                 | 0.31        |
| 94351      | WZ 4 A G 16     | angle handpiece (90°)      | 1-3/4 x 4         | 43 x 111    | 1:1        | 20,000*        | G 16             | 10           | 1/8"                 | 0.60        |
| 94315      | HA 7 ZGA G22    | straight handpiece         | 1 x 5             | 27 x 130    | -          | 25,000         | G 22             | 11           | 1/4"                 | 0.71        |
| 94375      | WZ 7 45° G22    | angle handpiece (45°)      | 2-1/4 x 7         | 57 x 175    | 1.3:1      | 17,100         | G 22             | 6            | 1/4"                 | 1.47        |
| 94355      | WZ 7 B G22      | angle handpiece (90°)      | 2 x 6             | 55 x 157    | 1.3:1      | 17,100         | G 22             | 6            | 1/4"                 | 1.32        |
| 94385      | WT 7 E M14 G 22 | angle grinder drive        | 2-5/8 x 7         | 67 x 178    | 2.7:1      | 25,000         | G 22             | -            | M14 thd.             | 1.46        |
| 94320      | HA 10 ZGE G28   | straight handpiece         | 1 x 6-3/4         | 33 x 170    | -          | 18,000         | G 28             | 11           | 1/4"                 | 1.14        |
| 94330      | HA 12 ZGA G28   | angle handpiece (45°)      | 1-1/4 x 6-1/2     | 33 x 162    | -          | 18,000         | G 28             | 12           | 1/2"                 | 1.12        |
| 94380      | WZ 10 45° G28   | angle handpiece (45°)      | 2-1/4 x 7         | 57 x 184    | 1.3:1      | 17,100         | G 28             | 6            | 1/4"                 | 1.41        |
| 94360      | WZ 10 B G28     | angle handpiece (45°)      | 2-1/4 x 6-1/2     | 55 x 166    | 1.3:1      | 17,100         | G 28             | 6            | 1/4"                 | 1.68        |
| 94418      | FSH G28         | special flexible handpiece | 1 x 20-1/2        | 24 x 525    | -          | 12,000         | G 28             | 11           | 1/4"                 | 2.20        |

\*max. 15,000 RPM when used with a 1/4" collet. For collet details, see table on page 66.

#### Angle grinder drive WT 7 E M14 G 22



Connectable to flexible shafts 7 ZGU G22 (without handpiece). Connection to flexible shaft can be pivoted 360°.

#### Included accessories

Keys, handle, clamping flanges and 4-1/2" guard

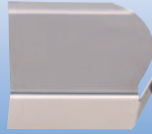
For compatible belt grinder attachment holder BSVH 41 and belt arms, see page 65.

| Keys    | EDP No. |
|---------|---------|
| 17 mm   | 93350   |
| 35x5 mm | 93395   |

### Belt grinder attachment holders



BSVH 25,5  
EDP 95000



SDVH-K  
EDP 95001



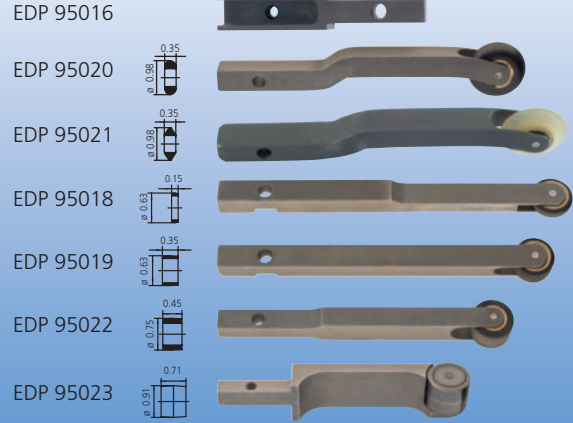
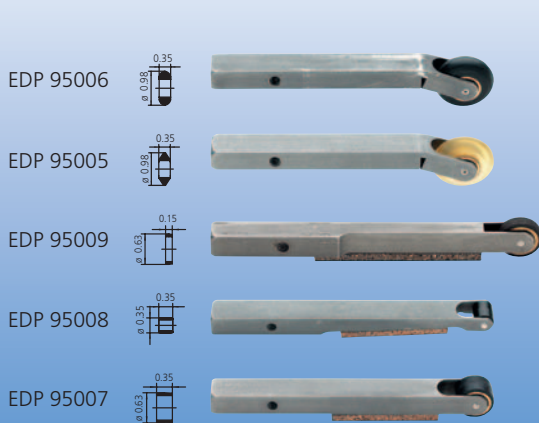
BSVH 41  
EDP 95015



