

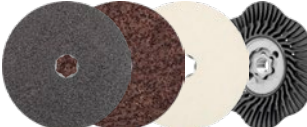
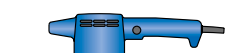
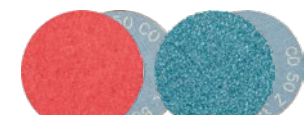


# Fine grinding and finishing products

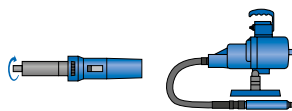
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## Fine grinding and polishing products

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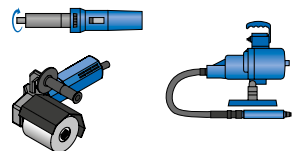
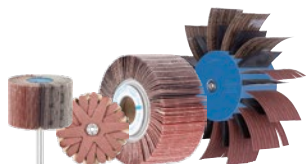




### POLICAP® seamless abrasive caps

- Abrasive caps, cap holders, and sets
- Abrasive cones and cone holders

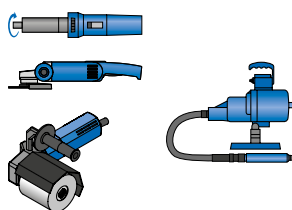
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### Flap wheels

- Mounted flap wheels
- Quick-change flap wheels and accessories
- Unmounted flap wheels and accessories
- Flap wheels for angle grinders and flap drums
- POLIFLAP® system
- POLISTAR-TUBE

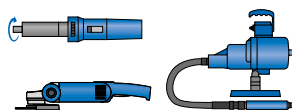
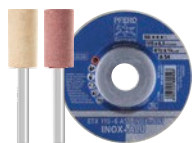
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### Non-woven products

- POLINOX® unitized wheels, discs, and arbors
- POLINOX® convolute wheels and reducing flanges
- POLINOX® mounted flap wheels
- POLINOX® cross buffs and accessories
- POLINOX® unmounted flap wheels and accessories
- POLINOX® unmounted flap wheels, threaded
- POLINOX® finishing drums and linear finishing kit
- POLINOX® fibre-backing discs and high-strength masking tape
- POLIVLIES® flap discs
- POLIVLIES® hook and loop discs and holders
- POLICLEAN® PLUS products

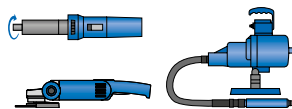
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### Poliflex® finishing products

- Finishing points – Rubber bond
- Finishing points – Leather bond
- Textile wheels

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114



### Polishing products

- Felt points
- Mounted felt flap wheels
- Felt wheels and flap discs
- Cloth rings and drive arbors
- Buffing drum

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### Grinding and polishing pastes

- Polishing paste bars and grinding pastes
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### X-LOCK quick-change system

- POLIVLIES® flap discs

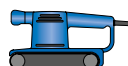
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Angle grinder



Eccentric orbital sander



Belt grinder



Belt grinder



Straight grinder



Stationary belt grinder



Linear finishing machines



Manual application

# Fine grinding and finishing products

## General information



### PFERD quality

Fine grinding and finishing products from PFERD are developed, manufactured and tested in accordance with the strictest quality requirements.

Research and development, our in-house and plant construction, and the continuous testing to quality and safety standards in our internal laboratories all guarantee high PFERD quality.

PFERD quality management is certified according to ISO 9001.



### Safety notes

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 on how the product should 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.



### Technical support

PFERD offers individual targeted support to solve unique application problems. Our experienced sales representatives and technical specialists are available to assist you.

**Contact your local sales representative or visit us at [pferd.com](http://pferd.com) to learn more.**

### Products made to order

If you cannot find the solution for your particular application in our extensive catalogue range, we can produce fine grinding and polishing products to meet your requirements in premium PFERD quality specifically for your application upon request.

Contact your local sales representatives who will be happy to assist you.





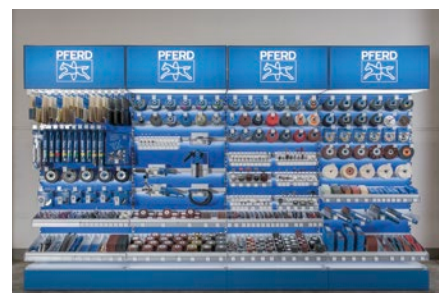
### PFERD packaging

PFERD supplies fine grinding and polishing products in robust industrial packaging, which protects the products against damage. You can find details on the packaging unit (PU) in the product tables. The packaging labels feature easy identification of product features and part number.



### PFERD TOOL-CENTER

The **PFERD TOOL-CENTER** is a premium display system that can be custom-designed to meet your specific product and presentation requirements. For more information from a PFERD expert, contact us today at [pferd.com](http://pferd.com).



### PFERDPRAXIS brochures and theme brochures

Our **PFERDPRAXIS** brochures contain a wealth of useful information on material properties as well as tips and tricks for using PFERD products on specific materials or for specific applications.



### 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®**:

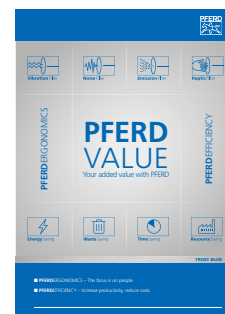
As part of **PFERDERGONOMICS®**, PFERD offers ergonomically optimized products and power tools that contribute to greater safety and working comfort, and thus to health protection.



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



For more information on this topic, please refer to our brochure "**PFERDVALUE®** – Your added value with PFERD".



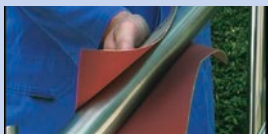
Please visit our website for more information on our products: [pferd.com](http://pferd.com)

# Fine grinding and finishing products

## Quick product selection guide

| Work type                                                                                                                                    | Face-down grinding<br>Products with backing pad                                     |                                                                     |                                                                                     |                                                               | Belt grinding<br>Products for belt grinders                                           |                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------|
|                                                                                                                                              |    |                                                                     |                                                                                     |                                                               |    |                                      |
| Work steps                                                                                                                                   | Page                                                                                |                                                                     |                                                                                     |                                                               | Page                                                                                  |                                      |
| Changing geometrical profiles<br>                           |    | COMBIDISC®<br>■ abrasive discs 29–33<br>■ diamond abrasive discs 33 |    | COMBIDISC®<br>mini fibre discs 32                             |      | COMBICLICK®<br>fibre discs 13–14     |
|                                                                                                                                              |    | COMBIDISC®<br>Mini-POLIFAN® 28                                      |    | Fibre discs 20–21                                             |      | PSA discs 23–24                      |
|                                                                                                                                              |  | Abrasive belts 42–47                                                |                                                                                     |                                                               |                                                                                       |                                      |
| Step-by-step fine grinding<br>Reducing roughness depths<br> |    | COMBIDISC®<br>■ abrasive discs 29–33<br>■ non-woven discs 34–36     |    | PSA discs 23–24                                               |    | Abrasive belts 42–47                 |
|                                                                                                                                              |    | Poliflex®<br>finishing wheels 114                                   |    | Velcro-backed<br>abrasive discs 25                            |                                                                                       |                                      |
|                                                                                                                                              |    | COMBICLICK®<br>■ fibre discs 13–14<br>■ non-woven discs 15–16       |    | Fibre discs 20–21                                             |                                                                                       |                                      |
|                                                                                                                                              |   | POLINOX®<br>unitized discs 88                                       |   | POLINOX® fibre-backing<br>discs 102                           |                                                                                       |                                      |
| Fine grinding<br>Very fine grinding<br>                   |  | COMBIDISC®<br>■ abrasive discs 29–33<br>■ non-woven discs 34–36     |  | Fibre discs 20–21                                             |  | Abrasive belts 42–47                 |
|                                                                                                                                              |  | Poliflex®<br>finishing wheels 114                                   |  | PSA discs 23–24                                               |  | Surface conditioning<br>belts 45, 48 |
|                                                                                                                                              |  | POLINOX®<br>unitized discs 88                                       |  | COMBICLICK®<br>■ fibre discs 13–14<br>■ non-woven discs 15–16 |                                                                                       |                                      |
| Cleaning<br>                                              |  | COMBIDISC®<br>non-woven discs 34–36                                 |  | POLIVLIES®<br>hook and loop discs 104                         |  | Surface conditioning<br>belts 45, 48 |
|                                                                                                                                              |  | COMBIDISC®<br>POLICLEAN® PLUS discs 34                              |  | POLICLEAN® PLUS<br>discs 107                                  |                                                                                       |                                      |
|                                                                                                                                              |  | COMBICLICK®<br>non-woven discs 15–16                                |  | POLINOX® fibre-backing<br>discs 102                           |                                                                                       |                                      |
|                                                                                                                                              |  | POLIVLIES®<br>flap discs 103                                        |                                                                                     |                                                               |                                                                                       |                                      |
| Creating visual effects<br>                               |  | COMBIDISC®<br>non-woven discs 34–36                                 |  | POLIVLIES®<br>hook and loop discs 104                         |  | Surface conditioning<br>belts 45, 48 |
|                                                                                                                                              |  | POLIVLIES®<br>flap discs 103                                        |  | COMBICLICK®<br>non-woven discs 15–16                          |                                                                                       |                                      |
|                                                                                                                                              |  | POLINOX® fibre-backing<br>discs 102                                 |                                                                                     |                                                               |                                                                                       |                                      |
| Polishing<br>                                             |  | COMBIDISC®<br>felt discs 37                                         |  | Felt flap discs 118                                           |  | Felt polishing belt 45               |
|                                                                                                                                              |  | COMBICLICK®<br>felt discs 17                                        |                                                                                     |                                                               |                                                                                       |                                      |



| Peripheral grinding<br>Mounted/unmounted products                                   |                                          |         | Manual grinding                                                                       |                                          |         |
|-------------------------------------------------------------------------------------|------------------------------------------|---------|---------------------------------------------------------------------------------------|------------------------------------------|---------|
|    |                                          |         |    |                                          |         |
| Page                                                                                |                                          | Page    | Page                                                                                  |                                          | Page    |
|    | Abrasive spiral bands                    | 55–56   |                                                                                       |                                          |         |
|    | POLIROLL® cartridge rolls                | 59      |                                                                                       |                                          |         |
|    | POLICAP® seamless abrasive caps          | 62–68   |                                                                                       |                                          |         |
|    | Abrasive spiral bands                    | 55–56   |      | Unmounted flap wheels for angle grinders | 77      |
|    | POLIROLL® cartridge rolls                | 59      |      | Flap drums                               | 78      |
|    | POLICAP® seamless abrasive caps          | 62–68   |      | POLISTAR-TUBE                            | 81      |
|  | Mounted flap wheels                      | 71–73   |    | Unmounted flap wheels                    | 75      |
|  | POLIROLL® cartridge rolls                | 59      |    | POLINOX® unitized wheels                 | 87      |
|  | POLINOX® convolute wheels                | 91      |    | Poliflex® fine grinding points           | 110–113 |
|  | POLINOX® mounted flap wheels             | 94–95   |    | POLINOX® finishing drums                 | 100–101 |
|  | POLINOX® unmounted flap wheels           | 97–99   |    | POLICLEAN® PLUS wheels                   | 106     |
|  | POLINOX® cross buffs                     | 96      |    | POLICLEAN® PLUS mounted wheels           | 107     |
|  | POLINOX® mounted flap wheels             | 94–95   |    | POLIFLAP® grinding wheel                 | 79–80   |
|  | POLINOX® unmounted flap wheels           | 97–99   |    | Flap drums                               | 78      |
|  | POLINOX® finishing drums                 | 100–101 |                                                                                       |                                          |         |
|  | Felt points and mounted felt flap wheels | 116–117 |    | Buffing drum                             | 120     |
|  | Felt wheels                              | 118     |    | Cloth rings                              | 119     |
|                                                                                     |                                          |         |      | Abrasive sheets, cloth/paper             | 48–49   |
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|                                                                                     |                                          |         |  | Screen rolls                             | 52      |
|                                                                                     |                                          |         |  | Abrasive cord                            | 53      |
|                                                                                     |                                          |         |    | Abrasive sheets, cloth/paper             | 48–49   |
|                                                                                     |                                          |         |    | POLINOX® hand pads                       | 50      |
|                                                                                     |                                          |         |    | Shop rolls, cloth/paper                  | 51      |
|                                                                                     |                                          |         |  | Non-woven shop rolls                     | 52      |
|                                                                                     |                                          |         |  | Screen rolls                             | 52      |
|                                                                                     |                                          |         |    | POLINOX® hand pads                       | 50      |
|                                                                                     |                                          |         |    | Non-woven shop rolls                     | 52      |
|                                                                                     |                                          |         |    | High-strength masking tape               | 102     |
|                                                                                     |                                          |         |  | INOX SHINER                              | 123     |
|                                                                                     |                                          |         |    | Diamond polishing pastes                 | 122     |
|                                                                                     |                                          |         |    | Polishing paste bars                     | 121     |
|                                                                                     |                                          |         |  | Grinding pastes                          | 121     |
|                                                                                     |                                          |         |  | Universal cleaner                        | 123     |



# Fine grinding and finishing products

## Coated abrasives

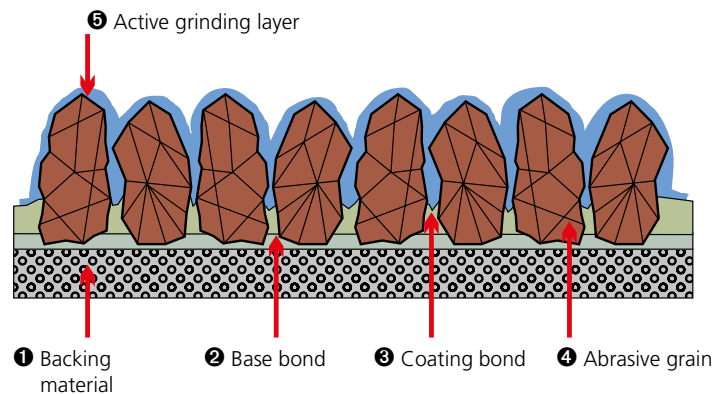
### Structure of coated abrasives

PFERD supplies a wide range of products with coated abrasives for machining a variety of workpiece geometries and materials:

- COMBICLICK® quick-mounting system
- Fibre discs
- PSA discs
- Abrasive discs
- COMBIDISC® quick-change discs
- Abrasive belts, sheets and rolls
- Abrasive spiral bands
- POLIROLL® cartridge rolls
- POLICAP® abrasive caps
- Flap wheels

You can find additional PFERD products with coated abrasives in catalogue section 6.

Coated abrasives are used for both wet and dry grinding.



### 1 Backing material

Bond and abrasive grain are applied to the base. The backing materials available for selection differ in their properties, such as tear strength, flexibility and wear. The respective grinding product is adapted to the requirements of the intended application by choosing the appropriate base material. The PFERD range is sub-divided into three groups:

#### Paper:

The main areas of application for coated abrasives with a paper base are in the woodworking industry and in trade, e.g. among carpenters, painters and decorators. Coated abrasives with a paper base are rarely used for industrial metalwork. Abrasives for manual grinding are predominantly made from paper with a surface weight of 70 to 100 g/m<sup>2</sup>. Heavier paper types are used to make abrasives for machine applications involving wide and narrow belts alike.

#### Cloth:

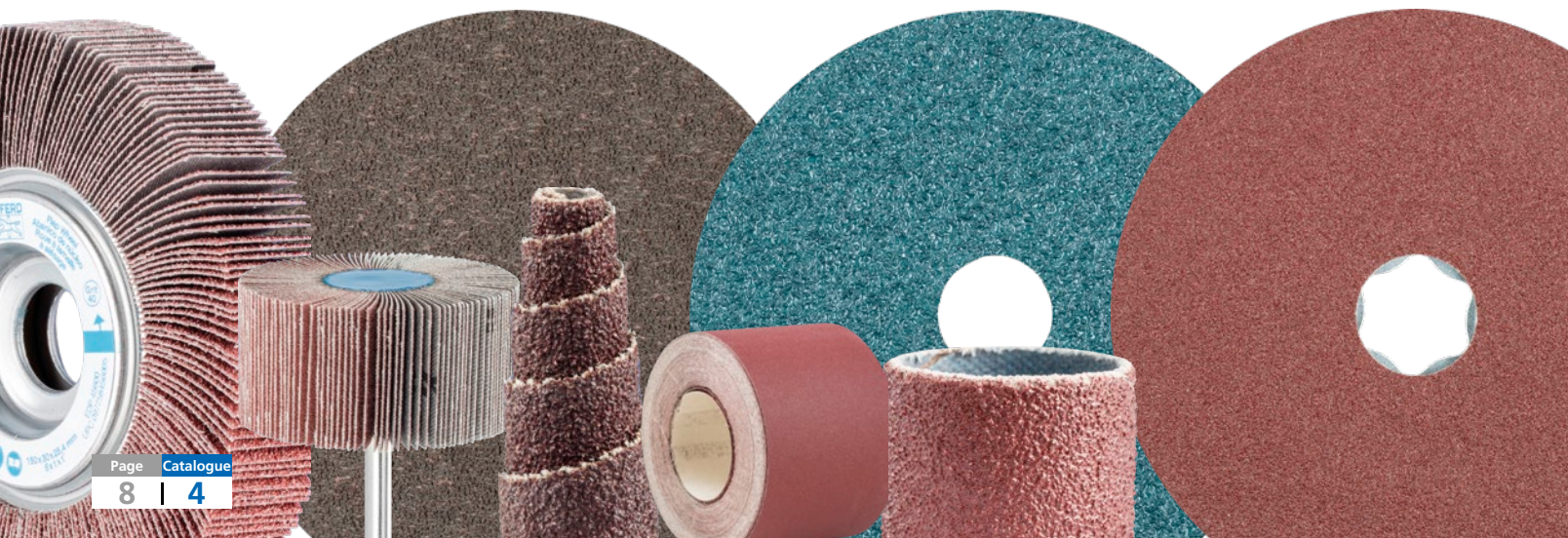
Coated abrasives with a cloth base are predominantly used for metalwork.

#### Vulcanized fibre:

When adapted to the corresponding applications, vulcanized fibre in various thicknesses is predominantly used for making fibre grinding discs. Vulcanized fibre is a very sturdy, robust backing material, and also very wear-resistant.

### 2 + 3 Bond

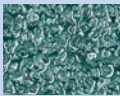
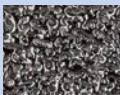
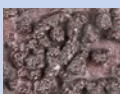
When manufacturing coated abrasives, different resin bonds are used to fix the abrasive grain to the backing material. First, the backing material is coated with the base bond (2). After this, the abrasive grain is evenly scattered over the surface and aligned to achieve higher aggressiveness with the help of special procedures. The coating bond (3) ensures that the abrasive grain is fixed in place and protects the grain against the forces and loads resulting from the grinding process.





### 4 Abrasive grain

Choosing the right abrasive grain has a significant influence on surface quality and productivity. The most common materials for abrasive grain are:

|                            |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Aluminum oxide A</b>    |    | Numerous types of aluminum oxide are used as abrasives. These may be present in molten or sintered form. The hardness and toughness can be influenced by special manufacturing procedures or additives. Standard types of aluminum oxide and a "sharp-edged" grain shape are predominantly used for coated abrasives.                                                                                                                                                                   |
| <b>Ceramic oxide CO</b>    |    | For sintered aluminum oxides, a differentiation is made between sintered bauxite aluminum oxides and sol-gel aluminum oxides. Sol-gel aluminum oxides are predominantly used for coated abrasives in the form of abrasive ceramic grain. This state-of-the-art abrasive is used for numerous applications due to its high toughness and good self-sharpening qualities.                                                                                                                 |
| <b>Zirconia alumina Z</b>  |    | Zirconia alumina is a fused mixture of aluminum oxide and zirconium oxide. In comparison to aluminum oxides, zirconia alumina exhibits lower hardness but greater toughness. The high proportion of zirconium oxide results in an extremely powerful self-sharpening effect and contributes to outstanding stock removal rates with cool grinding and a long service life.                                                                                                              |
| <b>Silicon carbide SiC</b> |    | Silicon carbide is synthetically manufactured abrasive grain which has very sharp edges, with low toughness and very high hardness. It is recommended for work on titanium, aluminum, bronze, stone and plastics. Ideally suited for use in the aeronautical industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.                                                                                                                           |
| <b>Diamond grain D</b>     |  | Diamond grain is the hardest abrasive. It consists of pure carbon in a crystalline structure. For grinding products, the diamonds used are generally synthetic, produced at very high temperatures and under high pressure. The properties of diamond grain can be adapted for use in grinding products through various synthesis conditions.                                                                                                                                           |
| <b>Compact grain CK</b>    |  | In the case of compact grain, individual grains are built up as granulate with a bond system. Each individual grain of granulate is one solid unit, in which numerous abrasive grains made from aluminum oxide or silicon carbide (SiC) are joined together. Used abrasive grains are torn out of this compound structure by the forces resulting from the grinding, and expose sharp abrasive points in doing so. This guarantees a long service life with a constant surface quality. |

### Grit sizes

The various grit sizes for coated abrasives are specified in ISO 6344 and have been adopted for FEPA standards:

| Coarse                                       | Medium                                    | Fine                          | Superfine                  |
|----------------------------------------------|-------------------------------------------|-------------------------------|----------------------------|
| P 12 – 16 – 20 – 24 – 36 – 40 – 50 – 60 – 80 | P 100 – 120 – 150 – 180 – 220 – 240 – 280 | P 320 – 360 – 400 – 500 – 600 | P 800 – 1000 – 1200 – 1500 |

### 5 Active grinding layer

The use of an active grinding layer considerably increases the stock removal rate and reduces the workpiece temperature. This is especially advantageous for materials with poor heat-conducting properties, such as stainless steel (INOX). PFERD products with an active grinding layer feature the additional "COOL" label in their item description.