SDVH-G  
EDP 95017

| EDP number | Model number | Mounting diameter |      | Uses protective cover [EDP] | Drive roll |      | Suitable for power tools/drives    | Weight [lb] |
|------------|--------------|-------------------|------|-----------------------------|------------|------|------------------------------------|-------------|
|            |              | [in]              | [mm] |                             | [in]       | [mm] |                                    |             |
| 95000      | BSVH 25,5    | 1                 | 25.5 | 95001                       | 3/4        | 20   | PBS 3/200 HV oVA, PWS 3/200 HV     | 0.39        |
| 95015      | BSVH 41      | 1-5/8             | 41   | 95017                       | 1-1/8      | 30   | WT 7 E M14, UBS 5/100 SI oVA 120 V | 0.69        |

### Belt Grinder Attachment Arms



- Durable, quality steel design.
- Use of the full roller width possible.
- Extremely slim fixtures on the roller.
- Asymmetrical arms for flush grinding.
- Belt arm can be rotated 360°.
- Belt tracking can be adjusted.
- BSVA/BSVAK 9/25-1 with conical guide roller (angle flat width 0.04").

| EDP number | Model number       | Fits belt attachment holder | For belt length [inches] | Width x roll dia. [inches] | Width x roll dia. [mm] | Suitable belt width [inches] | Use for   |
|------------|--------------------|-----------------------------|--------------------------|----------------------------|------------------------|------------------------------|---|
| 95016      | BSAD 41/36 x 610   | 95015                       | -                        | -                          | -                      | -                            | Adapter to extend the belt length from 20-1/2" to 24"   |
| 95020      | BSVA 9/25 x 520    | 95015                       | 20-1/2                   | 0.35 x 0.98                | 9 x 25                 | 1/8, 1/4, 3/8, 1/2, 5/8      | Finishing jobs, deburring, matting, fine grinding and seamless blending of inner radii/channels, especially on pipe couplings.            |
| 95006      | BSVAK 9/25 x 305   | 95000                       | 12                       | 0.35 x 0.98                | 8.8 x 25               | 1/8, 1/4, 3/8, 1/2           |   |
| 95021      | BSVA 9/25-1 x 520  | 95015                       | 20-1/2                   | 0.35 x 0.98                | 9 x 25                 | 1/8, 1/4, 3/8, 1/2           | Finishing in narrow inner radii/channels, especially on stainless steel (INOX) pipe couplings with very small welded seams (TIG welding). |
| 95005      | BSVAK 9/25-1 x 305 | 95000                       | 12                       | 0.35 x 0.98                | 8.8 x 25               | 1/8, 1/4, 3/8, 1/2           |   |
| 95018      | BSVA 4/16 x 520    | 95015                       | 20-1/2                   | 0.15 x 0.63                | 4 x 16                 | 1/4                          | Leveling, deburring, matting, fine grinding, cleaning, blending of stainless steel in narrow, small areas.                                |
| 95009      | BSVAK 4/16 x 305   | 95000                       | 12                       | 0.15 x 0.63                | 3.8 x 16               | 1/8, 1/4, 3/8                |   |
| 95008      | BSVAK 9/9 x 305    | 95000                       | 12                       | 0.35 x 0.35                | 8.8 x 9                | 3/8, 1/2                     | Leveling, chamfering, matting, fine grinding, cleaning and seamless blending on small areas.  |
| 95019      | BSVA 9/16 x 520    | 95015                       | 20-1/2                   | 0.35 x 0.63                | 9 x 16                 | 1/2                          |   |
| 95007      | BSVAK 9/16 x 305   | 95000                       | 12                       | 0.35 x 0.63                | 8.8 x 16               | 3/8, 1/2                     | Leveling, chamfering, matting, fine grinding, cleaning and seamless blending on wide areas.   |
| 95022      | BSVA 12/19 x 520   | 95015                       | 20-1/2                   | 0.45 x 0.75                | 12 x 19                | 1/2, 5/8                     |   |
| 95023      | BSVA 18/23 x 520   | 95015                       | 20-1/2                   | 0.71 x 0.91                | 18 x 23                | 3/4                          |   |

### The fast way to the best collet

Please use the tables below to find the perfect collet for your product.

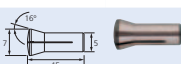
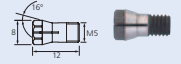
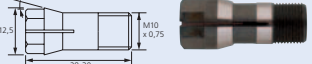

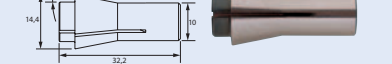
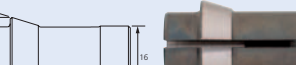
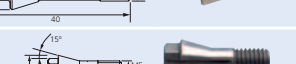
Determine the correct collet group from the Power tool/handpiece table.

Then, find the diameter and EDP of that collet group in the collet chart.

| Page | Power tool/handpiece | Collet group |
|------|----------------------|--------------|
| 11   | PGT 1/1000           | 1            |
| 12   | PGAS 2/800 E         | 1            |
| 13   | PGAS 1/700           | 15           |
| 14   | PGAS 1/550           | 15           |
| 15   | PGAS 3/440 HV        | 6            |
| 16   | PG 3/380 HV          | 6            |
| 17   | PGAS 4/350 E-HV      | 6            |
| 18   | PGAS 7/250 E-HV      | 16           |
| 19   | PGAS 5/230 HV        | 6            |
| 19   | PGAS 5/230 VE-HV     | 6            |
| 20   | PG 3/210 HV          | 6            |
| 21   | PGAS 8/100 HV        | 7            |

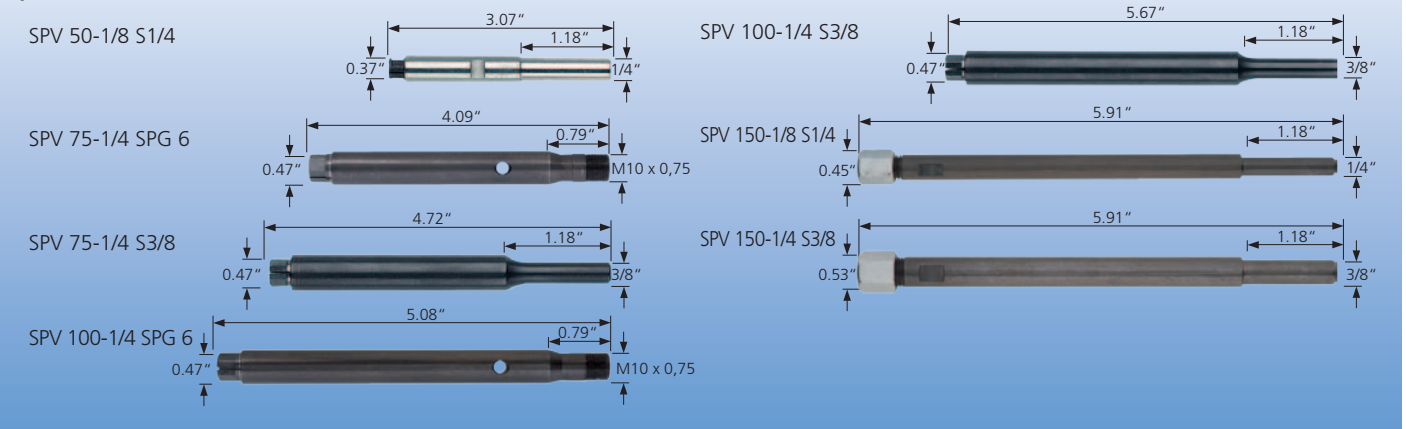
| Page | Power tool/handpiece       | Collet group |
|------|----------------------------|--------------|
| 22   | PGAS 10/40 V-HV            | 8            |
| 23   | PWS 1/800                  | 2            |
| 24   | PWS 3/200 DH               | 6            |
| 35   | UGER 11/330 SI 120 V       | 8            |
| 36   | UGER 5/250 SI 120 V        | 11           |
| 37   | UGER 5/90 SI 120 V         | 11           |
| 38   | UGER 11/90 SI 120 V        | 12           |
| 39   | UGER 15/60 SI 120 V        | 12           |
| 40   | UGER 15/30 SI 120 V        | 12           |
| 64   | Handpiece HA 4 ZGB G16     | 9            |
| 64   | Angle handpiece WZ 4 A G16 | 10           |
| 64   | Handpiece HA 7 ZGA G22     | 11           |