# Fine grinding and finishing products

## Surface roughness – influencing factors and reference values

### Factors influencing surface roughness:

#### Abrasive:

- The larger the grit, the rougher the surface finish will be.
- Aluminum oxide, ceramic oxide and zirconia alumina grains all achieve similar levels of surface roughness.
- Workpieces which are ground with silicon carbide grain exhibit a slightly brighter or more reflective surface than other grains.

#### Workpiece materials:

- The softer the material to be ground, the coarser the finished surface will be when using the same grit sizes.
- Adding grease or lubricant will achieve a slightly finer surface finish.

#### Work parameters:

- The relationship between the peripheral speed and feed rate has the following impact:
  - Increasing the peripheral speed slightly improves the surface quality.
  - Reducing the speed of the feed rate makes the surface quality slightly finer.
- The contact pressure can have a significant influence on the surface roughness.

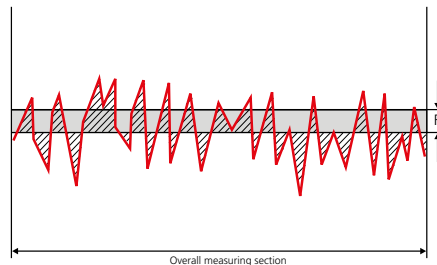
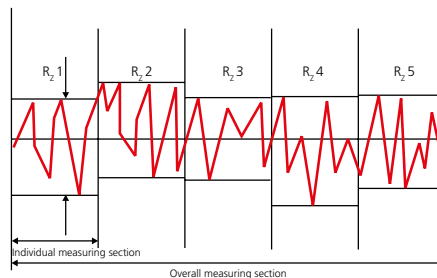
### There is a differentiation between the following roughness depths:

The **individual roughness depth  $R_{zi}$**  is the sum of the height of the largest profile peak and the depth of the largest profile trough within an individual measuring section.

The **roughness depth  $R_z$**  is the largest individual roughness depths ( $R_{zi}$ ) of consecutive individual measuring sections.

The **roughness depth  $R_{max}$**  is the largest individual roughness depth within the overall measuring section.

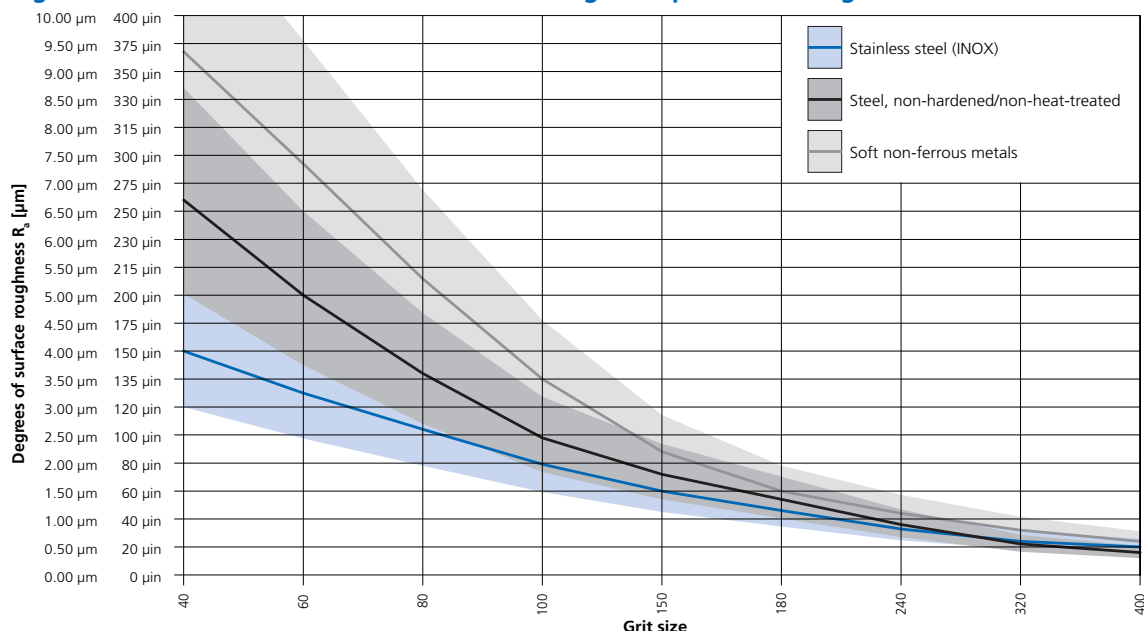
The **average roughness value  $R_a$**  is the arithmetic mean value of the sum of all profile values within the roughness profile.



### Reference values for roughness depths in the case of different applications

| Application                                       | Roughness depth                                                 |
|---------------------------------------------------|-----------------------------------------------------------------|
| Coarse stock removal:<br>Grit sizes 24 to 150     | $R_a = 0.70$ to $12 \mu\text{m}$<br>(25 to $470 \mu\text{in}$ ) |
| Fine finishing:<br>Grit sizes 180 to 400          | $R_a = 0.20$ to $0.70$<br>(8 to $25 \mu\text{in}$ )             |
| Very fine finishing:<br>Grit sizes 500 to 1200    | $R_a = 0.05$ to $0.20 \mu\text{m}$<br>(2 to $8 \mu\text{in}$ )  |
| Mirror finishing:<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 $0.10$<br>(2 to $4 \mu\text{in}$ )              |
| Step 3:                                           | $R_a < 0.01 \mu\text{m}$<br>( $< 1 \mu\text{in}$ )              |
| Pharmaceutical grade:                             | $R_a = 0.20$ to $0.70 \mu\text{m}$<br>(8 to $25 \mu\text{in}$ ) |
| Sanitary food grade/<br>directional matte finish: | $R_a = .10$ to $0.70 \mu\text{m}$<br>(4 to $25 \mu\text{in}$ )  |

### Surface roughness of different materials after machining with products using coated abrasives





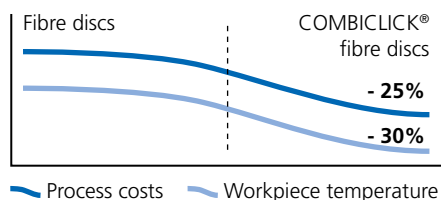
### The patented quick-mounting and cooling system is recommended with fibre, non-woven and felt discs.

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.

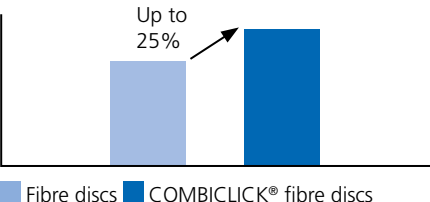
The special geometry of the cooling slots ensures high air throughput, which considerably reduces the thermal load on the abrasive material and the workpiece.

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.

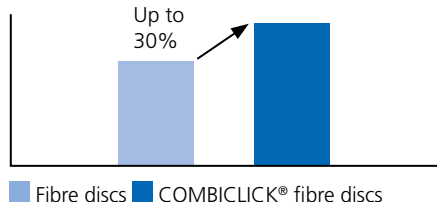
#### Lower process costs and workpiece temperature



#### Higher stock removal rate



#### Longer service life



### Advantages:

#### System



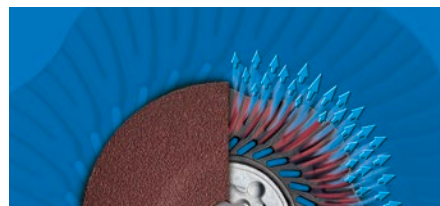
Very easy and comfortable.

#### Clamping mounting system



Extremely fast and easy disc changing reduces process costs.

#### Cooling effect



Very good cooling of the disc and workpiece.

#### Flexible grinding



Soft and flexible grinding performance in face-down grinding with 5 inch diameter fibre discs.

#### COMBICLICK® allows a very flat grinding angle!



With COMBICLICK®, scratches caused by protruding clamping parts are prevented and very high utilization of the available abrasive is attained.



### PFERDVALUE®

**PFERDERGONOMICS®** recommends COMBICLICK® as an innovative product solution to sustainably reduce vibration, noise and dust levels produced by discs, and to improve working comfort.



**PFERDEFFICIENCY®** recommends COMBICLICK® for long, fatigue-free and resource-saving work in the shortest possible time. The patented quick-mounting system reduces disc changes and setup times.



# COMBICLICK® quick-mounting system

## Fibre discs

The wide range of COMBICLICK® fibre discs offers the best product for any grinding application, from coarse to fine.

### Advantages:

- Innovative quick-mounting system guarantees convenient handling and cool grinding.
- High productivity due to long service life and very high stock removal rate.
- Consistent surface finish resulting from high-quality abrasives.

### Applications:

- Leveling
- Deburring
- Surface work
- Work on edges
- Work on weld seams
- Step-by-step fine grinding

### Recommendations for use:

- Use COMBICLICK® fibre discs with COMBICLICK® backing pads on commercially available angle grinders.

### Compatible power tools:

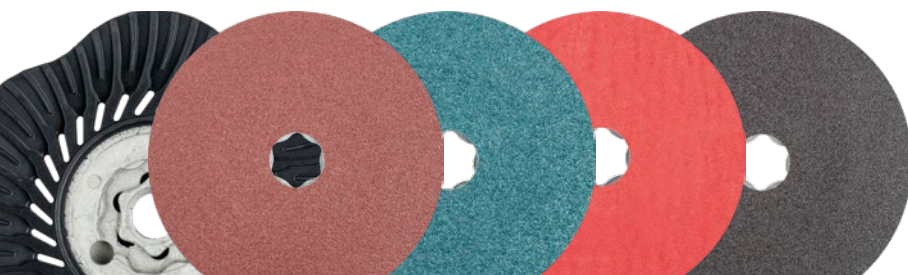
- Angle grinders
- Cordless angle grinders

### Ordering notes:

- Order COMBICLICK® backing pads separately. Detailed information and ordering data for backing pads can be found on page 18.

### 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.



### Quick product selection guide

| Material group ▼          |                                             |                                                                                                           | Abrasive ► | Aluminum oxide A | Zirconia Alumina Z | Ceramic oxide CO | Silicon carbide SiC | Aluminum oxide A-COOL | 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-based 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, paintwork                                     | ●          |                  |                    | ●                |                     |                       |                       |

● = highly recommended

○ = recommended

## Aluminum oxide A

For universal grinding work from coarse to fine grinding in industry and professional trades.

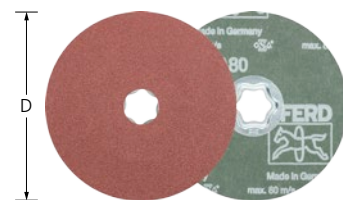
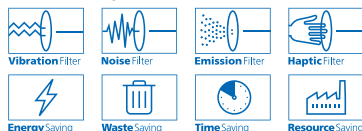
### Abrasive:

Aluminum oxide A

### Ordering notes:

- Please order COMBICLICK® backing pad separately.

### PFERDVALUE®:



| D<br>[Inches] | Grit and EDP number |       |       |       |       |       | Max.<br>RPM |  |
|---------------|---------------------|-------|-------|-------|-------|-------|-------------|-------------------------------------------------------------------------------------|
|               | 24                  | 36    | 50    | 60    | 80    | 120   |             |                                                                                     |
| 4-1/2         | 40091               | 40092 | 40093 | 40094 | 40095 | 40097 | 13,300      | 25                                                                                  |
| 5             | 40099               | 40100 | 40101 | 40102 | 40103 | 40105 | 12,200      | 25                                                                                  |

## Zirconia alumina Z

For coarse grinding work with a high stock removal rate and a long service life.

### Abrasive:

Zirconia alumina Z

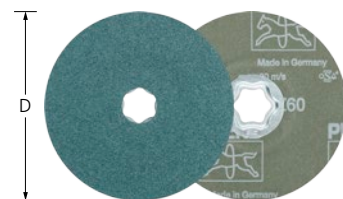
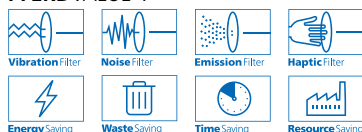
### Recommendations for use:

- Use powerful angle grinders in the case of a higher contact pressure.

### Ordering notes:

- Please order COMBICLICK® backing pad separately.

### PFERDVALUE®:



| D<br>[Inches] | Grit and EDP number |       |       |       |       |       | Max.<br>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                                                                                    |

## Ceramic oxide CO

For aggressive grinding with a very high stock removal rate and very long service life. The ceramic oxide grain is specifically designed for work on hard materials and coatings.

### Abrasive:

Ceramic oxide CO

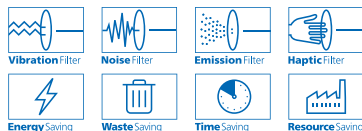
### Recommendations for use:

- Use with high-powered angle grinders.

### Ordering notes:

- Please order COMBICLICK® backing pad separately.

### PFERDVALUE®:

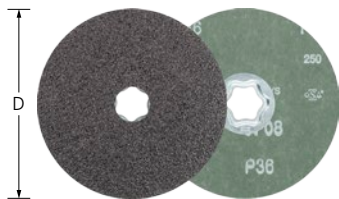


| D<br>[Inches] | Grit and EDP number |       |       |       |       |       | Max.<br>RPM |  |
|---------------|---------------------|-------|-------|-------|-------|-------|-------------|---------------------------------------------------------------------------------------|
|               | 24                  | 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                                                                                    |



# COMBICLICK® quick-mounting system

Fibre discs



## Silicon carbide SiC

For universal grinding work on components made from aluminum, copper, bronze, titanium and fibre-reinforced plastics.

Recommended for use on titanium alloys.

Ideally suited for use in the aerospace industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.

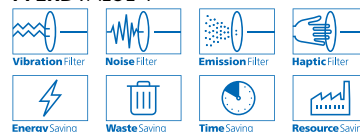
### Abrasive:

Silicon carbide SiC

### Ordering notes:

■ Please order COMBICLICK® backing pad separately.

### PFERDVALUE®:



| D<br>[Inches] | Grit and EDP number |       |       |       | Max.<br>RPM |    |
|---------------|---------------------|-------|-------|-------|-------------|----|
|               | 36                  | 60    | 80    | 120   |             |    |
| 4-1/2         | 40021               | 40022 | 40023 | 40024 | 13,300      | 25 |
| 5             | 40028               | 40029 | 40030 | 40031 | 12,200      | 25 |



## Aluminum oxide A-COOL

For universal grinding work from fine to very fine grinding on materials that do not conduct heat well, e.g. stainless steel (INOX) and aluminum.

Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

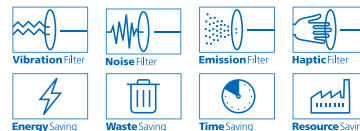
### Abrasive:

Aluminum oxide A-COOL

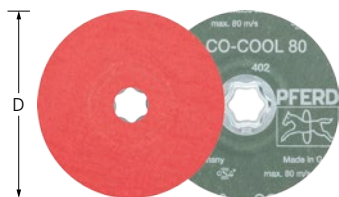
### Ordering notes:

■ Please order COMBICLICK® backing pad separately.

### PFERDVALUE®:



| D<br>[Inches] | Grit and EDP number |       |       |       |       |       |       | Max.<br>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 |



## Ceramic oxide CO-COOL

For aggressive grinding with maximum stock removal rate on hard materials that do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

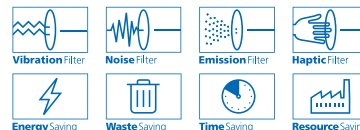
### Abrasive:

Ceramic oxide CO-COOL

### Ordering notes:

■ Please order COMBICLICK® backing pad separately.

### PFERDVALUE®:



| D<br>[Inches] | Grit and EDP number |       |       |       |       |       | Max.<br>RPM |    |
|---------------|---------------------|-------|-------|-------|-------|-------|-------------|----|
|               | 24                  | 36    | 50    | 60    | 80    | 120   |             |    |
| 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 | -     | -     | 8,500       | 25 |

COMBICLICK® non-woven discs are used for face-down grinding. They are available in the following types: finishing-soft type, surface conditioning-hard type, and unitized.

### Advantages:

- Innovative quick-mounting system guarantees convenient handling and cool grinding.

### Workpiece materials:

- Can be used on nearly all materials.

### Applications:

- Roughing
- Deburring
- Surface work
- Cleaning
- Work on weld seams
- Structuring surfaces
- Step-by-step fine grinding

### Recommendations for use:

- Use COMBICLICK® non-woven discs with COMBICLICK® backing pads on variable speed angle grinders.

### Compatible power tools:

- Angle grinders
- Cordless angle grinders

### Ordering notes:

- Order COMBICLICK® backing pads separately. Detailed information and ordering data for backing pads can be found on page 18.

### Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



Non-woven discs

### Surface conditioning, hard type

Recommended for universal work on small and medium-sized metal surfaces, e.g. removing rough grinding traces, removing oxidation and light deburring work. Achieve matte and satin-finished surfaces.

#### Advantages:

- Little wear due to high tear strength.
- The open structure of the non-woven material prevents loading.

#### Abrasive:

Aluminum oxide A

Available POLIVLIES® grit sizes:

100 C = coarse (yellow-brown)

180 M = medium (red-brown)

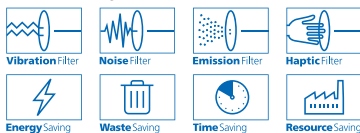
240 F = fine (blue)

- The addition of oil or water during grinding results in a finer finish, cooler grinding and longer service life.

#### Ordering notes:

- Please order COMBICLICK® backing pad separately.

#### PFERDVALUE®:



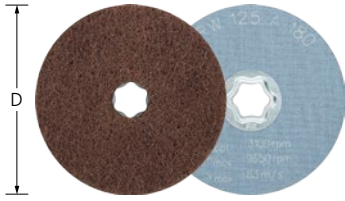
#### Recommendations for use:

- COMBICLICK® surface conditioning, hard type discs 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.

| D<br>[Inches] | Grit and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------------|-------|-------|-------------|-------------|---------------------------------------------------------------------------------------|
|               | 100 C               | 180 M | 240 F |             |             |                                                                                       |
| 4-1/2         | 48100               | 48101 | 48103 | 3,300       | 10,500      | 10                                                                                    |
| 5             | 48110               | 48111 | 48113 | 3,100       | 9,650       | 10                                                                                    |

# COMBICLICK® quick-mounting system

Non-woven discs



## Finishing, soft type

Recommended for very fine grinding on small and medium-sized surfaces and contours, and for cleaning metal and painted surfaces. Achieve matte and satin-finished surfaces. Highly open structure.

### Advantages:

- Can be used for wet and dry grinding.
- The open structure and high flexibility of the non-woven material prevents loading.

### Abrasive:

Aluminum oxide A

Available POLINOX® grit sizes:

- 100 = medium
- 180 = fine
- 280 = very fine

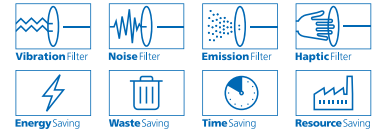
### Recommendations for use:

- COMBICLICK® finishing, soft type discs 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 notes:

- Please order COMBICLICK® backing pad separately.