| Page | Power tool/handpiece               | Collet group |
|------|------------------------------------|--------------|
| 64   | Angle handpiece WZ 7 45° G22       | 6            |
| 64   | Angle handpiece WZ 7 B G22         | 6            |
| 64   | Handpiece HA 10 ZGE G28            | 11           |
| 64   | Angle handpiece WZ 10 45° G28      | 6            |
| 64   | Angle handpiece WZ 10 B G28        | 6            |
| 64   | Flexible special handpiece FSH G28 | 11           |
| 64   | Handpiece HA 12 ZGA G28            | 12           |
| 67   | Spindle extension SPV 50-3 S8      | 2            |
| 67   | Spindle extension SPV 75-6 SPG 6   | 10           |
| 67   | Spindle extension SPV 75-6 S8      | 10           |
| 67   | Spindle extension SPV 100-6 SPG 6  | 10           |
| 67   | Spindle extension SPV 100-6 S8     | 10           |

| Collet group   | Shank diameter and EDP number |       |       |       |       |       |       |       |       |       |
|--|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|  | 3/32"                         | 1/8"  | 1/4"  | 3/8"  | 1/2"  | 3 mm  | 6 mm  | 8 mm  | 10 mm | 12 mm |
| 1     | 93006                         | 93007 | -     | -     | -     | 93003 | -     | -     | -     | -     |
| 2    | 93013                         | 93012 | -     | -     | -     | 93011 | -     | -     | -     | -     |
| 6   | 93067                         | 93072 | 93074 | -     | -     | 93057 | 93062 | 93064 | -     | -     |
| 7   | -                             | 93081 | 93084 | 93085 | -     | 93081 | 93082 | 93083 | -     | -     |
| 8   | -                             | -     | 93094 | 93095 | -     | -     | 93091 | 93092 | 93093 | -     |
| 9   | 93120                         | 93125 | 93127 | -     | -     | 93108 | 93114 | -     | -     | -     |
| 10  | -                             | 93146 | 93148 | -     | -     | 93134 | 93140 | -     | -     | -     |
| 11  | 93174                         | 93179 | 93182 | -     | -     | 93157 | 93163 | 93166 | -     | -     |
| 12  | -                             | -     | 93211 | 93215 | 93218 | -     | 93196 | 93199 | 93201 | 93203 |
| 15  | 93240                         | 93239 | -     | -     | -     | 93238 | -     | -     | -     | -     |
| 16  | -                             | -     | 93249 | 93250 | -     | -     | 93246 | 93247 | 93248 | -     |

Note: all diagram dimensions in mm

### Spindle extensions



Spindle extensions extend the shafts of grinding, brushing and milling products, allowing access to difficult-to-reach areas. The extensions are mounted into collets, or with threaded versions, directly onto the machine spindle. Spindle extensions are a cost effective alternative to made-to-order burs and mounted points.

**Safety note**  
When working with long shank lengths, it is vital that the product is inserted into the workpiece (e.g. cores, pipes, ducts or keyways) **before** the power tool is switched on. Running the extension outside the workpiece (e.g. cores, pipes, ducts or keyways) increases the risk of buckling of the extension, and/or serious accidents.

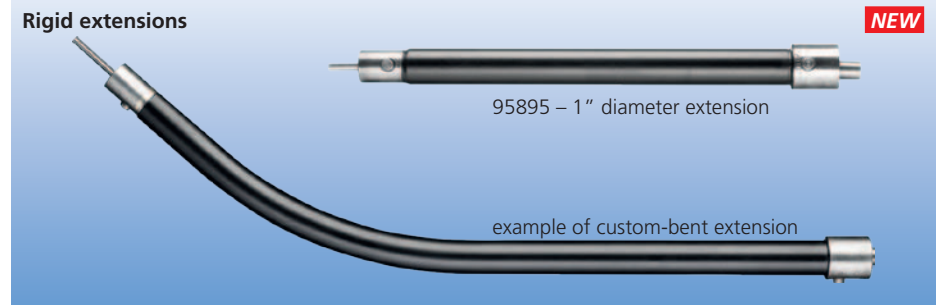
**The extensions are only intended for manual use** in connection with suitable air-power, electric grinders or flexible shaft handpieces for tools. Always run product at the appropriate RPM, and be sure it is inserted with proper overhang into a central running chuck.

**Do not connect multiple extensions, or mount products that already have extended-length shanks!**

| EDP number | Model number      | Max. speed [RPM] | Mounting pin dia. (motor/handpiece) [in.] | Fits shank diameter [in.] | Overall length [in.] | Mounting pin length [in.] | Max. spindle diameter [in.] | Included collet dia. [in.] | Collet group | Weight [lb] |
|------------|-------------------|------------------|---|---------------------------|----------------------|---------------------------|-----------------------------|----------------------------|--------------|-------------|
| 95820      | SPV 50-1/8 S1/4   | 44,000           | 1/4                                       | 1/8                       | 3.07                 | 1.18                      | 0.37                        | 1/8                        | 2            | 0.08        |
| 95821      | SPV 75-1/4 SPG 6  | 20,000           | SPG 6                                     | 1/4                       | 4.09                 | special                   | 0.47                        | 1/4                        | 10           | 0.16        |
| 95822      | SPV 75-1/4 S3/8   | 20,000           | 3/8                                       | 1/4                       | 4.72                 | 1.18                      | 0.47                        | 1/4                        | 10           | 0.17        |
| 95823      | SPV 100-1/4 SPG 6 | 20,000           | SPG 6                                     | 1/4                       | 5.08                 | special                   | 0.47                        | 1/4                        | 10           | 0.21        |
| 95824      | SPV 100-1/4 S3/8  | 20,000           | 3/8                                       | 1/4                       | 5.67                 | 1.18                      | 0.47                        | 1/4                        | 10           | 0.22        |
| 95825      | SPV 150-1/8 S1/4  | 10,000           | 1/4                                       | 1/8                       | 5.91                 | 1.18                      | 0.45                        | -                          | -            | 0.12        |
| 95826      | SPV 150-1/4 S3/8  | 10,000           | 3/8                                       | 1/4                       | 5.91                 | 1.18                      | 0.53                        | -                          | -            | 0.18        |

Rigid extensions, combined with air-powered or electric motor drives, provide the ideal solution for tough applications, such as cleaning or milling work on hard-to-reach workpieces in foundries. Rigid extensions are frequently used in series production, as they are created to exactly fit the workpiece geometry.

Custom lengths and bending radii to meet customer requirements are available by special order.



| EDP number | Model number  | Drive-side connection [DIN] | Handpiece-side connection [G] | Diameter x length |             | Max. bend radius [in] | Weight [lb] |
|------------|---------------|-----------------------------|-------------------------------|-------------------|-------------|-----------------------|-------------|
|            |               |                             |                               | nominal [in]      | metric [mm] |                       |             |
| 95895      | STV 27 L 250  | 10                          | 22                            | 1 x 10            | 27 x 250    | 10                    | 1.21        |
| 95896      | STV 27 L 500  | 10                          | 22                            | 1 x 20            | 27 x 500    | 10                    | 2.05        |
| 95897      | STV 27 L 1000 | 10                          | 22                            | 1 x 40            | 27 x 1000   | 10                    | 3.74        |

# Power tool accessories

## SENSOHANDLE anti-vibration handle

SENSOHANDLE



Vibration-damping, ergonomically optimized handle for use on all common angle grinders with M8, M10 or M14 female threads.

**Accessories included**

- 1 handle
- 3 adapters (M8, M10 and M14)

**Advantages**

- Significant reduction in vibration transmission, because vibration source and handgrip surface are decoupled.
- Moreover, the vibration energy is absorbed/reduced by the special rubber mixture.
- Safe and comfortable working, because of ergonomically optimized shape and dimensions.
- Secure hold due to the structured surface of the handle.