### PFERDVALUE®:



| D<br>[Inches] | Grit and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM |    |
|---------------|---------------------|-------|-------|-------------|-------------|----|
|               | 100                 | 180   | 280   |             |             |    |
| 4-1/2         | 48131               | 48132 | 48133 | 3,300       | 10,500      | 10 |
| 5             | 48135               | 48136 | 48137 | 3,100       | 9,650       | 10 |



## Unitized discs

For achieving a very fine, uniform surface finish which, depending on requirements, is a sufficient preparation for high-gloss polishing. Recommended for work on larger surfaces on components made of stainless steel (INOX).

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

### Advantages:

- High edge strength due to extreme durability.
- Can be profiled as desired, enabling optimal adjustment to the contour.

### Abrasive:

Aluminum oxide A

Silicon carbide SiC

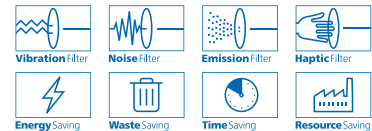
### Recommendations for use:

- COMBICLICK® unitized discs achieve their best performance at a recommended peripheral speed of 3,000–6,900 SFPM.

### Ordering notes:

- Further information on unitized products can be found on pages 85–86.

### PFERDVALUE®:



| D<br>[Inches] | Abrasives | Grit size | Hardness | Spec | EDP<br>number | Opt.<br>RPM | Max.<br>RPM |   |
|---------------|-----------|-----------|----------|------|---------------|-------------|-------------|---|
| 4-1/2         | SiC       | fine      | W        | 2SF  | 48150         | 5,000       | 8,350       | 5 |
|               | SiC       | fine      | MW       | 3SF  | 48154         | 5,000       | 8,350       | 5 |
|               | SiC       | fine      | MH       | 6SF  | 48158         | 5,000       | 8,350       | 5 |
|               | A         | fine      | H        | 8AM  | 48162         | 5,000       | 8,350       | 5 |
| 5             | SiC       | fine      | W        | 2SF  | 48166         | 4,500       | 7,650       | 5 |
|               | SiC       | fine      | MW       | 3SF  | 48170         | 4,500       | 7,650       | 5 |
|               | SiC       | fine      | MH       | 6SF  | 48174         | 4,500       | 7,650       | 5 |
|               | A         | fine      | H        | 8AM  | 48178         | 4,500       | 7,650       | 5 |



COMBICLICK® felt discs are used for face-down grinding on medium-sized and large surfaces. They are supplied in various diameters.

### Advantages:

- Innovative quick-mounting system guarantees convenient handling with fast disc changes.

### Workpiece materials:

- Can be used on nearly all materials.

### Applications:

- Polishing

### Recommendations for use:

- Use COMBICLICK® felt discs with COMBICLICK® backing pads on variable speed angle grinders.
- Felt discs achieve their best performance at a recommended peripheral 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.

### Compatible power tools:

- Angle grinders
- Cordless angle grinders

### Ordering notes:

- Please order COMBICLICK® backing pads separately. More detailed information and ordering data for backing pads can be found on page 18.
- Please order grinding and polishing pastes separately. Detailed information and ordering data for grinding and polishing pastes can be found on pages 121–122.

### Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



Felt discs

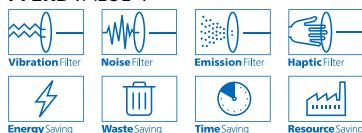
### Felt discs

Recommended for polishing with polishing paste bars, grinding pastes or diamond polishing pastes in face-down grinding on medium-sized and large surfaces.

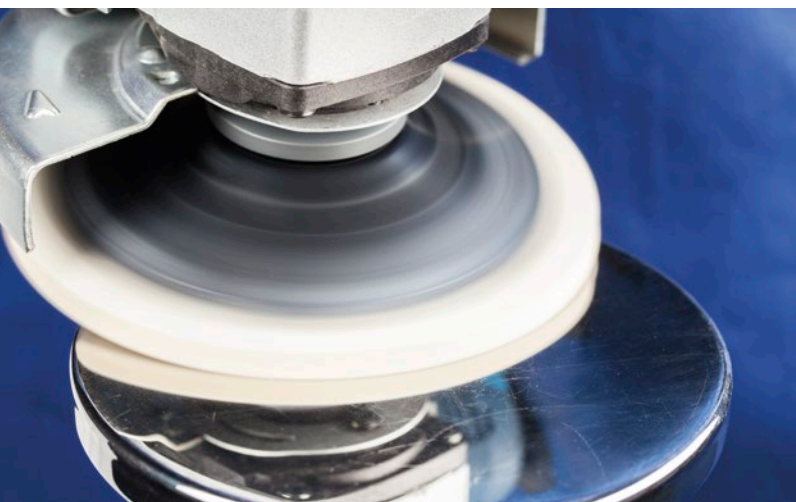
### Advantages:

- High productivity due to very long service life.
- Consistent performance over the entire lifespan due to high dimensional stability.

### PFERDVALUE®:



| D<br>[Inches] | EDP<br>number | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|-------------|-------------|---------------------------------------------------------------------------------------|
| 4-1/2         | 48705         | 1,900       | 10,500      | 5                                                                                     |
| 5             | 48706         | 1,650       | 9,650       | 5                                                                                     |



# COMBICLICK® quick-mounting system

## Backing pads



### Backing pads

With this backing pad, COMBICLICK® discs can be used on commercially available angle grinders. The different hardnesses are colour-coded:

CC-GT (medium) = black

CC-H-GT (hard) = blue

#### Advantages:

- The geometry of the cooling slots significantly reduces the thermal load.
- High productivity due to minimized disc change times.

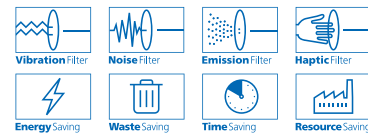
#### Recommendations for use:

- CC-H-GT backing pads is mainly used to work on stainless steel (INOX). It features very high edge strength, which enables a higher contact pressure.

#### Safety notes:

- The maximum approved peripheral speed is 15,800 SFPM.
- For backing pads with a 7 inch diameter, do not apply too high a contact pressure in order to prevent the backing pad from overstretching.

#### PFERDVALUE®:



| Disc diameter [Inches] | Thread | Hardness | EDP number | Max. RPM |   |
|------------------------|--------|----------|------------|----------|---|
| 4-1/2 and 5            | 5/8-11 | medium   | 69470      | 13,300   | 1 |
|                        |        | hard     | 69478      | 13,300   | 1 |
| 7                      | 5/8-11 | medium   | 69474      | 8,500    | 1 |

## Sets



### COMBICLICK® sets

COMBICLICK® sets include a wide variety of coated and non-woven materials to test performance and surface finish results to help determine the right 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.

#### Contents:

- 3 pcs. each of COMBICLICK® fibre discs:
  - CO-COOL 36 grit
  - CO-COOL 120 grit
  - A-COOL 220 grit
- 1 pc. each of COMBICLICK® non-woven disc:
  - Surface conditioning, hard type, 240 F fine
  - Surface conditioning, hard type, 180 M medium
  - Surface conditioning, hard type, 100 C coarse
  - Finishing, soft type, 280 very fine
  - Finishing, soft type, 180 fine
  - Finishing, soft type, 100 medium
  - Unitized disc SiC W soft
- 1 pc. each of:
  - Universal polishing paste
  - COMBICLICK® felt disc
  - COMBICLICK® backing pad
  - CC-GT 5/8-11

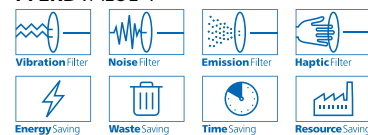
#### Advantages:

- Getting to know and testing the comprehensive system.
- Coordinated selection of the most common products.

#### Abrasive:

Aluminum oxide A  
Ceramic oxide CO-COOL  
Silicon carbide SiC

#### PFERDVALUE®:



| D [Inches] | Thread | EDP number |   |
|------------|--------|------------|---|
| 4-1/2      | 5/8-11 | 48192      | 1 |
| 5          | 5/8-11 | 48194      | 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:

- High productivity due to long service life and very high stock removal rate.
- Consistent surface finish resulting from high-quality abrasives.
- Optimum adaptation to contours due to high flexibility.

### Applications:

- Leveling
- Deburring
- Surface work
- Work on edges
- Work on weld seams
- Step-by-step fine grinding

### Recommendations for use:

- Use fibre discs conforming to ISO 15636 with backing pads on commercially available angle grinders.

### Compatible power tools:

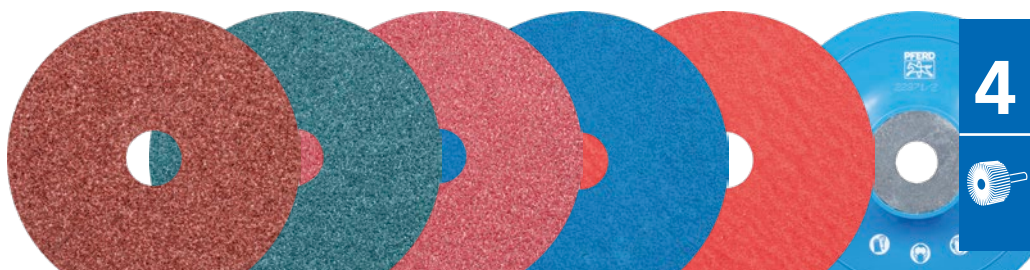
- Angle grinders
- Cordless angle grinders

### Ordering notes:

- Please order backing pads separately. More detailed information and ordering data for backing pads can be found on page 22.

### Safety notes:

- The maximum approved peripheral speed is 15,800 SFPM.
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



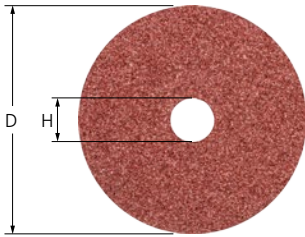
### Quick product selection guide

| Material group ▼          |                                             |                                                                                                           | Abrasive ► | Aluminum oxide A | Zirconia alumina Z | Ceramic oxide CO | Zirconia alumina Z-COOL | 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-based 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, paintwork                                     |            | ●                |                    |                  |                         |                       |

● = highly recommended

○ = recommended





### Aluminum oxide A

For universal grinding work from coarse to fine grinding in industry and professional trades.

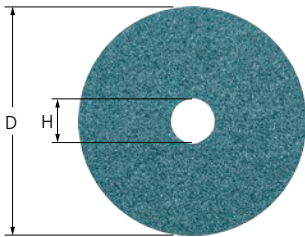
#### Abrasive:

Aluminum oxide A

#### Ordering notes:

- Please order backing pad separately. See page 22.

| D<br>[Inches] | H<br>[Inches] | Grit and EDP number |       |       |       |       |       |       |       | Max.<br>RPM |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------------|-------------------------------------------------------------------------------------|
|               |               | 16                  | 24    | 36    | 50    | 60    | 80    | 100   | 120   |             |                                                                                     |
| 4-1/2         | 7/8           | 62451               | 62452 | 62453 | 62454 | 62455 | 62456 | 62457 | 62458 | 13,300      | 25                                                                                  |
| 5             | 7/8           | 62501               | 62502 | 62503 | 62504 | 62505 | 62506 | 62507 | 62508 | 12,200      | 25                                                                                  |
| 7             | 7/8           | 62701               | 62702 | 62703 | 62704 | 62705 | 62706 | -     | -     | 8,500       | 25                                                                                  |



### Zirconia alumina Z

For coarse grinding work with a high stock removal rate and a long service life.

#### Abrasive:

Zirconia alumina Z

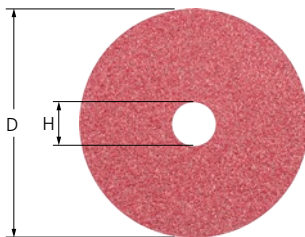
#### Ordering notes:

- Please order backing pad separately. See page 22.

#### Recommendations for use:

- Use with high-powered angle grinders in the case of a higher contact pressure.

| D<br>[Inches] | H<br>[Inches] | Grit and EDP number |       |       |       |       | Max.<br>RPM |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|-------------|---------------------------------------------------------------------------------------|
|               |               | 24                  | 36    | 50    | 60    | 80    |             |                                                                                       |
| 4-1/2         | 7/8           | 62462               | 62463 | 62464 | 62465 | 62466 | 13,300      | 25                                                                                    |
| 5             | 7/8           | 62522               | 62523 | 62524 | 62525 | 62526 | 12,200      | 25                                                                                    |
| 7             | 7/8           | 62712               | 62713 | 62714 | 62715 | 62716 | 8,500       | 25                                                                                    |



### Ceramic oxide CO

For aggressive grinding with a very high stock removal rate and very long service life. Consistently high performance due to self-sharpening ceramic oxide grain.

The ceramic oxide grain is specifically designed for work on hard materials and layers.

#### Abrasive:

Ceramic oxide CO

#### Ordering notes:

- Please order backing pad separately. See page 22.

#### Recommendations for use:

- Use with high-powered angle grinders.

| D<br>[Inches] | H<br>[Inches] | Grit and EDP number |       |       |       |       | Max.<br>RPM |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|-------------|---------------------------------------------------------------------------------------|
|               |               | 24                  | 36    | 50    | 60    | 80    |             |                                                                                       |
| 4-1/2         | 7/8           | 62410               | 62411 | 62412 | 62413 | 62414 | 13,300      | 25                                                                                    |
| 5             | 7/8           | 62510               | 62511 | -     | -     | -     | 12,200      | 25                                                                                    |
| 7             | 7/8           | 62743               | 62744 | 62745 | -     | -     | 8,500       | 25                                                                                    |



## Zirconia alumina Z-COOL

For coarse grinding work with a high stock removal rate and cool grinding.

Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

### Abrasive:

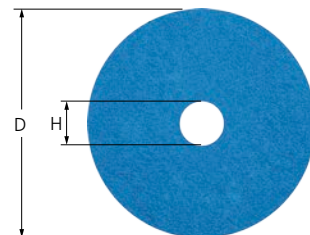
Zirconia alumina Z-COOL

### Ordering notes:

■ Please order backing pad separately.  
See page 22.

### Recommendations for use:

■ Use with high-powered angle grinders in the case of a higher contact pressure.



| D<br>[Inches] | H<br>[Inches] | Grit and EDP number |       |       |       | Max.<br>RPM |  |
|---------------|---------------|---------------------|-------|-------|-------|-------------|-------------------------------------------------------------------------------------|
|               |               | 36                  | 50    | 60    | 80    |             |                                                                                     |
| 4-1/2         | 7/8           | 62468               | 62469 | 62470 | 62471 | 13,300      | 25                                                                                  |
| 5             | 7/8           | 62528               | 62529 | 62530 | 62531 | 12,200      | 25                                                                                  |
| 7             | 7/8           | 62718               | 62719 | 62720 | 62721 | 8,500       | 25                                                                                  |

## Ceramic oxide CO-COOL

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

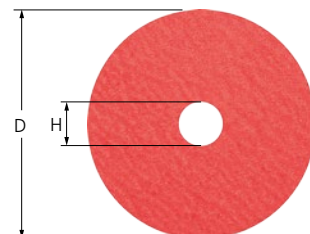
Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

### Abrasive:

Ceramic oxide CO-COOL

### Ordering notes:

■ Please order backing pad separately.  
See page 22.



| D<br>[Inches] | H<br>[Inches] | Grit and EDP number |       |       |       |       |       | Max.<br>RPM |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|-------|-------------|---------------------------------------------------------------------------------------|
|               |               | 24                  | 36    | 50    | 60    | 80    | 120   |             |                                                                                       |
| 4-1/2         | 7/8           | 62416               | 62417 | 62418 | 62419 | 62420 | 62421 | 13,300      | 25                                                                                    |
| 5             | 7/8           | 62516               | 62517 | 62518 | 62519 | 62520 | 62521 | 12,200      | 25                                                                                    |
| 7             | 7/8           | 62749               | 62750 | 62751 | 62752 | 62753 | 62754 | 8,500       | 25                                                                                    |

4



# Fibre discs

## Backing pads and accessories



Rubber

High-performance

Temperature-resistant

### Backing pads for fibre discs

Backing pads for fibre discs used on commercially available angle grinders.

#### Rubber backing pads:

Rubber backing pad with a ribbed surface for better cooling to improve disc life. Available in three densities.

#### High-performance backing pads:

High-performance backing pad with a long service life due to abrasion-resistant, glass-fibre-reinforced plastic. Cool grinding due to radially arranged cooling fins, and high fibre disc stock removal rate due to sturdy, rigid design.

#### Temperature-resistant backing pads:

Temperature-resistant backing pad with a long service life due to the highly temperature-resistant material. High-precision work with flexible density. Maximum stock removal with hard density.

#### Ordering notes:

■ The compatible clamping nut is included.

#### Accessories:

■ Clamping nuts for backing pads

| Compatible with these disc dia. [Inches]    | Thread size [Inches] | Backing density | EDP number | Compatible clamping nut | Max. RPM |  |
|---------------------------------------------|----------------------|-----------------|------------|-------------------------|----------|-------------------------------------------------------------------------------------|
| <b>Rubber backing pads (ribbed surface)</b> |                      |                 |            |                         |          |                                                                                     |
| 4-1/2                                       | 5/8-11               | Regular (R)     | 69455      | 69107                   | 13,300   | 1                                                                                   |
| 5                                           | 5/8-11               | Regular (R)     | 69525      | 69107                   | 12,200   | 1                                                                                   |
| 7                                           | 5/8-11               | Flexible (F)    | 69704      | 69108                   | 8,500    | 1                                                                                   |
|                                             |                      | Regular (R)     | 69705      | 69108                   | 8,500    | 1                                                                                   |
|                                             |                      | Hard (H)        | 69706      | 69108                   | 8,500    | 1                                                                                   |
| <b>High-performance backing pads</b>        |                      |                 |            |                         |          |                                                                                     |
| 4-1/2                                       | 5/8-11               | Hard (H)        | 69481      | 42071                   | 13,300   | 1                                                                                   |
| 5                                           | 5/8-11               | Hard (H)        | 69484      | 42071                   | 12,200   | 1                                                                                   |
| 7                                           | 5/8-11               | Hard (H)        | 69487      | 42071                   | 8,500    | 1                                                                                   |
| <b>Temperature-resistant backing pads</b>   |                      |                 |            |                         |          |                                                                                     |
| 4-1/2                                       | 5/8-11               | Flexible (F)    | 69480      | 42071                   | 13,300   | 1                                                                                   |
|                                             |                      | Hard (H)        | 69482      | 42071                   | 13,300   | 1                                                                                   |
| 5                                           | 5/8-11               | Flexible (F)    | 69483      | 42071                   | 12,200   | 1                                                                                   |
|                                             |                      | Hard (H)        | 69485      | 42071                   | 12,200   | 1                                                                                   |
| 7                                           | 5/8-11               | Flexible (F)    | 69486      | 42071                   | 8,500    | 1                                                                                   |
|                                             |                      | Hard (H)        | 69488      | 42071                   | 8,500    | 1                                                                                   |



### Fibre disc backing pad accessories

Fibre disc backing pad accessories, including clamping nuts and spanner wrench.

#### Advantages:

■ Matching centre hole distances for standard commercial face pin spanners.

| Thread size [Inches] | Compatible with these grinder sizes [Inches] | EDP number |  |
|----------------------|----------------------------------------------|------------|---------------------------------------------------------------------------------------|
| 5/8-11               | 4-5                                          | 69107      | 1                                                                                     |
|                      | 7-9                                          | 69108      | 1                                                                                     |
|                      | 4-1/2-7                                      | 42071      | 1                                                                                     |
| Spanner wrench       | -                                            | 69115      | 1                                                                                     |



PSA (pressure-sensitive adhesive) discs are suited to grinding larger surfaces. The flexible system includes a PSA disc and associated holder for use on contours. With the disc holder, PSA discs can be used on commercially available, variable speed or slow-running angle grinders with a 5/16-24 UNC thread.

### Advantages:

- Quick disc changes due to flexible system.
- Optimum adaptation to contours because of high flexibility.

### Workpiece materials:

- Can be used on nearly all materials.

### Applications:

- Leveling
- Deburring
- Surface work
- Work on edges
- Work on weld seams
- Step-by-step fine grinding

### Compatible power tools:

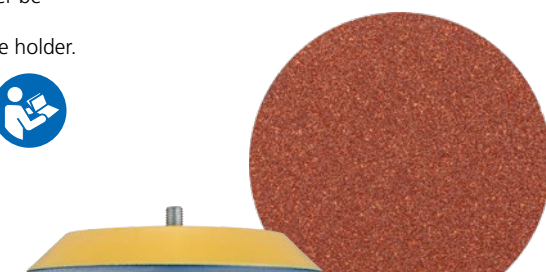
- Angle grinders
- Cordless angle grinders

### Ordering notes:

- Please order disc holders separately. More detailed information and ordering data for disc holders can be found on page 24.

### Safety notes:

- The maximum permitted peripheral speed is 6,300 SFPM.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- Position the PSA discs centrally on the holder.



PSA discs

4



## Aluminum oxide A

For universal grinding work from coarse to fine grinding in industry and professional trades.

### Advantages:

- Recommended for general use on virtually all materials.

### Ordering notes:

- Please order disc holder separately.

### Abrasive:

Aluminum oxide A

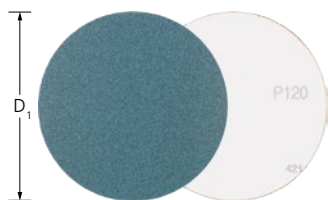


| D <sub>1</sub><br>[Inches] | Grit and EDP number |       |       |       |       |       |       |       |       |       |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|----------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|-------------|---------------------------------------------------------------------------------------|
|                            | 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 | 4,600       | 4,850       | 50                                                                                    |
| 6                          | 47374               | 47375 | 47376 | 47377 | 47378 | 47379 | 47380 | 47381 | 47382 | 47383 | 47384 | 47385 | 3,800       | 4,100       | 50                                                                                    |



# PSA discs

PSA discs



## Zirconia alumina Z

Designed for coarse grinding and high stock removal with a long service life.

### Advantages:

- Recommended for general use on virtually all materials.

### Ordering notes:

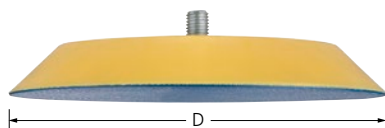
- Please order disc holder separately. See below.

### Abrasive:

Zirconia alumina Z

| D <sub>1</sub><br>[Inches] | Grit and EDP number |       |       |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|----------------------------|---------------------|-------|-------|-------|-------|-------------|-------------|-------------------------------------------------------------------------------------|
|                            | 36                  | 40    | 60    | 80    | 120   |             |             |                                                                                     |
| 5                          | 47560               | 47561 | 47563 | 47564 | 47566 | 4,600       | 4,850       | 50                                                                                  |
| 6                          | 47570               | 47571 | 47573 | 47574 | 47576 | 3,800       | 4,100       | 50                                                                                  |

## PSA disc holders



## Threaded spindle

Backing pad for use with PSA discs. For threaded spindle (dual action machines).

| D<br>[Inches] | Thread  | EDP<br>number | Max.<br>RPM |  |
|---------------|---------|---------------|-------------|--------------------------------------------------------------------------------------|
| 5             | 5/16-24 | 47266         | 10,000      | 1                                                                                    |
| 6             | 5/16-24 | 47268         | 10,000      | 1                                                                                    |



Velcro-backed abrasive discs in the NET type feature a netting fabric, to which the abrasive grain is bonded with a high-performance bond system, which makes it very durable.

The range comprises two diameters that have been adapted to the most common power tools, with a comprehensive choice of grain sizes, from 80 to 1,000 grit.

## Advantages:

- Very long service life and high stock removal rate.
- Very fine, even surfaces can be achieved.
- Dust-free work due to good extraction capability.
- No loading due to netting structure.
- Durable netting structure with high tear strength and edge stability.

## Applications:

- Roughing
- Surface grinding
- Cleaning
- Step-by-step fine grinding

## Compatible power tools:

- Eccentric orbital sanders

## Safety notes:



## Workpiece materials:

- Aluminum
- Additional non-ferrous metals
- Stainless steel (INOX)
- Wood
- Plastics
- Steel, cast steel



Velcro-backed abrasive discs

## Aluminum oxide A

For dust-free, universal grinding work on medium-sized and large surfaces.

### Abrasive:

Aluminum oxide A

### Recommendations for use:

- Use the extraction connection on the machine to effectively remove the grinding dust.



| D <sub>1</sub><br>[Inches] | Grit and EDP number |       |       |       |       |       |       |       |       |       |       |  |
|----------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------------------------------------------------------------------------|
|                            | 80                  | 100   | 120   | 150   | 180   | 240   | 320   | 400   | 600   | 800   | 1000  |                                                                                       |
| 5                          | 47520               | 47521 | 47522 | 47523 | 47524 | 47525 | 47526 | 47527 | 47528 | 47529 | 47530 | 25                                                                                    |
| 6                          | 47531               | 47532 | 47533 | 47534 | 47535 | 47536 | 47537 | 47538 | 47539 | 47540 | 47541 | 25                                                                                    |



# COMBIDISC® quick-change discs

## General information



The COMBIDISC® product range contains a wide selection of grinding products for surface finishing. From coarse machining and surface texturing to face-down mirror polishing – the range provides the best product, even for complicated applications.

### Advantages:

- Reduced down time due to quick disc changes.
- Great convenience due to simple handling and low-vibration working.
- No operational disruptions caused by sticking, slipping or disengaging.

### Applications:

- Roughing
- Leveling
- Deburring
- Surface work
- Work on edges
- Polishing
- Cleaning
- Sharpening
- Work on weld seams
- Structuring surfaces
- Step-by-step fine grinding

### Recommendations for use:

- Use COMBIDISC® grinding discs with arbors or abrasive disc holders on flexible shaft drives with angle handpieces, compressed-air or electric angle grinders.

### Compatible power tools:

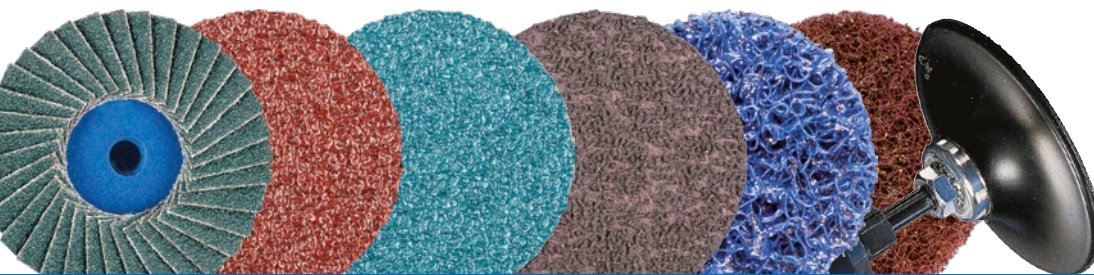
- Flexible shaft drives
- Straight grinders
- Angle grinders
- Cordless angle grinders

### Ordering notes:

- Please order arbors or COMBIDISC® abrasive disc holders separately. More detailed information and ordering data can be found on page 37.

### 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.



## Quick product selection guide

| Material group ▼          |                                             |                                                                                                           | Abrasive ► | Aluminum oxide A, A-PLUS, A-CONTOUR | Aluminum oxide A compact grain | Zirconia alumina Z |
|---------------------------|---------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------|-------------------------------------|--------------------------------|--------------------|
| 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-based 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, paintwork                                     |            | ●                                   |                                |                    |

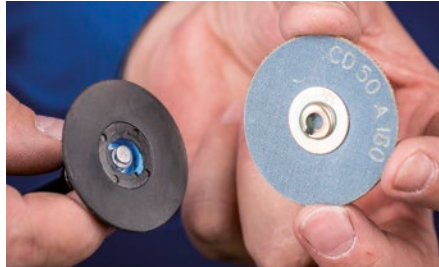
● = highly recommended

○ = recommended



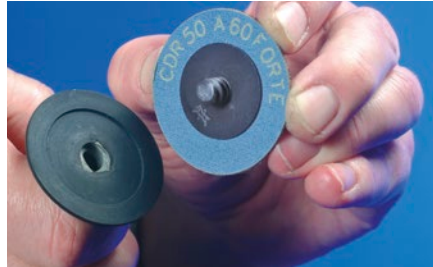
### PFERD offers two alternative mounting systems:

#### CD system



**Disc side:** Threaded connection with female thread (metal/plastic). Also suitable for the following systems available on the market: PSG, Power Lock Type II "turn on", SocAtt, Turn-On.

#### CDR system



**Disc side:** Threaded 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.

### PFERDVALUE®:

**PFERDERGONOMICS®** recommends COMBIDISC® products as a solution to sustainably reduce vibration, noise and dust levels produced by discs and to improve working comfort.



**PFERDEFFICIENCY®** recommends COMBIDISC® products to reduce disc change and setup times.



### Recommended rotational speed range

#### Example:

EDP: 42292 2" CD CO-COOL

Application:

Grinding alloyed steel

Peripheral speed: 4,000–5,000 SFPM

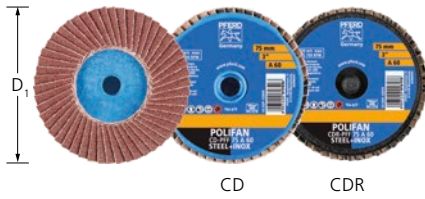
**Rotational speed: 7,600–9,600 RPM**

| D <sub>1</sub><br>[Inches] | Peripheral speed [SFPM] |       |        |        |        |        |        |        |        |
|----------------------------|-------------------------|-------|--------|--------|--------|--------|--------|--------|--------|
|                            | 1,000                   | 2,000 | 3,000  | 4,000  | 5,000  | 6,000  | 7,000  | 8,000  | 10,000 |
| Rotational speeds [RPM]    |                         |       |        |        |        |        |        |        |        |
| 1                          | 3,800                   | 7,600 | 11,500 | 15,300 | 19,100 | 22,900 | 26,700 | 30,600 | 38,200 |
| 1-1/2                      | 2,500                   | 5,100 | 7,600  | 10,200 | 12,700 | 15,300 | 17,800 | 20,400 | 25,500 |
| 2                          | 1,900                   | 3,800 | 5,700  | 7,600  | 9,600  | 11,500 | 13,400 | 15,300 | 19,100 |
| 3                          | 1,300                   | 2,500 | 3,800  | 5,100  | 6,400  | 7,600  | 8,900  | 10,200 | 12,700 |

| Silicon carbide SiC | Ceramic oxide CO-COOL | Diamond abrasive discs | POLICLEAN® discs | Non-woven discs<br>Soft type, Hard type, Unitized |
|---------------------|-----------------------|------------------------|------------------|---------------------------------------------------|
|                     | ●                     |                        | ●                | ●                                                 |
|                     | ●                     |                        | ○                | ○                                                 |
|                     | ●                     |                        | ●                | ●                                                 |
|                     | ○                     |                        | ●                | ●                                                 |
|                     |                       |                        | ●                | ●                                                 |
| ○                   |                       |                        | ●                | ●                                                 |
| ●                   | ●                     | ●                      | ○                | ●                                                 |
|                     | ●                     | ●                      | ○                | ●                                                 |
|                     |                       |                        | ●                | ●                                                 |
| ●                   |                       | ●                      | ●                | ●                                                 |

# COMBIDISC® quick-change discs

Abrasive discs



## Mini-POLIFAN® Aluminum oxide A

For universal coarse grinding work with high stock removal rates.

Ideal for dressing weld seams in hard-to-reach places.

Longer service life and higher stock removal rate when compared to abrasive discs.

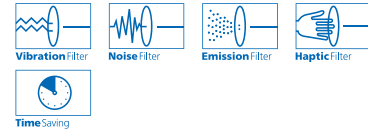
### Abrasive:

Aluminum oxide A

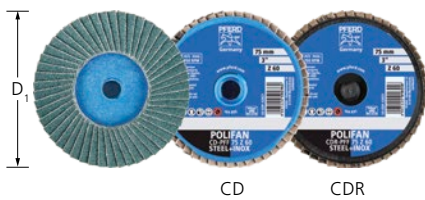
### Ordering notes:

■ Please order arbors or COMBIDISC® abrasive disc holders separately. See below and pg. 37.

### PFERDVALUE®:



| D <sub>1</sub><br>[Inches] | Grit and EDP number                                                               |       |       |       | Opt.<br>RPM   |  |
|----------------------------|-----------------------------------------------------------------------------------|-------|-------|-------|---------------|-------------------------------------------------------------------------------------|
|                            | 40                                                                                | 60    | 80    | 120   |               |                                                                                     |
| CD system                  |  |       |       |       |               |                                                                                     |
| 2                          | 42802                                                                             | 42803 | 42804 | 42805 | 12,000–14,000 | 10                                                                                  |
| 3                          | 42808                                                                             | 42809 | 42810 | 42811 | 8,000–10,000  | 10                                                                                  |
| CDR system                 |  |       |       |       |               |                                                                                     |
| 2                          | 42912                                                                             | 42913 | 42914 | 42915 | 12,000–14,000 | 10                                                                                  |
| 3                          | 42918                                                                             | 42919 | 42920 | 42921 | 8,000–10,000  | 10                                                                                  |



## Mini-POLIFAN® Zirconia alumina Z

For coarse grinding work with a high stock removal rate and a long service life.

### Abrasive:

Zirconia alumina Z

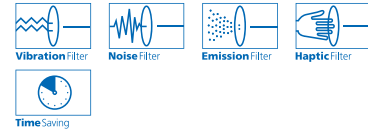
### Recommendations for use:

■ Use in the case of a higher contact pressure.

### Ordering notes:

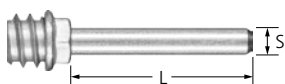
■ Please order arbors or COMBIDISC® abrasive disc holders separately. See below and pg. 37.

### PFERDVALUE®:



| D <sub>1</sub><br>[Inches] | Grit and EDP number                                                                 |       |       |       | Opt.<br>RPM   |  |
|----------------------------|-------------------------------------------------------------------------------------|-------|-------|-------|---------------|---------------------------------------------------------------------------------------|
|                            | 40                                                                                  | 60    | 80    | 120   |               |                                                                                       |
| CD system                  |  |       |       |       |               |                                                                                       |
| 2                          | 42814                                                                               | 42815 | 42816 | 42817 | 12,000–14,000 | 10                                                                                    |
| 3                          | 42820                                                                               | 42821 | 42822 | 42823 | 8,000–10,000  | 10                                                                                    |
| CDR system                 |  |       |       |       |               |                                                                                       |
| 2                          | 42924                                                                               | 42925 | 42926 | 42927 | 12,000–14,000 | 10                                                                                    |
| 3                          | 42930                                                                               | 42931 | 42932 | 42933 | 8,000–10,000  | 10                                                                                    |

## Drive arbors



## Drive arbors for Mini-POLIFAN® discs

Matching arbor for use with COMBIDISC® Mini-POLIFAN® discs with CD thread.

| S<br>[Inches] | L<br>[Inches] | EDP<br>number | Recommended<br>diameters |   |
|---------------|---------------|---------------|--------------------------|---|
| 1/4           | 1-1/2         | 42851         | 2                        | 1 |
|               |               | 42852         | 3                        | 1 |

## Aluminum oxide A

For universal coarse to fine grinding applications in industry and professional trades.

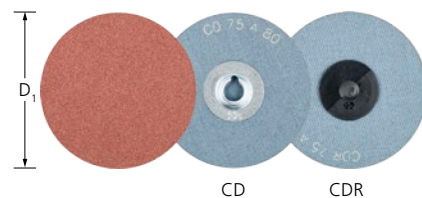
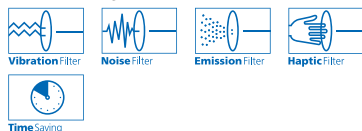
### Abrasive:

Aluminum oxide A

### Ordering notes:

- Please order backing pad separately.  
See page 37.

### PFERDVALUE®:



| D <sub>1</sub><br>[Inches]                                                                   | Grit and EDP number |       |       |       |       |       |       | Opt.<br>RPM   |  |
|----------------------------------------------------------------------------------------------|---------------------|-------|-------|-------|-------|-------|-------|---------------|-------------------------------------------------------------------------------------|
|                                                                                              | 36                  | 50    | 60    | 80    | 120   | 180   | 320   |               |                                                                                     |
| CD system   |                     |       |       |       |       |       |       |               |                                                                                     |
| 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                                                                                  |
| CDR system  |                     |       |       |       |       |       |       |               |                                                                                     |
| 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                                                                                  |

## Aluminum oxide A-PLUS

For universal applications from coarse to fine grinding. Higher stock removal rate due to sturdy backing material. Recommended for use in edge grinding due to high tear strength.

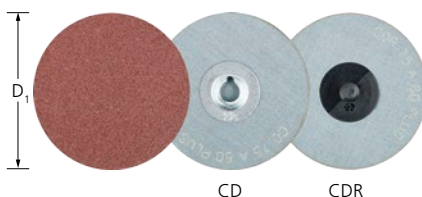
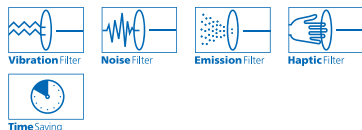
### Abrasive:

Aluminum oxide A-PLUS

### Ordering notes:

- Please order backing pad separately.  
See page 37.

### PFERDVALUE®:



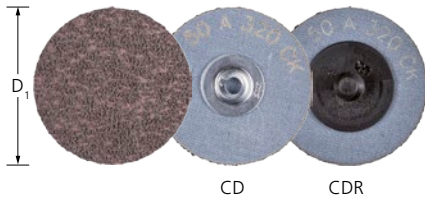
| D <sub>1</sub><br>[Inches] | Grit and EDP number                                                                 |         |         |          | Opt.<br>RPM  |  |  |
|----------------------------|-------------------------------------------------------------------------------------|---------|---------|----------|--------------|---------------------------------------------------------------------------------------|--|
|                            | 36 PLUS                                                                             | 60 PLUS | 80 PLUS | 120 PLUS |              |                                                                                       |  |
| CD system                  |  |         |         |          |              |                                                                                       |  |
| 2                          | 42330                                                                               | 42331   | 42332   | 42333    | 8,000–13,000 | 100                                                                                   |  |
| 3                          | 42335                                                                               | 42336   | 42337   | 42338    | 5,000–9,000  | 50                                                                                    |  |
| CDR system                 |  |         |         |          |              |                                                                                       |  |
| 2                          | 42670                                                                               | 42671   | 42672   | 42673    | 8,000–13,000 | 100                                                                                   |  |
| 3                          | 42675                                                                               | 42676   | 42677   | 42678    | 5,000–9,000  | 50                                                                                    |  |





# COMBIDISC® quick-change discs

Abrasive discs



## Aluminum oxide A compact grain

Extremely well suited for fine and very fine grinding, and for step-by-step preparations for polishing.

The self-sharpening compact grain facilitates a very long service life and achieves consistent surface quality levels throughout the entire service life.

### Abrasive:

Aluminum oxide A compact grain (CK)

### Ordering notes:

- Please order backing pad separately.  
See page 37.