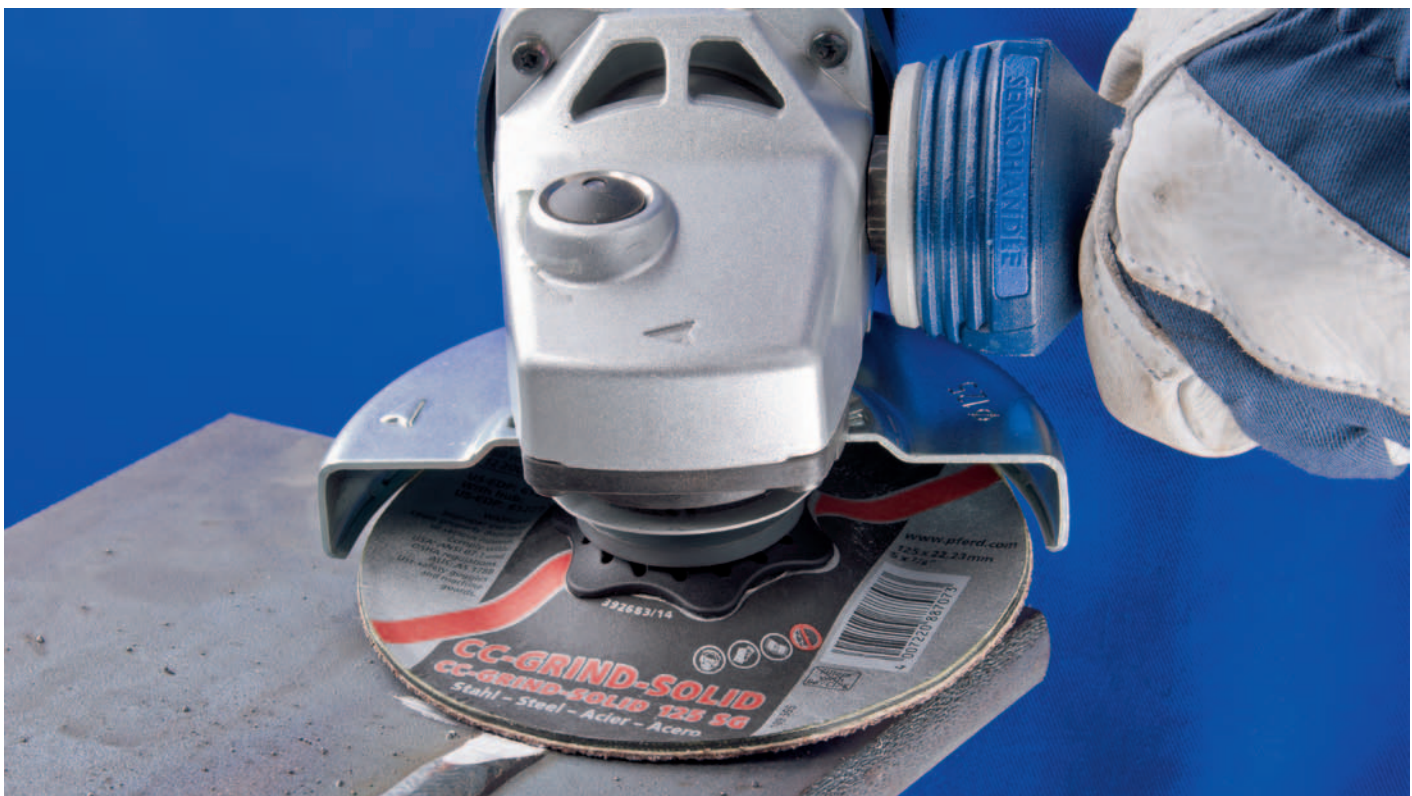
**M8 adapter is compatible with the following PFERD power tools**

- PWAS 13/120 AVH
- WT 7 E M14 G22

PFERDERGONOMICS®



| EDP number | Included thread adapters | Suitable for power tools/drives    | Weight [lb] |
|------------|--------------------------|------------------------------------|-------------|
| 95506      | M8                       | power tools with M8 metric thread  | 1.10        |
|            | M10                      | power tools with M10 metric thread |             |
|            | M14                      | power tools with M14 metric thread |             |