### PFERDVALUE®:



Vibration Filter



Noise Filter



Emission Filter

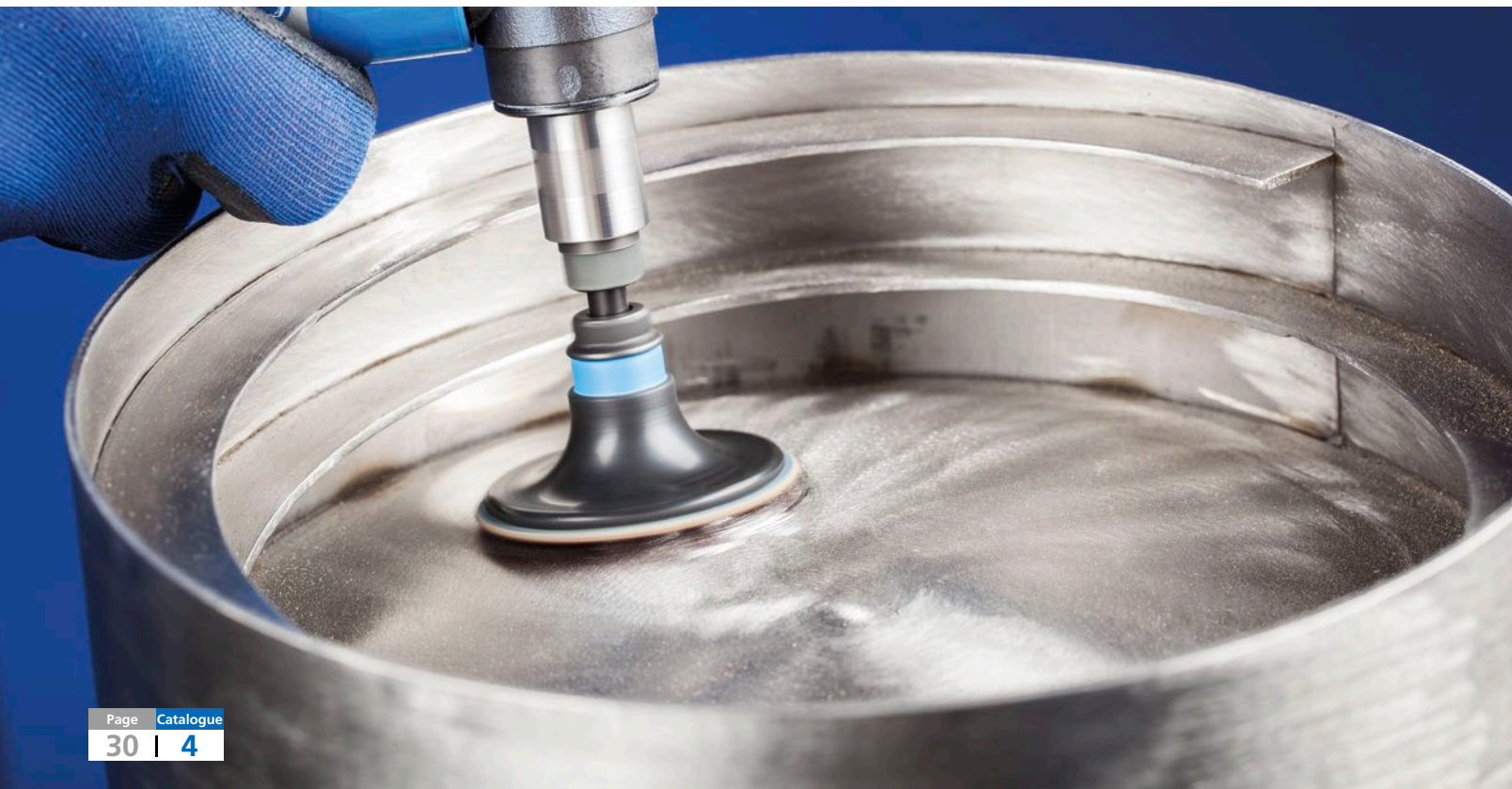


Haptic Filter



Time Saving

|            | D <sub>1</sub><br>[Inches] | Grit and EDP number                                                               |       |       |       |       |       |       |       |       | Opt.<br>RPM  |  |
|------------|----------------------------|-----------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|-------------------------------------------------------------------------------------|
|            |                            | 120                                                                               | 180   | 240   | 320   | 400   | 600   | 800   | 1000  | 1200  |              |                                                                                     |
| CD system  |                            |  |       |       |       |       |       |       |       |       |              |                                                                                     |
|            | 2                          | 42936                                                                             | 42937 | 42938 | 42939 | 42940 | 42941 | 42942 | 42943 | 42944 | 3,800–13,000 | 100                                                                                 |
|            | 3                          | 42945                                                                             | 42946 | 42947 | 42948 | 42949 | 42950 | 42951 | 42952 | 42953 | 2,500–9,000  | 50                                                                                  |
| CDR system |                            |  |       |       |       |       |       |       |       |       |              |                                                                                     |
|            | 2                          | 42954                                                                             | 42955 | 42956 | 42957 | 42958 | 42959 | 42960 | 42961 | 42962 | 3,800–13,000 | 100                                                                                 |
|            | 3                          | 42963                                                                             | 42964 | 42965 | 42966 | 42967 | 42968 | 42969 | 42970 | 42971 | 2,500–9,000  | 50                                                                                  |



## Zirconia alumina Z

For coarse grinding work with a high stock removal rate and a long service life.

### Abrasive:

Zirconia alumina Z

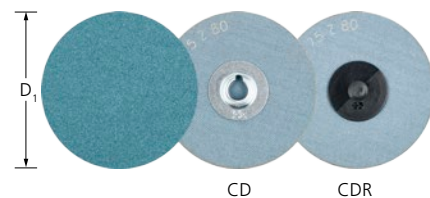
### Recommendations for use:

- Use with hard or medium-hard COMBIDISC® abrasive disc holders.

### Ordering notes:

- Please order backing pad separately. See page 37.

### PFERDVALUE®:

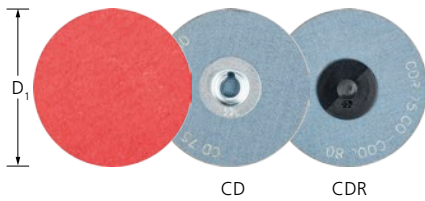


|                                                                                                     | D <sub>1</sub><br>[Inches] | Grit and EDP number |       |       |       | Opt.<br>RPM  |  |
|-----------------------------------------------------------------------------------------------------|----------------------------|---------------------|-------|-------|-------|--------------|-------------------------------------------------------------------------------------|
|                                                                                                     |                            | 36                  | 50    | 60    | 80    |              |                                                                                     |
| <b>CD system</b>   |                            |                     |       |       |       |              |                                                                                     |
|                                                                                                     | 2                          | 42254               | 42256 | 42257 | 42258 | 3,800–13,000 | 100                                                                                 |
|                                                                                                     | 3                          | 42261               | 42263 | 42264 | 42265 | 2,500–9,000  | 50                                                                                  |
| <b>CDR system</b>  |                            |                     |       |       |       |              |                                                                                     |
|                                                                                                     | 2                          | 42593               | 42595 | 42596 | 42597 | 3,800–13,000 | 100                                                                                 |
|                                                                                                     | 3                          | 42600               | 42602 | 42603 | 42604 | 2,500–9,000  | 50                                                                                  |



# COMBIDISC® quick-change discs

Abrasive discs



## Ceramic oxide CO-COOL

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

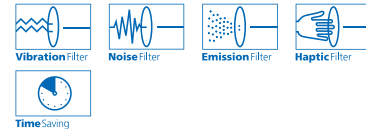
### Abrasive:

Ceramic oxide CO-COOL

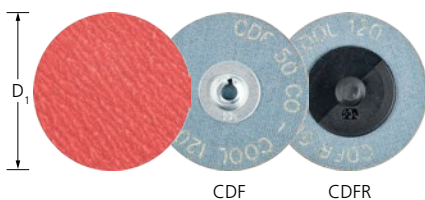
### Ordering notes:

- Please order backing pad separately.  
See page 37.

### PFERDVALUE®:



|                                                                                              | D <sub>1</sub><br>[Inches] | Grit and EDP number |       |       |       |       | Opt.<br>RPM  |  |
|----------------------------------------------------------------------------------------------|----------------------------|---------------------|-------|-------|-------|-------|--------------|-------------------------------------------------------------------------------------|
|                                                                                              |                            | 24                  | 36    | 60    | 80    | 120   |              |                                                                                     |
| CD system   |                            |                     |       |       |       |       |              |                                                                                     |
|                                                                                              | 2                          | 42280               | 42289 | 42292 | 42293 | 42295 | 3,800–13,000 | 100                                                                                 |
|                                                                                              | 3                          | 42281               | 42296 | 42299 | 42300 | 42302 | 2,500–9,000  | 50                                                                                  |
| CDR system  |                            |                     |       |       |       |       |              |                                                                                     |
|                                                                                              | 2                          | 42619               | 42628 | 42631 | 42632 | 42634 | 3,800–13,000 | 100                                                                                 |
|                                                                                              | 3                          | 42620               | 42635 | 42638 | 42639 | 42641 | 2,500–9,000  | 50                                                                                  |



## Ceramic oxide CO-COOL mini fibre discs

Exceptionally well-suited to surface and edge grinding. The fibre backing strengthens the abrasive disc and improves stock removal.

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

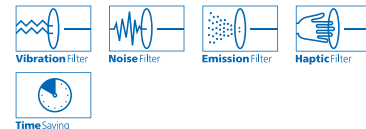
### Abrasive:

Ceramic oxide CO-COOL

### Ordering notes:

- Please order backing pad separately.  
See page 37.

### PFERDVALUE®:



|             | D <sub>1</sub><br>[Inches]                                                          | Grit and EDP number |       |       |       | Opt.<br>RPM  |  |
|-------------|-------------------------------------------------------------------------------------|---------------------|-------|-------|-------|--------------|---------------------------------------------------------------------------------------|
|             |                                                                                     | 36                  | 50    | 80    | 120   |              |                                                                                       |
| CDF system  |  |                     |       |       |       |              |                                                                                       |
|             | 2                                                                                   | 40492               | 40494 | 40496 | 40497 | 3,800–13,000 | 100                                                                                   |
|             | 3                                                                                   | 40499               | 40501 | 40503 | 40504 | 2,500–9,000  | 50                                                                                    |
| CDFR system |  |                     |       |       |       |              |                                                                                       |
|             | 2                                                                                   | 40632               | 40634 | 40636 | 40637 | 3,800–13,000 | 100                                                                                   |
|             | 3                                                                                   | 40639               | 40641 | 40643 | 40644 | 2,500–9,000  | 50                                                                                    |



## Silicon carbide SiC

For universal grinding work on components made from aluminum, copper, bronze, titanium and fibre-reinforced plastics.

Recommended for use on titanium alloys.

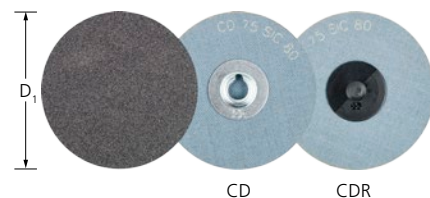
Ideally suited to use in the aeronautical industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.

**Abrasive:**  
Silicon carbide SiC

### Ordering notes:

- Please order backing pad separately. See page 37.

### PFERDVALUE®:



|                                                                                              | D <sub>1</sub><br>[Inches] | Grit and EDP number |       |       |       |       | Opt.<br>RPM  |  |
|----------------------------------------------------------------------------------------------|----------------------------|---------------------|-------|-------|-------|-------|--------------|-------------------------------------------------------------------------------------|
|                                                                                              |                            | 36                  | 60    | 80    | 120   | 240   |              |                                                                                     |
| CD system   |                            |                     |       |       |       |       |              |                                                                                     |
|                                                                                              | 2                          | 42415               | 42416 | 42417 | 42418 | 42419 | 3,800–13,000 | 100                                                                                 |
|                                                                                              | 3                          | 42420               | 42421 | 42422 | 42423 | 42424 | 2,500–9,000  | 50                                                                                  |
| CDR system  |                            |                     |       |       |       |       |              |                                                                                     |
|                                                                                              | 2                          | 42750               | 42751 | 42752 | 42753 | 42754 | 3,800–13,000 | 100                                                                                 |
|                                                                                              | 3                          | 42755               | 42756 | 42757 | 42758 | 42759 | 2,500–9,000  | 50                                                                                  |

## Diamond

Highly recommended for work on wear-resistant coatings and for hard facings made of tungsten carbide, chromium carbide, titanium carbide, etc. Recommended for work on materials used for aircraft engine construction, e.g. HASTELLOY®, INCONEL® and titanium/titanium alloys. Also highly recommended for work on extremely hard materials such as tungsten carbide, glass, ceramics, enamel, stone and carbon-reinforced plastic (CRP)/glass reinforced plastic (GRP).

### Abrasive:

Diamond (D)

D 251 = P 60

D 126 = P 120

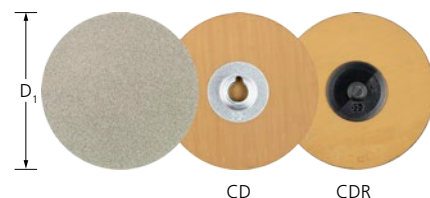
D 76 = P 220

(P = Grit size according to ISO 6344)

### Ordering notes:

- Grit sizes are indicated in µm.
- Please order backing pad separately. See page 37.

### PFERDVALUE®:



### Recommendations for use:

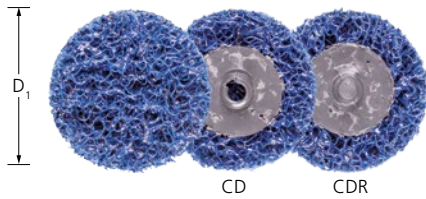
- For the best results, use at a recommended peripheral speed of 2,000–4,000 SFPM.
- Use with hard or medium-hard COMBIDISC® abrasive disc holders.

| D <sub>1</sub><br>[Inches]                                                                     | Grit and EDP number |               |              | Opt.<br>RPM  |  |
|------------------------------------------------------------------------------------------------|---------------------|---------------|--------------|--------------|---------------------------------------------------------------------------------------|
|                                                                                                | D 251 / P 60        | D 126 / P 120 | D 76 / P 220 |              |                                                                                       |
| CD system   |                     |               |              |              |                                                                                       |
| 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                                                                                    |
| CDR system  |                     |               |              |              |                                                                                       |
| 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® quick-change discs

Non-woven discs



## POLICLEAN® PLUS discs

For coarse cleaning work such as removing paint, scale, heat discolouration, rust and adhesive residues in face-down grinding.

POLICLEAN® PLUS discs exhibit a higher stock removal rate with a very long service life.

### Applications:

roughing, surface work, cleaning

### Abrasive:

Aluminum oxide A

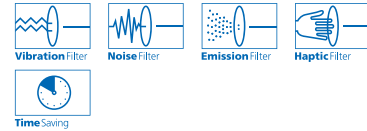
### Recommendations for use:

- Use with hard or medium-hard COMBIDISC® abrasive disc holders.

### Ordering notes:

- Please order backing pad separately. See page 37.

### PFERDVALUE®:



|                   | D <sub>1</sub><br>[Inches] | EDP<br>number | Opt.<br>RPM |    |
|-------------------|----------------------------|---------------|-------------|----|
| <b>CD system</b>  |                            |               |             |    |
|                   | 2                          | 44840         | 5,500–8,000 | 10 |
|                   | 3                          | 44841         | 3,800–5,000 | 10 |
| <b>CDR system</b> |                            |               |             |    |
|                   | 2                          | 44842         | 5,500–8,000 | 10 |
|                   | 3                          | 44843         | 3,800–5,000 | 10 |



## Surface conditioning, hard type

Recommended for universal work on small and medium-sized metal surfaces, e.g. removing rough grinding traces, removing oxidation and light deburring work. Achieve matte and satin-finished surfaces.

### Applications:

roughing, deburring, surface work, cleaning, weld dressing, structuring, fine grinding in multiple steps

### Abrasive:

Aluminum oxide A

Available POLIVLIES® grit sizes:

100 C = coarse (yellow-brown)

180 M = medium (red-brown)

240 F = fine (blue)

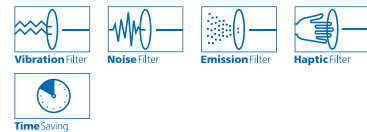
### Recommendations for use:

- The addition of oil or water during grinding results in a finer finish, cooler grinding and longer service life.

### Ordering notes:

- Please order backing pad separately. See page 37.

### PFERDVALUE®:



| D,<br>[Inches] | Grit, type and EDP number                                                           |       |       | Opt.<br>RPM  |  |
|----------------|-------------------------------------------------------------------------------------|-------|-------|--------------|---------------------------------------------------------------------------------------|
|                | 100 C                                                                               | 180 M | 240 F |              |                                                                                       |
| CD system      |  |       |       |              |                                                                                       |
| 1-1/2          | 43176                                                                               | 43177 | 43179 | 7,000–10,000 | 50                                                                                    |
| 2              | 43180                                                                               | 43181 | 43183 | 5,500–7,500  | 50                                                                                    |
| 3              | 43184                                                                               | 43185 | 43187 | 3,800–5,000  | 25                                                                                    |
| CDR system     |  |       |       |              |                                                                                       |
| 1-1/2          | 43234                                                                               | 43235 | 43237 | 7,000–10,000 | 50                                                                                    |
| 2              | 43238                                                                               | 43239 | 43241 | 5,500–7,500  | 50                                                                                    |
| 3              | 43242                                                                               | 43243 | 43245 | 3,800–5,000  | 25                                                                                    |
| 4              | 43246                                                                               | 43247 | 43248 | 2,850–4,000  | 25                                                                                    |

## Finishing, soft type

Recommended for very fine grinding on small and medium-sized surfaces and contours, and for cleaning metal and painted surfaces. Achieve matte and satin-finished surfaces. Highly open structure.

### Applications:

roughing, deburring, surface work, cleaning, weld dressing, structuring, fine grinding in multiple steps

### Abrasive:

Aluminum oxide A  
Available POLINOX® grit sizes:

100 = medium  
180 = fine  
280 = very fine

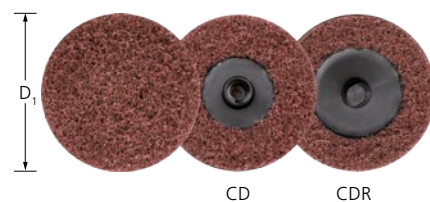
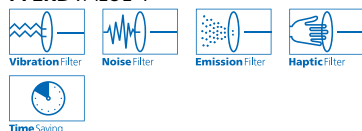
### Recommendations for use:

■ The addition of oil or water during grinding results in a finer finish, cooler grinding and longer service life.

### Ordering notes:

■ Please order backing pad separately.  
See page 37.

### PFERDVALUE®:



| D <sub>1</sub><br>[Inches] | Grit and EDP number                                                                |       |       | Opt.<br>RPM |  |
|----------------------------|------------------------------------------------------------------------------------|-------|-------|-------------|-------------------------------------------------------------------------------------|
|                            | 100                                                                                | 180   | 280   |             |                                                                                     |
| CD system                  |   |       |       |             |                                                                                     |
| 2                          | 43200                                                                              | 43201 | 43203 | 5,500–7,500 | 50                                                                                  |
| 3                          | 43204                                                                              | 43205 | 43207 | 3,800–5,000 | 25                                                                                  |
| CDR system                 |  |       |       |             |                                                                                     |
| 2                          | 43258                                                                              | 43259 | 43261 | 5,500–7,500 | 50                                                                                  |
| 3                          | 43262                                                                              | 43263 | 43265 | 3,800–5,000 | 25                                                                                  |

4



# COMBIDISC® quick-change discs

Non-woven discs



## Unitized discs

For achieving a very fine, uniform surface finish which, depending on requirements, is a sufficient preparation for high-gloss polishing. Ideal for work on small and medium-sized surfaces of stainless steel (INOX) components.

The different thicknesses/hardnesses of the non-woven material are colour-coded:

W (soft) = grey  
MH (medium-hard) = dark blue  
H (hard) = red

Further information on unitized products can be found on pages 85-86.

### Applications:

roughing, deburring, surface work, cleaning, weld dressing, structuring, fine grinding in multiple steps

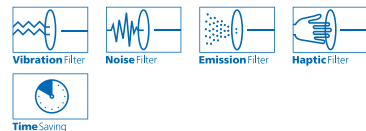
### Abrasive:

Aluminum oxide A  
Silicon carbide SiC

### Ordering notes:

- Please order backing pad separately. See page 37.
- All discs have a thickness of 1/4".

### PFERDVALUE®:



| D<br>[Inches]                                                                                         | Abrasives | Grit size | Hardness | Spec | EDP<br>number | Opt.<br>RPM | Max.<br>RPM |    |
|-------------------------------------------------------------------------------------------------------|-----------|-----------|----------|------|---------------|-------------|-------------|----|
| <b>CD system</b>     |           |           |          |      |               |             |             |    |
| 2                                                                                                     | SiC       | fine      | W        | 2SF  | 48430         | 9,500       | 19,100      | 25 |
|                                                                                                       | A         | coarse    | W        | 2AM  | 48431         | 9,500       | 19,100      | 25 |
|                                                                                                       | SiC       | fine      | MH       | 6SF  | 48434         | 9,500       | 19,100      | 25 |
|                                                                                                       | A         | fine      | MH       | 6AF  | 48435         | 9,500       | 19,100      | 25 |
|                                                                                                       | A         | fine      | H        | 8AM  | 48438         | 9,500       | 19,100      | 25 |
|                                                                                                       | A         | coarse    | H        | 8AC  | 48439         | 9,500       | 19,100      | 25 |
| 3                                                                                                     | SiC       | fine      | W        | 2SF  | 48440         | 6,400       | 12,500      | 25 |
|                                                                                                       | A         | coarse    | W        | 2AM  | 48441         | 6,400       | 12,500      | 25 |
|                                                                                                       | SiC       | fine      | MH       | 6SF  | 48444         | 6,400       | 12,500      | 25 |
|                                                                                                       | A         | fine      | MH       | 6AF  | 48445         | 6,400       | 12,500      | 25 |
|                                                                                                       | A         | fine      | H        | 8AM  | 48448         | 6,400       | 12,500      | 25 |
|                                                                                                       | A         | coarse    | H        | 8AC  | 48449         | 6,400       | 12,500      | 25 |
| <b>CDR system</b>  |           |           |          |      |               |             |             |    |
| 2                                                                                                     | SiC       | fine      | W        | 2SF  | 48450         | 9,500       | 19,100      | 25 |
|                                                                                                       | A         | coarse    | W        | 2AM  | 48451         | 9,500       | 19,100      | 25 |
|                                                                                                       | SiC       | fine      | MH       | 6SF  | 48454         | 9,500       | 19,100      | 25 |
|                                                                                                       | A         | fine      | MH       | 6AF  | 48455         | 9,500       | 19,100      | 25 |
|                                                                                                       | A         | fine      | H        | 8AM  | 48458         | 9,500       | 19,100      | 25 |
|                                                                                                       | A         | coarse    | H        | 8AC  | 48459         | 9,500       | 19,100      | 25 |
| 3                                                                                                     | SiC       | fine      | W        | 2SF  | 48460         | 6,400       | 12,500      | 25 |
|                                                                                                       | A         | coarse    | W        | 2AM  | 48461         | 6,400       | 12,500      | 25 |
|                                                                                                       | SiC       | fine      | MH       | 6SF  | 48464         | 6,400       | 12,500      | 25 |
|                                                                                                       | A         | fine      | MH       | 6AF  | 48465         | 6,400       | 12,500      | 25 |
|                                                                                                       | A         | fine      | H        | 8AM  | 48468         | 6,400       | 12,500      | 25 |
|                                                                                                       | A         | coarse    | H        | 8AC  | 48469         | 6,400       | 12,500      | 25 |



## Felt discs

Recommended for polishing with polishing paste bars, grinding pastes or diamond polishing pastes in face-down grinding on small and medium-sized surfaces.

**Applications:**  
polishing

### Recommendations for use:

- For the best results, use at a recommended speed of 1,000–2,000 SFPM. This provides an ideal compromise between polishing performance, thermal load on the workpiece and disc wear.
- When applying a different polishing paste, use a new, unused felt disc.

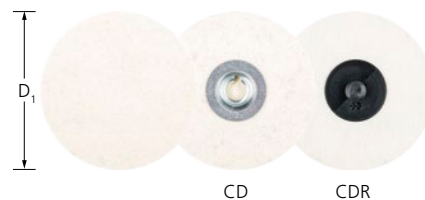
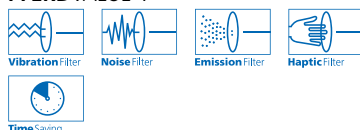
### Ordering notes:

- Further information on felt discs can be found on page 115.
- Please order backing pad and polishing paste separately. See page 37 and 121.

### Accessories:

- Grinding and polishing pastes

### PFERDVALUE®:



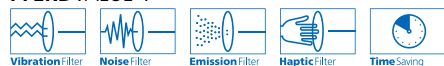
|                                                                                                     | D <sub>1</sub><br>[Inches] | EDP<br>number | Opt.<br>RPM |    |
|-----------------------------------------------------------------------------------------------------|----------------------------|---------------|-------------|----|
| <b>CD system</b>   |                            |               |             |    |
|                                                                                                     | 2                          | 43215         | 2,000–4,000 | 10 |
|                                                                                                     | 3                          | 43216         | 1,200–2,500 | 10 |
| <b>CDR system</b>  |                            |               |             |    |
|                                                                                                     | 2                          | 43213         | 2,000–4,000 | 10 |
|                                                                                                     | 3                          | 43214         | 1,200–2,500 | 10 |

## Backing pads

## Backing pads

Matching backing pads for COMBIDISC® quick-change discs. Available in three different hardness grades.

### PFERDVALUE®:



| D<br>[Inches] | S<br>[Inches] | EDP number                                                                                     |                                                                                                  | Max.<br>RPM |  |
|---------------|---------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------|
|               |               | Type CD<br> | Type CDR<br> |             |                                                                                       |
| Soft          |               |                                                                                                |                                                                                                  |             |                                                                                       |
| 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                                                                                     |
| Medium        |               |                                                                                                |                                                                                                  |             |                                                                                       |
| 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                                                                                     |
| Hard          |               |                                                                                                |                                                                                                  |             |                                                                                       |
| 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                                                                                     |

# COMBIDISC® quick-change discs

## Sets



### Advantages:

- Getting to know and testing the comprehensive system.

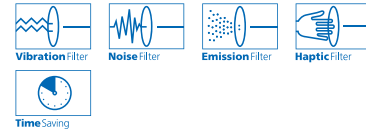
### Abrasive:

- Aluminum oxide A
- Silicon carbide SiC

### Recommendations for use:

- Use COMBIDISC® grinding discs with an arbor or abrasive disc holder on flexible shaft drives with an angle handpiece or small compressed-air or electric angle grinders.

### PFERDVALUE®:



### COMBIDISC® prep-to-paint set

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 44842 – 2" CDR POLICLEAN® PLUS disc

4 pcs. of:

- EDP 42506 – 2" CDR abrasive 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                                                                                   |



### COMBIDISC® sanitary finish set

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

6 pcs. of:

- EDP 42506 – 2" CDR abrasive discs A/O 80 grit
- EDP 43239 – 2" CDR surface conditioning discs medium

| Type                               | Full set EDP number |  |
|------------------------------------|---------------------|---------------------------------------------------------------------------------------|
| Sanitary finish, 2" CDR attachment | 42790               | 1                                                                                     |



### COMBIDISC® mirror finish set

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 43213 – 2" CDR felt disc
  - EDP 48765 – Small bar pre-polishing paste (green)

2 pcs. of:

- EDP 48454 – 2" CDR unitized disc medium hard SiC fine

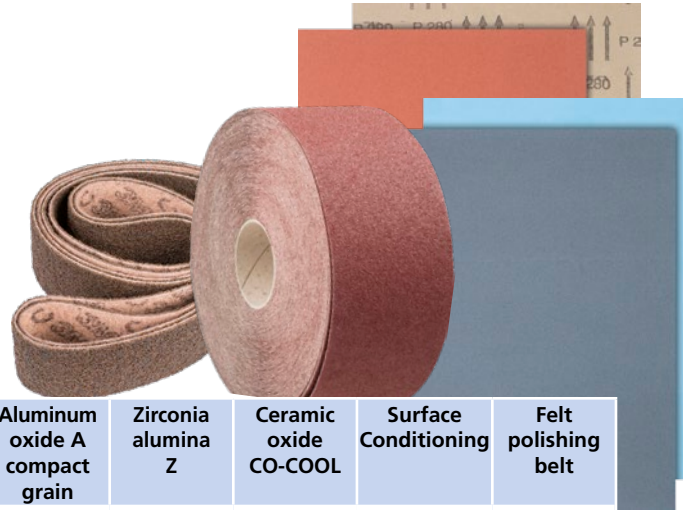
3 pcs. of:

- EDP 43239 – 2" CDR surface conditioning discs medium

| Type                             | Full set EDP number |  |
|----------------------------------|---------------------|---------------------------------------------------------------------------------------|
| Mirror finish, 2" CDR attachment | 42791               | 1                                                                                     |

PFERD supplies a comprehensive range of products which utilize flexible abrasives.

- Abrasive belts
- Abrasive sheets, cloth and paper-backed
- POLINOX® hand pads for surface conditioning
- Shop rolls and holders
- Abrasive cords



### Quick product selection guide

| Material group ▼          |                                             | Abrasive ►                                                                                                | Recommended peripheral speeds for short and long belts [SFPM] | Aluminum oxide A | Aluminum oxide A compact grain | Zirconia alumina Z | Ceramic oxide CO-COOL | Surface Conditioning | Felt polishing belt |
|---------------------------|---------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|------------------|--------------------------------|--------------------|-----------------------|----------------------|---------------------|
| Steel, cast steel         | Non-hardened, non-heat-treated steels       | Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel                           | 5,000–7,000                                                   | ●                |                                | ○                  |                       | ●                    | ●                   |
|                           | Hardened, heat-treated steels               | Tool steels, tempering steels, alloyed steels, cast steel                                                 | 4,000–5,000                                                   | ○                | ●                              | ●                  |                       | ○                    | ●                   |
| Stainless steel (INOX)    | Rust- and acid-resistant steels             | Austenitic and ferritic stainless steels                                                                  | 3,000–5,000                                                   |                  | ●                              | ○                  | ●                     | ●                    | ●                   |
| Non-ferrous metals        | Soft non-ferrous metals, non-ferrous metals | Soft aluminum alloys                                                                                      | 5,000–8,000                                                   | ○                |                                |                    | ○                     | ●                    | ●                   |
|                           |                                             | Brass, copper, zinc                                                                                       |                                                               | ●                |                                | ○                  |                       | ●                    | ●                   |
|                           | Hard non-ferrous metals                     | Hard aluminum alloys                                                                                      | 4,000–5,000                                                   | ●                |                                | ○                  |                       | ●                    | ●                   |
|                           |                                             | Bronze, titanium                                                                                          |                                                               |                  |                                | ○                  | ●                     | ●                    | ●                   |
|                           | High-temperature-resistant materials        | Nickel-based and cobalt-based alloys                                                                      | 1,000–3,000                                                   |                  |                                | ○                  | ●                     | ●                    | ●                   |
| 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 | 5,000–7,000                                                   | ●                |                                | ○                  |                       | ●                    |                     |
| Plastics, other materials |                                             | Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint-work                                    | 2,000–5,000                                                   | ●                |                                |                    |                       | ●                    | ●                   |

● = highly recommended    ○ = recommended

# Abrasive belts, sheets, and rolls

## General information – abrasive belts

The comprehensive range of short and long belts is tailored to the belt grinders that are commonly found on the market.

Abrasive belts from PFERD are designated as "abrasive belts" in ISO 2976.

### Advantages:

- Increased economic efficiency due to aggressive abrasive performance and long service life.
- High tear strength with optimum flexibility.
- Consistent work results due to high grain adhesion.

### Applications:

- Leveling
- Deburring
- Work on edges
- Sharpening
- Work on weld seams
- Step-by-step fine grinding

### Recommendations for use:

- Use grinding oil which is recommended for the material to considerably increase service life and abrasive performance of the products.
- Benchstand belts are used for light to moderate duty general purpose grinding on low powered machines. Grinding and finishing is typically against a platen or contact wheel.
- Backstand belts are used for general purpose grinding on heavy-duty machines. Grinding and finishing is performed at a contact wheel for the most aggressive action. Applications include deburring, blending, and finishing.

### Compatible power tools:

- Belt grinders

### Safety notes:



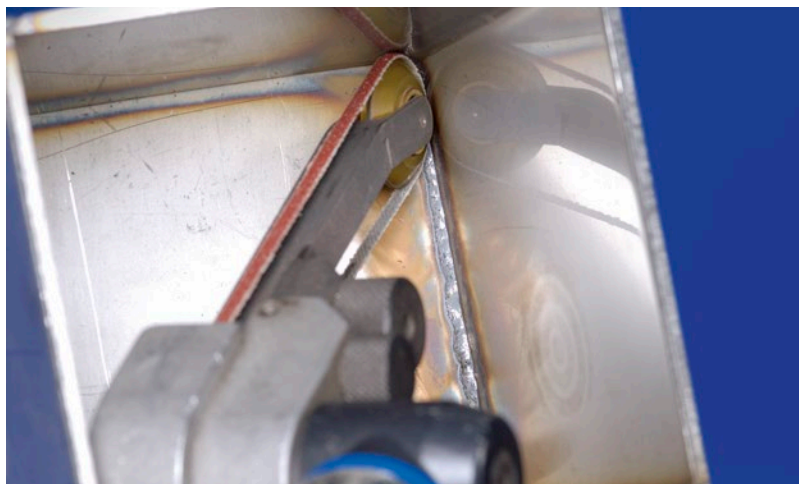
### Recommended rotational speed range

Using the table, you can determine the rotational speed in RPM based on the peripheral speed. Please refer to page 39 for the recommended peripheral speeds.

#### Example:

EDP: 49008, File belt, aluminum oxide A  
Diameter of the drive roller: 2 inches  
Peripheral speed: 4,000–5,000 SFPM  
**Rotational speed: 7,400–9,300 RPM**

| Drive roller dia.<br>[Inches] | Peripheral speed [SFPM] |        |        |        |        |        |        |        |
|-------------------------------|-------------------------|--------|--------|--------|--------|--------|--------|--------|
|                               | 1,000                   | 2,000  | 3,000  | 4,000  | 5,000  | 6,000  | 7,000  | 8,000  |
|                               | Rotational speeds [RPM] |        |        |        |        |        |        |        |
| 3/4                           | 5,000                   | 10,000 | 15,000 | 20,100 | 25,100 | 30,100 | 35,100 | 40,200 |
| 1                             | 3,800                   | 7,600  | 11,400 | 15,200 | 19,000 | 22,900 | 26,700 | 30,500 |
| 1-1/2                         | 2,500                   | 5,000  | 7,500  | 10,000 | 12,500 | 15,000 | 17,500 | 20,100 |
| 2                             | 1,800                   | 3,700  | 5,600  | 7,400  | 9,300  | 11,200 | 13,100 | 14,900 |
| 2-1/2                         | 1,500                   | 3,000  | 4,500  | 6,000  | 7,500  | 9,000  | 10,600 | 12,100 |
| 3                             | 1,200                   | 2,500  | 3,700  | 5,000  | 6,200  | 7,500  | 8,700  | 10,000 |
| 4                             | 900                     | 1,800  | 2,800  | 3,700  | 4,600  | 5,600  | 6,500  | 7,400  |
| 5                             | 700                     | 1,500  | 2,200  | 3,000  | 3,700  | 4,500  | 5,200  | 6,000  |
| 6                             | 600                     | 1,200  | 1,800  | 2,500  | 3,100  | 3,700  | 4,300  | 5,000  |
| 8                             | 400                     | 900    | 1,400  | 1,800  | 2,300  | 2,800  | 3,200  | 3,700  |
| 10                            | 350                     | 700    | 1,100  | 1,500  | 1,800  | 2,200  | 2,600  | 3,000  |
| 12                            | 300                     | 600    | 900    | 1,200  | 1,500  | 1,800  | 2,100  | 2,500  |





# Abrasive belts, sheets, and rolls

## Power tool and matching grinding belt dimensions

| Manufacturer              | Model                              | Abrasive belts' width x length [Inches] |
|---------------------------|------------------------------------|-----------------------------------------|
| <b>PFERD</b>              | <b>Compressed-air belt grinder</b> |                                         |
|                           | 90711                              | 1/8 x 12                                |
|                           | 95000                              | 1/4 x 12                                |
|                           |                                    | 3/8 x 12                                |
|                           |                                    | 1/2 x 12                                |
|                           | <b>Electric belt grinders</b>      |                                         |
|                           | 91410                              | 1/8 x 20-1/2                            |
|                           |                                    | 1/4 x 20-1/2                            |
|                           |                                    | 1/2 x 20-1/2                            |
|                           |                                    | 5/8 x 20-1/2                            |
|                           |                                    | 3/4 x 20-1/2                            |
|                           |                                    | 1/4 x 24                                |
|                           |                                    | 1/2 x 24                                |
|                           | <b>Angle handpieces</b>            |                                         |
|                           | 94385 + 95015                      | 1/8 x 20-1/2                            |
|                           |                                    | 1/4 x 20-1/2                            |
|                           |                                    | 1/2 x 20-1/2                            |
|                           |                                    | 5/8 x 20-1/2                            |
|                           |                                    | 3/4 x 20-1/2                            |
|                           |                                    | 1/4 x 24                                |
|                           |                                    | 1/2 x 24                                |
|                           |                                    | 1/8 x 12                                |
|                           |                                    | 1/4 x 12                                |
|                           |                                    | 3/8 x 12                                |
|                           |                                    | 1/2 x 12                                |
| <b>3M</b>                 | 3M™ file belt sander               | 1/2 x 18                                |
| <b>Atlas Copco</b>        | G2410                              | 1/4 x 12                                |
|                           |                                    | 1/2 x 12                                |
| <b>ATA</b>                | RAL20L                             | 1/2 x 12                                |
| <b>Black &amp; Decker</b> | PF260                              | 1/2 x 18                                |
|                           | DS321                              | 3 x 21                                  |

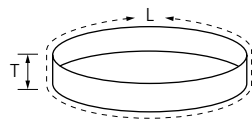
| Manufacturer     | Model    | Abrasive belts' width x length [Inches] |
|------------------|----------|-----------------------------------------|
| <b>DeWalt</b>    | DW432    | 3 x 21                                  |
|                  | DW433    |                                         |
|                  | DWP352VS |                                         |
| <b>Dynabrade</b> | 40352    | 1/4-3/4 x 18                            |
|                  | 40353    |                                         |
|                  | 40320    |                                         |
|                  | 40321    |                                         |
|                  | 40324    |                                         |
|                  | 40335    |                                         |
|                  | 40381    |                                         |
|                  | 15400    | 3/4 x 18                                |
|                  | 40330    | 1/4-3/4 x 18-24                         |
|                  | 40615    |                                         |
|                  | 40503    | 1/4-3/4 x 24                            |
|                  | 15360    |                                         |
|                  | 15420    |                                         |
|                  | 14000    | 1/4-1/2 x 12                            |
|                  | 15003    |                                         |
| <b>Hitachi</b>   | SB10V2   | 4 x 24                                  |
|                  | SB8V2    | 3 x 21                                  |
| <b>Genesis</b>   | GBS321A  | 3 x 21                                  |
| <b>Makita</b>    | 9910     | 3 x 18                                  |
|                  | 9911     |                                         |
|                  | 9902     |                                         |
|                  | 9903     | 3 x 24                                  |
|                  | 9920     |                                         |
|                  | 9404     | 4 x 24                                  |
|                  | 9403     | 1/4, 1/2 x 21                           |
|                  | 9032     |                                         |

| Manufacturer        | Model        | Abrasive belts' width x length [Inches] |
|---------------------|--------------|-----------------------------------------|
| <b>Metabo</b>       | BF 18 LTX 90 | 1/4-3/4 x 18                            |
|                     | BFE 9-20     | 1/4-3/4 x 18                            |
| <b>Milwaukee</b>    | 6101         | 1/2 x 18                                |
| <b>Porter-Cable</b> | 352VS        | 3 x 21                                  |
|                     | 362V         | 4 x 24                                  |
| <b>Rexon</b>        | BD480A       | 4 x 36                                  |
|                     | BD460M       |                                         |
| <b>Ryobi</b>        | BE319        | 3 x 18                                  |
|                     | P450         | 3 x 18                                  |
|                     | BD461G       | 4 x 36                                  |
| <b>SKIL</b>         | 7510-01      | 3 x 18                                  |
|                     | 3376         | 4 x 36                                  |
| <b>Suhner</b>       | UBC 10-R     | 1/4-1/2 x 12                            |
|                     | LBC 16 H     |                                         |
|                     | WB 10        |                                         |
|                     | LBB 20 DH    | 1/4-1/2 x 12                            |
| <b>Triton</b>       | TA 1200BS    | 3 x 21                                  |
| <b>WEN</b>          | 6307         | 1/2 x 18                                |
|                     | 6502         | 4 x 36                                  |
|                     | 6321         | 3 x 21                                  |



# Abrasive belts, sheets, and rolls

## File belts



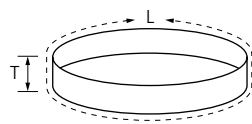
### Aluminum oxide A

For universal applications from coarse to fine grinding.

**Abrasive:**

Aluminum oxide A

| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|-------------------------------------------------------------------------------------|
|               |               | 36                  | 60    | 80    | 120   |                                                                                     |
| 12            | 1/4           | 48960               | 48963 | 48964 | 48966 | 50                                                                                  |
|               | 1/2           | 49024               | 49027 | 49028 | 49030 | 50                                                                                  |
| 18            | 1/4           | 49000               | 49003 | 49004 | 49006 | 50                                                                                  |
|               | 1/2           | 49032               | 49035 | 49036 | 49038 | 50                                                                                  |
|               | 3/4           | 49048               | 49051 | 49052 | 49054 | 50                                                                                  |
| 24            | 1/4           | 49008               | 49011 | 49012 | 49014 | 50                                                                                  |
|               | 1/2           | 49040               | 49043 | 49044 | 49046 | 50                                                                                  |
|               | 3/4           | 49077               | 49078 | 49079 | 49080 | 50                                                                                  |



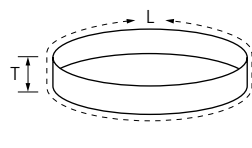
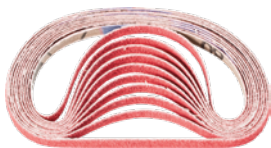
### Zirconia alumina Z

For coarse grinding work with a high stock removal rate and a long service life.