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| - Ceramic                             | 208  | 56-59, 61-62 |
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| - Tube brushes                        | 208  | 63-64        |
| - Wheel brushes                       | 208  | 56-58        |
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| Abrasive rolls                        | 204  | 49-50        |
| Abrasive sheets (cloth/paper-backed)  | 204  | 47           |
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| - Bench wheels               | 208  | 20    |
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| - Cup brushes                | 208  | 34-38 |
| - Disc brushes               | 208  | 59-61 |
| - File brushes               | 201  | 46    |
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| Circular end brushes             | 208  | 50         | - Flap discs                  | 206  | 41         | - Machinist's files                  | 201  | 42    |
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| - Backing pads                   | 204  | 16         | Crimped wire                  |      |            | Drive arbors for                     |      |       |
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| - Bevel brushes                     | 208  | 39         |
| - Cup brushes                       | 208  | 36-38      |
| - Encapsulated wheel brushes        | 208  | 33         |
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| 69951                  | 206  | 53   | 82032 - 82043        | 208  | 23     | 82647 - 82654  | 208  | 36   | 83616         | 208  | 46     |
| 69952                  | 206  | 47   | 82053 - 82062        | 208  | 25     | 82657          | 208  | 37   | 83657 - 83665 | 208  | 57     |
| 69953                  | 206  | 49   | 82075 - 82078        | 208  | 26     | 82664          | 208  | 38   | 83670 - 83706 | 208  | 58     |
| 69954                  | 206  | 56   | 82083 - 82084        | 208  | 24     | 82680 - 82683  | 208  | 28   | 83720 - 83771 | 208  | 56     |
| 69955                  | 206  | 47   | 82085 - 82086        | 208  | 26     | 82684 - 82688  | 208  | 29   | 83782 - 83795 | 208  | 57     |
| 69960                  | 206  | 56   | 82094                | 208  | 24     | 82689 - 82701  | 208  | 31   | 83810 - 83825 | 208  | 61     |
| 69963                  | 206  | 49   | 82101 - 82120        | 208  | 25     | 82716 - 82725  | 208  | 37   | 83917         | 208  | 59     |
| 69964                  | 206  | 56   | 82153 - 82158        | 208  | 28     | 82749          | 208  | 28   | 83941 - 83975 | 208  | 60     |
| 69965                  | 206  | 47   | 82165 - 82170        | 208  | 29     | 82750 - 82751P | 208  | 37   | 83978 - 83985 | 208  | 60, 67 |
| 69975 - 69995          | 206  | 46   | 82186 - 82194P       | 208  | 30     | 82752 - 82753  | 208  | 28   | 83988 - 84005 | 208  | 62     |
| <b>763827 - 792049</b> |      |      | 82195 - 82195P       | 208  | 27     | 82758          | 208  | 29   | 84011 - 84066 | 208  | 63     |
| 763827                 | 208  | 70   | 82201 - 82213P       | 208  | 39     | 82759 - 82765  | 208  | 31   | 84071 - 84084 | 208  | 64     |
| 763834 - 763841        | 208  | 73   | 82219 - 82236        | 208  | 36     | 82789 - 82794  | 208  | 37   | 84120 - 84149 | 208  | 59     |
| 763858                 | 208  | 72   | 82243 - 82255        | 208  | 35     | 82820 - 82838  | 208  | 46   | 84165 - 84181 | 208  | 56     |
| 763865                 | 208  | 70   | 82283 - 82288        | 208  | 28     | 82850 - 82854  | 208  | 45   | 84189 - 84194 | 208  | 57     |
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| 84231 - 84246 | 208        | 59        | 89622                | 208  | 83     | 90521         | 209  | 26   | 95000 - 95023 | 209  | 65   |
| 84250 - 84281 | 208        | 61        | 89625 - 89641        | 208  | 101    | 90531         | 209  | 25   | 95200         | 209  | 30   |
| 84310 - 84313 | 208        | 62        | 89643 - 89662        | 208  | 100    | 90551         | 209  | 27   | 95294 - 95295 | 209  | 20   |
| 84324 - 84332 | 208        | 64        | 89665 - 89692        | 208  | 107    | 90681         | 209  | 29   | 95500 - 95502 | 209  | 30   |
| 84340 - 84440 | 208        | 65        | 89695 - 89710        | 208  | 82     | 90700 - 90702 | 209  | 30   | 95506         | 209  | 68   |
| 84600 - 84641 | 208        | 66        | 89711 - 89726        | 208  | 104    | 90711         | 209  | 28   | 95512 - 95516 | 209  | 32   |
| 84645 - 84655 | 208        | 67        | 89729 - 89730        | 208  | 105    | 91003         | 209  | 35   | 95520         | 209  | 61   |
| 84656         | 204<br>208 | 102<br>67 | 89734 - 89750        | 208  | 104    | 91005         | 209  | 36   | 95808         | 209  | 41   |
| 84657 - 84659 | 208        | 67        | 89753 - 89759        | 208  | 109    | 91010         | 209  | 37   | 95810 - 95811 | 209  | 60   |
| 84665 - 84671 | 208        | 66        | 89763 - 89765        | 208  | 110    | 91012         | 209  | 38   | 95820 - 95826 | 209  | 67   |
| 85002 - 85009 | 208        | 77        | 89767 - 89770        | 208  | 109    | 91016         | 209  | 39   | 95893         | 209  | 57   |