**Abrasive:**

Zirconia alumina Z

| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|---------------------------------------------------------------------------------------|
|               |               | 36                  | 60    | 80    | 120   |                                                                                       |
| 12            | 1/4           | 49682               | 49683 | 49684 | 49685 | 50                                                                                    |
|               | 1/2           | 49712               | 49715 | 49716 | 49727 | 50                                                                                    |
| 18            | 1/4           | 49691               | 49694 | 49695 | 49722 | 50                                                                                    |
|               | 1/2           | 49717               | 49720 | 49730 | 49731 | 50                                                                                    |
|               | 3/4           | 49740               | 49743 | 49744 | 49745 | 50                                                                                    |
| 24            | 1/4           | 49696               | 49699 | 49700 | 49706 | 50                                                                                    |
|               | 1/2           | 49734               | 49738 | 49739 | 49752 | 50                                                                                    |
|               | 3/4           | 49754               | 49755 | 49756 | 49757 | 50                                                                                    |



### Ceramic oxide CO-COOL

For aggressive grinding with the highest stock removal rates on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain. Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

**Abrasive:**

Ceramic oxide CO-COOL

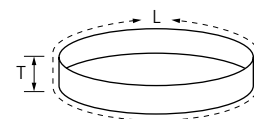
| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|---------------------------------------------------------------------------------------|
|               |               | 40                  | 60    | 80    | 120   |                                                                                       |
| 12            | 1/4           | 49492               | 49493 | 49494 | 49495 | 50                                                                                    |
|               | 1/2           | 49529               | 49531 | 49532 | 49533 | 50                                                                                    |
| 18            | 1/4           | 49497               | 49499 | 49500 | 49501 | 50                                                                                    |
|               | 1/2           | 49536               | 49538 | 49539 | 49540 | 50                                                                                    |
|               | 3/4           | 49560               | 49562 | 49563 | 49564 | 50                                                                                    |
| 24            | 1/4           | 49504               | 49506 | 49507 | 49508 | 50                                                                                    |
|               | 1/2           | 49543               | 49545 | 49546 | 49547 | 50                                                                                    |
|               | 3/4           | 49723               | 49724 | 49725 | 49726 | 50                                                                                    |

### Aluminum oxide A

For universal grinding work from coarse to fine grinding.

**Abrasive:**

Aluminum oxide A



| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|-------------------------------------------------------------------------------------|
|               |               | 40                  | 60    | 80    | 100   | 120   |                                                                                     |
| 21            | 3             | 49211               | 49213 | 49214 | 49215 | 49216 | 10                                                                                  |
| 24            | 3             | 49250               | 49252 | 49253 | 49254 | 49255 | 10                                                                                  |
|               | 4             | 49360               | 49362 | 49363 | 49364 | 49365 | 10                                                                                  |



# Abrasive belts, sheets, and rolls

## General information – Belts and accessories for pneumatic drums

The comprehensive range of pneumatic drum belts and accessories offers the best solution for many applications, from aggressive grinding to fine grinding and also for polishing applications.

### Advantages:

- Excellent economic efficiency due to high abrasive performance and long service life.
- High tear strength with optimum flexibility.
- The cushioned grinding increases the service life of belts by reducing heat build-up and allowing increased flexibility.

### Applications:

- Structuring surfaces
- Polishing
- Step-by-step fine grinding

### Recommendations for use:

- For use on linear finishing machine (EDP 91217) see our "Power tools" catalogue section 9.

### Compatible power tools:

- Drum grinders

### Accessories:

- Pneumatic drum
- Threaded spindle extension

### Ordering notes:

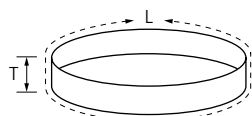
- You will find more flap and finishing drums on pages 78, 100–101, and also in catalogue section 8.

### 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.



## Belts and accessories for pneumatic drums



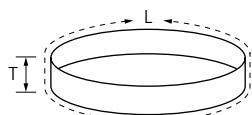
### Aluminum oxide A

For universal grinding work from coarse to fine grinding.

#### Abrasive:

Aluminum oxide A

| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|---------------------------------------------------------------------------------------|
|               |               | 40                  | 60    | 80    | 100   | 120   |                                                                                       |
| 15-1/2        | 3-1/2         | 49312               | 49314 | 49315 | 49316 | 49317 | 10                                                                                    |



### Ceramic oxide CO-COOL

For coarse grinding work with a high stock removal rate and cool grinding.

Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

#### Abrasive:

Ceramic oxide CO-COOL

| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |  |
|---------------|---------------|---------------------|-------|-------|---------------------------------------------------------------------------------------|
|               |               | 40                  | 60    | 80    |                                                                                       |
| 15-1/2        | 3-1/2         | 49641               | 49642 | 49643 | 10                                                                                    |



### 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 and aluminum.

#### Abrasive:

Aluminum oxide A

Available POLIVLIES® grit sizes:

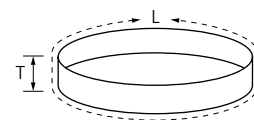
100 C = coarse (yellow-brown)

180 M = medium (red-brown)

240 F = fine (blue)

#### Recommendations for use:

- For the best results, use at a recommended speed of 1,000–3,000 SFPM.



| L<br>[Inches] | T<br>[Inches] | Grit, type and EDP number |       |       |  |
|---------------|---------------|---------------------------|-------|-------|-------------------------------------------------------------------------------------|
|               |               | 100 C                     | 180 M | 240 F |                                                                                     |
| 15-1/2        | 3-1/2         | 43613                     | 43614 | 43615 | 10                                                                                  |

### Felt polishing belt

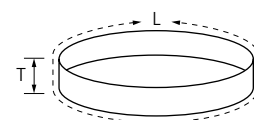
Ideal for use on tubular constructions and rails.

#### Recommendations for use:

- Apply pre-polishing and high-gloss polishing successively during polishing process.
- When changing the polishing paste, also replace the polishing belt so no contaminants are included from previous step.
- For the best results, use at a recommended speed of 1,000–3,000 SFPM.

#### Accessories:

- Grinding and polishing pastes



| L<br>[Inches] | T<br>[Inches] | EDP number |  |
|---------------|---------------|------------|---------------------------------------------------------------------------------------|
| 15-1/2        | 3-1/2         | 43659      | 5                                                                                     |

### Pneumatic drum

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 belt size<br>[Inches] | Drum diameter<br>[Inches] | Max.<br>inflation | Internal<br>thread | EDP<br>number | Max.<br>RPM |  |
|---------------------------|---------------------------|-------------------|--------------------|---------------|-------------|---------------------------------------------------------------------------------------|
| 3-1/2 x 15-1/2            | 5                         | 15 psi            | 5/8-11             | 49985         | 3,800       | 1                                                                                     |

### Threaded spindle extension for pneumatic drum

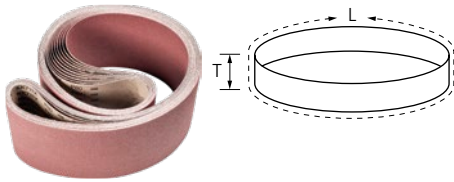
Threaded spindle extension allows pneumatic drum to be mounted on linear finishing tool.



| Fits power tool spindle<br>(internal thread) | External<br>thread | EDP<br>number |  |
|----------------------------------------------|--------------------|---------------|---------------------------------------------------------------------------------------|
| 5/8-11                                       | 5/8-11             | 49986         | 1                                                                                     |

# Abrasive belts, sheets, and rolls

## Benchstand belts

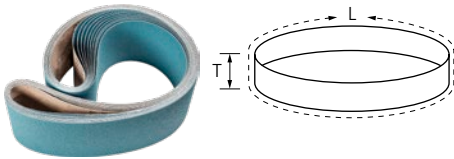


### Aluminum oxide A

For universal grinding work from coarse to fine grinding.

**Abrasive:**  
Aluminum oxide A

| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|-------------------------------------------------------------------------------------|
|               |               | 36                  | 50    | 60    | 80    | 120   |                                                                                     |
| 36            | 4             | -                   | -     | 49375 | 49376 | 49378 | 10                                                                                  |
| 42            | 1             | -                   | 49094 | 49095 | 49096 | 49098 | 10                                                                                  |
| 48            | 2             | 49132               | 49134 | 49135 | 49136 | 49138 | 10                                                                                  |
|               | 6             | 49464               | 49466 | 49467 | 49468 | 49470 | 10                                                                                  |
| 60            | 2-1/2         | 49179               | 49181 | 49182 | 49183 | -     | 10                                                                                  |

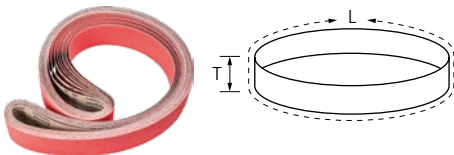


### Zirconia alumina Z

For coarse grinding work with a high stock removal rate and a long service life.

**Abrasive:**  
Zirconia alumina Z

| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |  |
|---------------|---------------|---------------------|-------|-------|--------------------------------------------------------------------------------------|
|               |               | 36                  | 60    | 80    |                                                                                      |
| 36            | 4             | 49879               | 49882 | 49883 | 10                                                                                   |
| 48            | 2             | 49786               | 49789 | 49790 | 10                                                                                   |
|               | 6             | 49885               | 49888 | 49889 | 10                                                                                   |
| 60            | 2             | 49792               | 49795 | 49796 | 10                                                                                   |
|               | 2-1/2         | 49828               | 49831 | 49832 | 10                                                                                   |



### Ceramic oxide CO-COOL

For coarse grinding work with a high stock removal rate and cool grinding. Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

**Abrasive:**  
Ceramic oxide CO-COOL

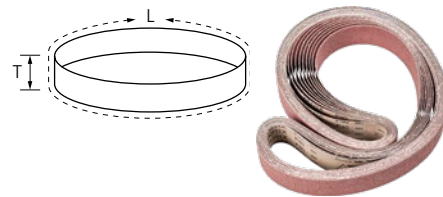
| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|---------------------------------------------------------------------------------------|
|               |               | 40                  | 60    | 80    | 120   |                                                                                       |
| 36            | 4             | 49658               | 49660 | 49661 | 49662 | 10                                                                                    |
| 48            | 2             | 49588               | 49590 | 49591 | 49592 | 10                                                                                    |
|               | 6             | 49672               | 49674 | 49675 | 49676 | 10                                                                                    |
| 60            | 2             | 49595               | 49597 | 49598 | 49599 | 10                                                                                    |
|               | 2-1/2         | 49616               | 49618 | 49619 | 49620 | 10                                                                                    |

### Aluminum oxide A

For universal grinding work from coarse to fine grinding.

**Abrasive:**

Aluminum oxide A



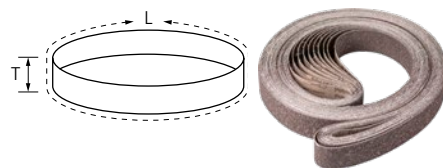
| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------------------------------------------------------------------------------------|
|               |               | 36                  | 60    | 80    |                                                                                     |
| 132           | 2             | 49159               | 49162 | 49163 | 10                                                                                  |

### Aluminum oxide A compact grain

Extremely well suited to fine and very fine grinding, and for step-by-step preparations for polishing. The self-sharpening compact grain facilitates a very long service life and achieves consistent surface quality levels throughout the entire service life.

**Abrasive:**

Aluminum oxide A compact grain (CK)



| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|-------------------------------------------------------------------------------------|
|               |               | 120                 | 240   | 400   | 600   |                                                                                     |
| 132           | 2             | 49810               | 49811 | 49812 | 49813 | 10                                                                                  |

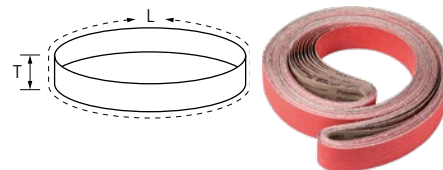
### Ceramic oxide CO-COOL

For coarse grinding work with a high stock removal rate and cool grinding.

Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

**Abrasive:**

Ceramic oxide CO-COOL

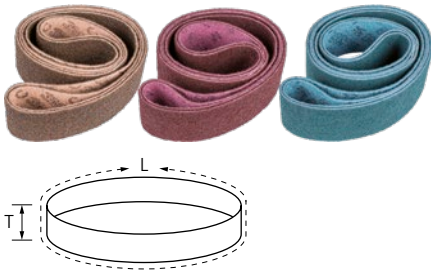


| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|---------------------------------------------------------------------------------------|
|               |               | 40                  | 60    | 80    | 120   |                                                                                       |
| 132           | 2             | 49687               | 49688 | 49689 | 49690 | 10                                                                                    |



# Abrasive belts, sheets, and rolls

## POLIVLIES® surface conditioning belts



### POLIVLIES® surface conditioning belts

Ideal for universal work on metal surfaces in stationary applications, e.g. removal of rough grinding traces, removal of oxidation and light deburring work. Achieve matte and satin-finished surfaces.

#### Abrasive:

Aluminum oxide A

Available POLIVLIES® grit sizes:

100 C = coarse (yellow-brown)

180 M = medium (red-brown)

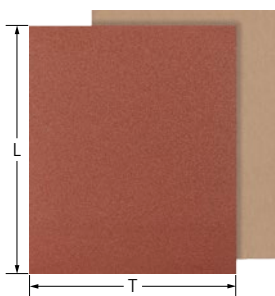
240 F = fine (blue)

#### Recommendations for use:

■ For the best results, use at a recommended speed of 1,000–3,000 SFPM.

| L<br>[Inches] | T<br>[Inches] | Grit, type and EDP number |       |       |  |
|---------------|---------------|---------------------------|-------|-------|-------------------------------------------------------------------------------------|
|               |               | 100 C                     | 180 M | 240 F |                                                                                     |
| 12            | 1/4           | 43634                     | 43635 | 43636 | 10                                                                                  |
|               | 1/2           | 43643                     | 43644 | 43645 | 10                                                                                  |
| 18            | 1/4           | 43550                     | 43551 | 43552 | 10                                                                                  |
|               | 1/2           | 43556                     | 43557 | 43558 | 10                                                                                  |
|               | 3/4           | 43562                     | 43563 | 43564 | 10                                                                                  |
| 24            | 1/4           | 43553                     | 43554 | 43555 | 10                                                                                  |
|               | 1/2           | 43559                     | 43560 | 43561 | 10                                                                                  |
|               | 3/4           | 43666                     | 43667 | 43668 | 10                                                                                  |
| 36            | 4             | 43660                     | 43661 | 43662 | 10                                                                                  |
| 48            | 2             | 43672                     | 43673 | 43674 | 10                                                                                  |
|               | 6             | 43681                     | 43682 | 43683 | 10                                                                                  |
| 60            | 2             | 43678                     | 43679 | 43680 | 10                                                                                  |
|               | 2-1/2         | 43675                     | 43676 | 43677 | 10                                                                                  |
| 132           | 2             | 43669                     | 43670 | 43671 | 10                                                                                  |

## Abrasive sheets



### Cloth-backed sheets, heavy-duty

The brown cloth-backed variant is ideal for universal, heavy-duty use on alloyed and non-alloyed steels, as well as non-ferrous metals.

#### Advantages:

- Very high grain adhesion on very flexible cloth.
- High abrasive performance.
- Oil and kerosene-resistant.

#### Recommendations for use:

- Tear to the necessary size if required.

#### Abrasive:

Aluminum oxide A

| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|-------|-------|---------------------------------------------------------------------------------------|
|               |               | 40                  | 60    | 80    | 100   | 120   | 150   | 180   |                                                                                       |
| 11            | 9             | 46912               | 46913 | 46914 | 46915 | 46916 | 46917 | 46918 | 50                                                                                    |

| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|-------|-------|---------------------------------------------------------------------------------------|
|               |               | 220                 | 240   | 280   | 320   | 400   | 444   | 999   |                                                                                       |
| 11            | 9             | 46919               | 46920 | 46921 | 46922 | 46924 | 46925 | 46926 | 50                                                                                    |



### Cloth-backed sheets, standard-duty

The blue cloth-backed variant is the low-cost alternative for normal workloads when working on painted wood and metal surfaces.

#### Advantages:

- Good grain adhesion on sturdy cloth.
- Good abrasive performance.

#### Abrasive:

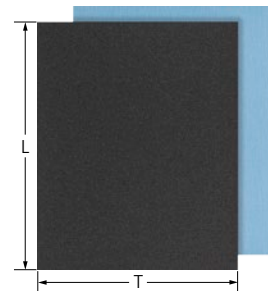
Aluminum oxide A

#### Recommendations for use:

- Tear to the necessary size if required.

#### Ordering notes:

- Grit sizes 40, 60 and 80 are supplied in packaging units of 50 pieces.



| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |       |       |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------------------------------------------------------------------|
|               |               | 40                  | 60    | 80    | 100   | 120   | 150   | 180   | 220   | 240   |                                                                                     |
| 11            | 9             | 46900               | 46901 | 46902 | 46903 | 46904 | 46905 | 46906 | 46907 | 46908 | 100                                                                                 |

### Paper-backed sheets, water-resistant

The SiC abrasive enables use on paint and glass. Ideal for all wet grinding work on conventional painted surfaces.

#### Advantages:

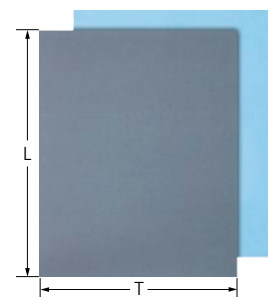
- Very high grain adhesion on very flexible and light paper.
- Maximum abrasive performance.
- Can be used for wet and dry grinding.

#### Abrasive:

Silicon carbide SiC

#### Recommendations for use:

- Tear to the necessary size if required.



| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |       |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|-------|-------|-------|---------------------------------------------------------------------------------------|
|               |               | 100                 | 120   | 150   | 180   | 220   | 240   | 280   | 320   |                                                                                       |
| 11            | 9             | 46927               | 46928 | 46929 | 46930 | 46931 | 46932 | 46933 | 46934 | 50                                                                                    |

| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|-------|-------|---------------------------------------------------------------------------------------|
|               |               | 360                 | 400   | 500   | 600   | 800   | 1000  | 1200  |                                                                                       |
| 11            | 9             | 46935               | 46936 | 46937 | 46938 | 46939 | 46940 | 46941 | 50                                                                                    |

### Paper-backed sheets, general-purpose

The aluminum oxide A abrasive is the low-cost alternative for normal workloads when working on painted wooden and metal surfaces.

#### Advantages:

- Good grain adhesion on sturdy paper.
- Good abrasive performance.

#### Ordering notes:

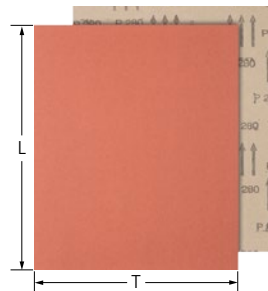
- Grit sizes 40, 60 and 80 are supplied in packaging units of 50 pieces.

#### Abrasive:

Aluminum oxide A

#### Recommendations for use:

- Tear to the necessary size if required.



| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|---------------------------------------------------------------------------------------|
|               |               | 40                  | 60    | 80    | 100   | 120   |                                                                                       |
| 11            | 9             | 46942               | 46943 | 46944 | 46945 | 46946 | 100                                                                                   |

| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|-------|---------------------------------------------------------------------------------------|
|               |               | 150                 | 180   | 220   | 240   | 280   | 400   |                                                                                       |
| 11            | 9             | 46947               | 46948 | 46949 | 46950 | 46951 | 46952 | 100                                                                                   |

# Abrasive belts, sheets, and rolls

## POLINOX® hand pads



### POLINOX® hand pads

Recommended for very fine grinding on small to large surfaces and contours, and for manually cleaning metal and painted surfaces. Achieve matte and satin-finished surfaces. Highly open structure.

#### Advantages:

- Highly flexible, enabling optimal adjustment to the contour.
- Hard-to-reach areas can be accessed.
- Can be used for wet and dry grinding.

#### Abrasive:

Aluminum oxide A  
Silicon carbide SiC

#### Recommendations for use:

- Cut to the necessary size if required.

#### 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 challenging 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.