| 85010 - 85011 | 208        | 79        | 89771 - 89775        | 208  | 110    | 91019         | 209  | 40   | 95894         | 209  | 59   |
| 85012 - 85018 | 208        | 78        | 89776 - 89778        | 208  | 112    | 91200         | 209  | 41   | 95895 - 95897 | 209  | 67   |
| 85030 - 85036 | 208        | 77        | 89779 - 89782        | 208  | 111    | 91217         | 209  | 42   | 95995         | 209  | 25   |
| 85037 - 85053 | 208        | 78        | 89784                | 208  | 112    | 91235         | 209  | 46   | 96003 - 96110 | 209  | 62   |
| 85054 - 85059 | 208        | 79        | 89785                | 208  | 111    | 91410         | 209  | 44   | 97028         | 209  | 11   |
| 85060 - 85067 | 208        | 80        | 89788 - 89791        | 208  | 105    | 91421         | 209  | 45   | 97557 - 97558 | 209  | 60   |
| 85071         | 208        | 79        | 89795                | 208  | 106    | 92001         | 209  | 53   | 97970 - 97973 | 209  | 25   |
| 85081 - 85084 | 208        | 80        | 89796                | 208  | 109    | 92201         | 209  | 50   |               |      |      |
| 85085 - 85098 | 208        | 81        | 89808 - 89818        | 208  | 108    | 92205         | 209  | 51   |               |      |      |
| 85100         | 208        | 82        | 89821 - 89850        | 208  | 106    | 92210         | 209  | 52   |               |      |      |
| 85124 - 85138 | 208        | 83        | 89860 - 89863        | 208  | 107    | 92901 - 92905 | 209  | 61   |               |      |      |
| 85236 - 85348 | 208        | 84        | 89876 - 89877        | 208  | 94     | 93003 - 93249 | 209  | 66   |               |      |      |
| 88028 - 88052 | 208        | 32        | 89882 - 89900        | 208  | 93     | 93303         | 209  | 44   |               |      |      |
| 89211 - 89231 | 208        | 85        | 89901                | 208  | 89, 94 | 93304 - 93310 | 209  | 46   |               |      |      |
| 89233 - 89278 | 208        | 86        | 89902 - 89903        | 208  | 94     | 93325         | 209  | 13   |               |      |      |
| 89283 - 89289 | 208        | 87        | 89905 - 89919        | 208  | 93     | 93327         | 209  | 11   |               |      |      |
| 89294 - 89308 | 208        | 89        | 89921                | 208  | 94     | 93328         | 209  | 12   |               |      |      |
| 89313 - 89315 | 208        | 88        | 89922                | 208  | 89, 94 | 93335 - 93340 | 209  | 15   |               |      |      |
| 89320 - 89355 | 208        | 87        | 89923 - 89925        | 208  | 94     | 93350         | 209  | 18   |               |      |      |
| 89362 - 89370 | 208        | 88        | 89928                | 208  | 87     | 93352         | 209  | 38   |               |      |      |
| 89374 - 89380 | 208        | 90        | 89930                | 208  | 93     | 93353         | 209  | 18   |               |      |      |
| 89381         | 208        | 88        | <b>90002 - 97973</b> |      |        | 93370         | 209  | 35   |               |      |      |
| 89390 - 89405 | 208        | 95        | 90002                | 209  | 11     | 93380         | 209  | 38   |               |      |      |
| 89432 - 89435 | 208        | 96        | 90006 - 90008        | 209  | 12     | 93383 - 93384 | 209  | 21   |               |      |      |
| 89437         | 208        | 99        | 90009                | 209  | 14     | 93395         | 209  | 46   |               |      |      |
| 89438         | 208        | 96        | 90010 - 90011        | 209  | 13     | 94001 - 94005 | 209  | 55   |               |      |      |
| 89439 - 89447 | 208        | 98        | 90014                | 209  | 15     | 94015         | 209  | 57   |               |      |      |
| 89449 - 89456 | 208        | 95        | 90018                | 209  | 16     | 94020 - 94025 | 209  | 59   |               |      |      |
| 89464 - 89469 | 208        | 92        | 90020                | 209  | 17     | 94264 - 94274 | 209  | 60   |               |      |      |
| 89471 - 89480 | 208        | 91        | 90033                | 209  | 18     | 94301 - 94418 | 209  | 64   |               |      |      |
| 89514 - 89533 | 208        | 97        | 90035                | 209  | 19     | 94501 - 94505 | 209  | 55   |               |      |      |
| 89539 - 89556 | 208        | 102       | 90036                | 209  | 20     | 94515         | 209  | 57   |               |      |      |
| 89559         | 208        | 83        | 90038                | 209  | 19     | 94520 - 94525 | 209  | 59   |               |      |      |
| 89560 - 89571 | 208        | 51, 99    | 90064                | 209  | 21     | 94775 - 94786 | 209  | 60   |               |      |      |
| 89572 - 89600 | 208        | 99        | 90083                | 209  | 22     | 94801 - 94805 | 209  | 55   |               |      |      |
| 89601 - 89604 | 208        | 83        | 90502                | 209  | 23     | 94815         | 209  | 57   |               |      |      |
| 89609 - 89620 | 208        | 103       | 90512 - 90514        | 209  | 24     | 94820 - 94825 | 209  | 59   |               |      |      |
|               |            |           |                      |      |        | 94978 - 94988 | 209  | 60   |               |      |      |