#### Ordering notes:

- Bulk quantities available.

| L<br>[Inches] | T<br>[Inches] | EDP<br>number | Description     | Grit size | Abrasive        | Colour |  |
|---------------|---------------|---------------|-----------------|-----------|-----------------|--------|---------------------------------------------------------------------------------------|
| 9             | 6             | 44606         | medium finish   | 100       | Aluminum oxide  | tan    | 20                                                                                    |
|               |               | 44600         | general purpose | 180       | Aluminum oxide  | maroon | 20                                                                                    |
|               |               | 44613         | food service    | 180       | Aluminum oxide  | green  | 20                                                                                    |
|               |               | 44609         | ultra fine      | 400       | Silicon carbide | grey   | 20                                                                                    |
|               |               | 44618         | non-abrasive    | -         | None            | white  | 20                                                                                    |

## Mandrel



### Mandrel

Small mandrel designed to grip non-woven material.

#### Applications:

- Used to reach tight internal diameters.

#### Recommendations for use:

- Grips a 1 inch wide strip of non-woven material cut to length.

| L<br>[Inches] | S<br>[Inches] | EDP<br>number | Max.<br>RPM |  |
|---------------|---------------|---------------|-------------|---------------------------------------------------------------------------------------|
| 7/8           | 1/4           | 44837         | 14,000      | 1                                                                                     |

Due to their high flexibility, shop rolls are ideal for a range of hand-grinding applications. The matching shop roll holder is ideal for storing and tearing off the belts to the required length.

### Advantages:

- Optimum adaptation to contours due to high flexibility.
- Low wear resulting from high tear strength and very high grain adhesion.

### Applications:

- Roughing
- Surface work
- Cleaning
- Step-by-step fine grinding

### Recommendations for use:

- Cut to the required dimensions if necessary.

### Compatible power tools:

- Manual application

### Accessories:

- Shop roll holders

### Safety notes:



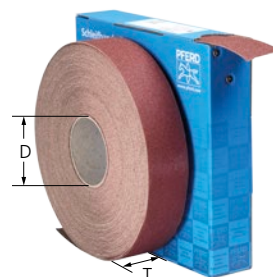
## Shop rolls and holders

### Heavy-duty shop rolls

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



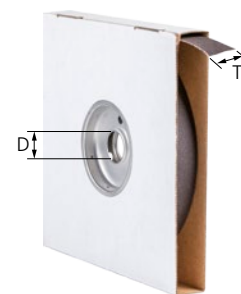
| Length<br>[Yards] | T<br>[Inches] | D<br>[Inches] | Grit and EDP number |       |       |       |       |       |       |       |       |       |   |  |
|-------------------|---------------|---------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|---------------------------------------------------------------------------------------|
|                   |               |               | 60                  | 80    | 100   | 120   | 150   | 180   | 220   | 240   | 320   | 400   |   |                                                                                       |
| 50                | 1             | 3             | 47116               | 47117 | 47118 | 47119 | 47120 | 47121 | -     | 47123 | 47125 | 47126 | 1 |                                                                                       |
|                   | 1-1/2         | 3             | 47166               | 47167 | 47168 | 47169 | 47170 | 47171 | 47172 | 47173 | 47175 | -     | 1 |                                                                                       |
|                   | 2             | 3             | 47216               | 47217 | 47218 | 47219 | 47220 | 47221 | 47222 | 47223 | 47225 | 47226 | 1 |                                                                                       |

### Light, flexible shop rolls

Provides good heat resistance and smooth finishes. Aluminum oxide cloth with resin-over-glue bond, for use on ferrous and non-ferrous metals grinding flat or irregular surfaces, cleaning and polishing of rough ground workpieces.

#### Abrasive:

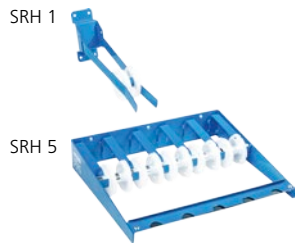
Aluminum oxide A



| Length<br>[Yards] | T<br>[Inch.] | D<br>[Inch.] | Grit and EDP number |       |       |       |       |       |       |       |       |       |       |       |  |
|-------------------|--------------|--------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------------------------------------------------------------------------|
|                   |              |              | 50                  | 60    | 80    | 100   | 120   | 150   | 180   | 220   | 240   | 320   | 400   | 500   |                                                                                       |
| 50                | 1            | 3            | 47101               | 47102 | 47103 | 47104 | 47105 | 47106 | 47107 | 47108 | 47109 | 47111 | 47112 | 47113 | 1                                                                                     |
|                   | 1-1/2        | 3            | 47151               | 47152 | 47153 | 47154 | 47155 | 47156 | 47157 | 47158 | 47159 | 47161 | 47162 | 47163 | 1                                                                                     |
|                   | 2            | 3            | 47201               | 47202 | 47203 | 47204 | 47205 | 47206 | 47207 | 47208 | 47209 | 47211 | 47212 | 47213 | 1                                                                                     |

# Abrasive belts, sheets, and rolls

## Shop rolls and holders



### Shop roll holders

Holder for wall-mounting: for storing and tearing off to the required length as necessary. With the multi-roll holder, various roll sizes can be combined with each other as desired.

| Type        | No. of rolls | Recommended for roll widths [Inches] | Recommended 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                                                                                   |

## Screen 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

| Length [Yards] | T [Inches] | Grit and EDP number |       |       |  |
|----------------|------------|---------------------|-------|-------|---------------------------------------------------------------------------------------|
|                |            | 80                  | 120   | 180   |                                                                                       |
| 10             | 1-1/2      | 47233               | 47234 | 47235 | 1                                                                                     |

## Non-woven shop rolls



### Aluminum oxide A and silicon carbide SiC

Ideal for very fine grinding on small to large surfaces and contours, and for manually cleaning metal and painted surfaces. Achieve matte and satin-finished surfaces. Highly open structure.

#### Advantages:

- Highly flexible, enabling optimal adjustment to the contour.
- Hard-to-reach areas can be accessed.
- Can be used for wet and dry grinding.

#### Recommendations for use:

- Cut to the necessary size if required.

**Abrasive:**  
Aluminum oxide A  
Silicon carbide SiC

| Length [Yards] | T [Inches] | Abrasives | Grit and EDP number |       |       |       |       |  |
|----------------|------------|-----------|---------------------|-------|-------|-------|-------|---------------------------------------------------------------------------------------|
|                |            |           | 80                  | 100   | 180   | 280   | 400   |                                                                                       |
| 10             | 4          | A         | 43515               | 43516 | 43517 | 43518 | -     | 1                                                                                     |
|                |            | SiC       | -                   | -     | -     | -     | 43519 | 1                                                                                     |



### High flexibility abrasive cord

Ideal for very fine deburring and finishing work in hard-to-reach places.

Recommended for work on very small holes, grooves and cut-outs in tool and die making.

#### Explanation of the abbreviations:

D = Abrasive cord diameter

#### Abrasive:

Aluminum oxide A

Silicon carbide SiC



| D<br>[Inches] | Length<br>[Yards] | Abrasives | Grit and EDP number |       |       |       |  |
|---------------|-------------------|-----------|---------------------|-------|-------|-------|-------------------------------------------------------------------------------------|
|               |                   |           | 120                 | 150   | 180   | 200   |                                                                                     |
| 0.02          | 16                | SiC       | -                   | -     | -     | 49900 | 1                                                                                   |
| 0.03          | 16                | A         | -                   | -     | -     | 49901 | 1                                                                                   |
| 0.04          | 16                | A         | -                   | -     | 49902 | -     | 1                                                                                   |
| 0.06          | 16                | A         | -                   | 49903 | -     | -     | 1                                                                                   |
| 0.07          | 16                | A         | -                   | -     | 49904 | -     | 1                                                                                   |
| 0.08          | 16                | A         | 49905               | -     | -     | -     | 1                                                                                   |



# Abrasive spiral bands

## General information

The comprehensive range of abrasive spiral bands offers the best solution for every application, from fine grinding to aggressive grinding.

Matching, reusable rubber drum holders in two different shapes are available for using abrasive spiral bands:

- Cylindrical
- Conical

In ISO 2421, abrasive spiral bands are designated as "cylindrical abrasive sleeves".

In ISO 15637-1, cylindrical rubber drum holders are designated as "holding fixtures for cylindrical abrasive sleeves".

### Advantages:

- Abrasive spiral bands fit securely on the rubber drum holder as the holder expands during use.
- Outstanding service life due to a special manufacturing process – even under the toughest work conditions.
- Highest possible economic efficiency due to particularly high stock removal and aggressiveness of the abrasive.

### Applications:

- Roughing
- Leveling
- Deburring
- Surface work
- Work on edges
- Sharpening
- Work on weld seams
- Step-by-step fine grinding

### Recommendations for use:

- To change the abrasive spiral bands, raise and lower them while turning clockwise. When doing so, leave the rubber drum holder engaged in the power tool.
- Adhere to the minimum speed for the rubber drum holder to ensure that the abrasive spiral band fits securely.
- For best performance, use with a recommended peripheral speed of 4,000–6,000 SFPM.
- Use grinding oil recommended for the material in order to increase the service life and abrasive performance of the products.

### Compatible power tools:

- Flexible shaft drives
- Straight grinders

### Safety notes:

- The maximum permitted peripheral speed is 6,000 SFPM.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- Do not allow abrasive spiral bands to protrude beyond the rubber drum holder.



### Accessories:

- Rubber drum holders



### Recommended rotational speed range

#### Example:

EDP: 41131, 1" spiral band, aluminum oxide A

Peripheral speed: 4,000–6,000 SFPM

**Rotational speed: 15,30–22,900 RPM**

| Band dia.<br>[Inches] | Peripheral speed [SFPM] |        |        |
|-----------------------|-------------------------|--------|--------|
|                       | 4,000                   | 5,000  | 6,000  |
|                       | Rotational speeds [RPM] |        |        |
| 3/8                   | 40,700                  | 50,900 | 61,100 |
| 1/2                   | 30,600                  | 38,200 | 45,800 |
| 5/8                   | 24,400                  | 30,600 | 36,700 |
| 3/4                   | 20,400                  | 25,500 | 30,600 |
| 7/8                   | 17,500                  | 21,800 | 26,200 |
| 1                     | 15,300                  | 19,100 | 22,900 |
| 1-1/8                 | 13,600                  | 17,000 | 20,400 |
| 1-1/2                 | 10,200                  | 12,700 | 15,300 |
| 1-3/4                 | 8,700                   | 10,900 | 13,100 |
| 2                     | 7,600                   | 9,600  | 11,500 |
| 2-3/8                 | 6,400                   | 8,000  | 9,700  |

### Quick product selection guide

| Material group ▼          |                                             |                                                                                                           | Abrasive ► | Aluminum oxide A | Zirconia alumina Z-COOL | 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-based 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, paintwork                                     | ●          |                  |                         |                       |

● = highly recommended

○ = recommended

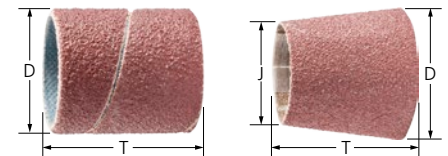
### Abrasive spiral bands

#### Aluminum oxide A

For universal applications from coarse to fine grinding.

##### Abrasive:

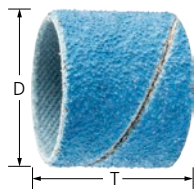
Aluminum oxide A



| D<br>[Inches]    | J<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |       |       | Compatible holder | Opt. RPM      |  |
|------------------|---------------|---------------|---------------------|-------|-------|-------|-------|-------|-------------------|---------------|---------------------------------------------------------------------------------------|
|                  |               |               | 40                  | 50    | 60    | 80    | 150   | 240   |                   |               |                                                                                       |
| Cylindrical type |               |               |                     |       |       |       |       |       |                   |               |                                                                                       |
| 3/8              | -             | 3/4           | -                   | -     | -     | 41022 | 41023 | 41024 | 41966             | 30,000–44,000 | 100                                                                                   |
| 1/2              | -             | 1             | -                   | -     | -     | 41046 | 41049 | -     | 41970             | 30,000–44,000 | 100                                                                                   |
| 5/8              | -             | 1-1/8         | -                   | 41068 | 41069 | 41070 | 41072 | 41074 | 41973             | 26,000–36,000 | 100                                                                                   |
| 3/4              | -             | 1             | -                   | -     | 41102 | 41103 | 41106 | -     | 41976             | 20,000–30,000 | 100                                                                                   |
| 7/8              | -             | 3/4           | -                   | 41131 | 41132 | 41133 | 41135 | 41137 | 41979             | 18,000–26,000 | 100                                                                                   |
| 1                | -             | 1             | -                   | -     | 41149 | 41150 | 41153 | -     | 41982             | 16,000–22,900 | 100                                                                                   |
| 1-1/8            | -             | 1-1/8         | 41190               | 41191 | 41192 | 41193 | 41195 | 41197 | 41985             | 13,000–19,100 | 100                                                                                   |
| 1-1/2            | -             | 1             | 41200               | -     | 41202 | 41203 | 41206 | -     | 41988             | 10,000–15,900 | 100                                                                                   |
| 1-3/4            |               | 1-1/8         | 41238               | 41239 | 41240 | 41241 | 41243 | 41245 | 41991             | 8,500–12,700  | 100                                                                                   |
| 2                | -             | 1             | 41248               | -     | 41250 | 41251 | 41254 | -     | 41994             | 7,500–11,200  | 100                                                                                   |
| 2-3/8            | -             | 1-1/8         | 41295               | 41296 | 41297 | 41298 | 41300 | -     | 41997             | 6,500–9,500   | 100                                                                                   |
| Tapered type     |               |               |                     |       |       |       |       |       |                   |               |                                                                                       |
| 3/4              | 1/2           | 2-1/2         | 41350               | -     | 41351 | 41352 | 41353 | -     | 42005             | 19,000–26,000 | 100                                                                                   |
| 1-1/8            | 7/8           | 1-3/16        | 41355               | -     | 41356 | 41357 | 41358 | -     | 42007             | 13,000–19,100 | 100                                                                                   |
| 1-1/2            | 7/8           | 2-3/8         | 41360               | -     | 41361 | 41362 | 41363 | -     | 42006             | 10,000–15,900 | 100                                                                                   |

# Abrasive spiral bands

## Abrasive spiral bands



### Zirconia alumina Z-COOL type

For coarse grinding work with a high stock removal rate and cool grinding.

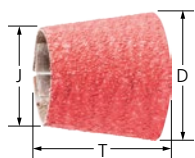
Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and results in cooler grinding.

**Abrasive:**  
Zirconia alumina Z-COOL

#### Ordering notes:

■ Grit size 150 is supplied with aluminum oxide A-COOL (brown).

| D<br>[Inches]     | T<br>[Inches] | Grit and EDP number |       |       |       | Compatible holder | Opt. RPM      |  |
|-------------------|---------------|---------------------|-------|-------|-------|-------------------|---------------|-------------------------------------------------------------------------------------|
|                   |               | 36                  | 50    | 80    | 150   |                   |               |                                                                                     |
| Cylindrical shape |               |                     |       |       |       |                   |               |                                                                                     |
| 5/8               | 1-1/8         | -                   | 41405 | 41406 | 41407 | 41973             | 26,000–36,000 | 100                                                                                 |
| 7/8               | 3/4           | -                   | 41408 | 41409 | 41410 | 41979             | 18,000–26,000 | 100                                                                                 |
| 1-1/8             | 1-1/8         | 41415               | 41416 | 41417 | 41418 | 41985             | 13,000–19,100 | 100                                                                                 |
| 1-3/4             | 1-1/8         | 41419               | 41420 | 41421 | 41422 | 41991             | 8,500–12,700  | 100                                                                                 |
| 2-3/8             | 1-1/8         | 41427               | 41428 | 41429 | 41430 | 41997             | 6,500–9,500   | 100                                                                                 |



### Ceramic oxide CO-COOL

For aggressive grinding with maximum stock removal rate on hard and tough materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and results in cooler grinding.

The packaging size is ideally suited to industrial requirements.

**Abrasive:**  
Ceramic oxide CO-COOL

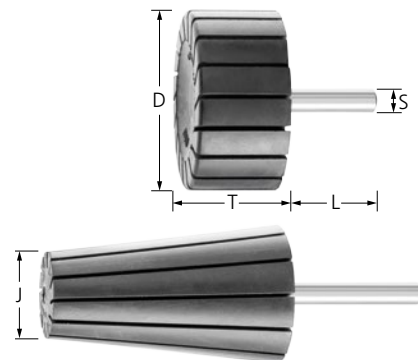
| D<br>[Inches] | J<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       | Compatible holder | Opt. RPM      |  |
|---------------|---------------|---------------|---------------------|-------|-------|-------|-------------------|---------------|---------------------------------------------------------------------------------------|
|               |               |               | 36                  | 60    | 80    | 120   |                   |               |                                                                                       |
| Tapered shape |               |               |                     |       |       |       |                   |               |                                                                                       |
| 3/4           | 1/2           | 2-1/2         | 41388               | 41389 | 41390 | 41391 | 42005             | 19,000–26,000 | 100                                                                                   |
| 1-1/8         | 7/8           | 1-3/16        | 41392               | 41393 | 41394 | 41395 | 42007             | 13,000–19,100 | 100                                                                                   |
| 1-1/2         | 7/8           | 2-3/8         | 41396               | 41397 | 41398 | 41399 | 42006             | 10,000–15,900 | 100                                                                                   |





### Rubber drum holders

Matching rubber drum holder for conical and cylindrical abrasive spiral bands.



| D<br>[Inches]            | J<br>[Inches] | T<br>[Inches] | S<br>[Inches] | L<br>[Inches] | EDP<br>number | Max.<br>RPM |  |
|--------------------------|---------------|---------------|---------------|---------------|---------------|-------------|-------------------------------------------------------------------------------------|
| <b>Cylindrical shape</b> |               |               |               |               |               |             |                                                                                     |
| 3/8                      | -             | 3/4           | 1/4           | 1-5/8         | 41966         | 44,000      | 5                                                                                   |
| 1/2                      | -             | 1             | 1/4           | 1-5/8         | 41970         | 44,000      | 5                                                                                   |
| 5/8                      | -             | 1-1/8         | 1/4           | 1-5/8         | 41973         | 36,000      | 5                                                                                   |
| 3/4                      | -             | 1             | 1/4           | 1-5/8         | 41976         | 30,000      | 5                                                                                   |
| 7/8                      | -             | 3/4           | 1/4           | 1-5/8         | 41979         | 26,000      | 5                                                                                   |
| 1                        | -             | 1             | 1/4           | 1-5/8         | 41982         | 22,900      | 5                                                                                   |
| 1-1/8                    | -             | 1-1/8         | 1/4           | 1-1/4         | 41985         | 19,100      | 5                                                                                   |
| 1-1/2                    | -             | 1             | 1/4           | 1-1/4         | 41988         | 15,900      | 5                                                                                   |
| 1-3/4                    | -             | 1-1/8         | 1/4           | 1-1/4         | 41991         | 12,700      | 5                                                                                   |
| 2                        | -             | 1             | 1/4           | 1-1/4         | 41994         | 11,200      | 5                                                                                   |
| 2-3/8                    | -             | 1-1/8         | 1/4           | 1-1/4         | 41997         | 9,500       | 5                                                                                   |
| <b>Tapered shape</b>     |               |               |               |               |               |             |                                                                                     |
| 3/4                      | 1/2           | 2-1/2         | 1/4           | 1-5/8         | 42005         | 26,000      | 5                                                                                   |
| 1-1/8                    | 7/8           | 1-3/16        | 1/4           | 1-5/8         | 42007         | 19,100      | 5                                                                                   |
| 1-1/2                    | 7/8           | 2-3/8         | 1/4           | 1-5/8         | 42006         | 15,900      | 5                                                                                   |



# POLIROLL® cartridge rolls

## General information

POLIROLL® cartridge rolls are suited for work in hard-to-reach places.

They consist of spirally wound coated abrasives. The abrasive grain is embedded in the resinoid coating on the sturdy backing material, which achieves the best possible abrasive performance.

### Advantages:

- Consistently high abrasive performance throughout the entire service life due to fresh abrasive grain being constantly freed up in operation.
- Secure fit of the POLIROLL® when in use due to self-tensioning provided by grooved, conical arbor.
- Easy cartridge changing.

### Applications:

- Leveling
- Deburring
- Work on edges
- Sharpening
- Work on weld seams
- Step-by-step fine grinding



### Recommendations for use:

- Grind with the tip instead of the flat surface so as not to damage the bond through exposure to heat.
- Mount POLIROLL® with the bonded side facing towards the arbor.
- Use grinding oil recommended for the material in order to increase the service life and abrasive performance of the products.

### Compatible power tools:

- Flexible shaft drives
- Straight grinders

### Safety notes:

- The maximum permitted peripheral speed is 2,300 SFPM.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



### Accessories:

- Arbors for POLIROLL®

### Recommended rotational speed range

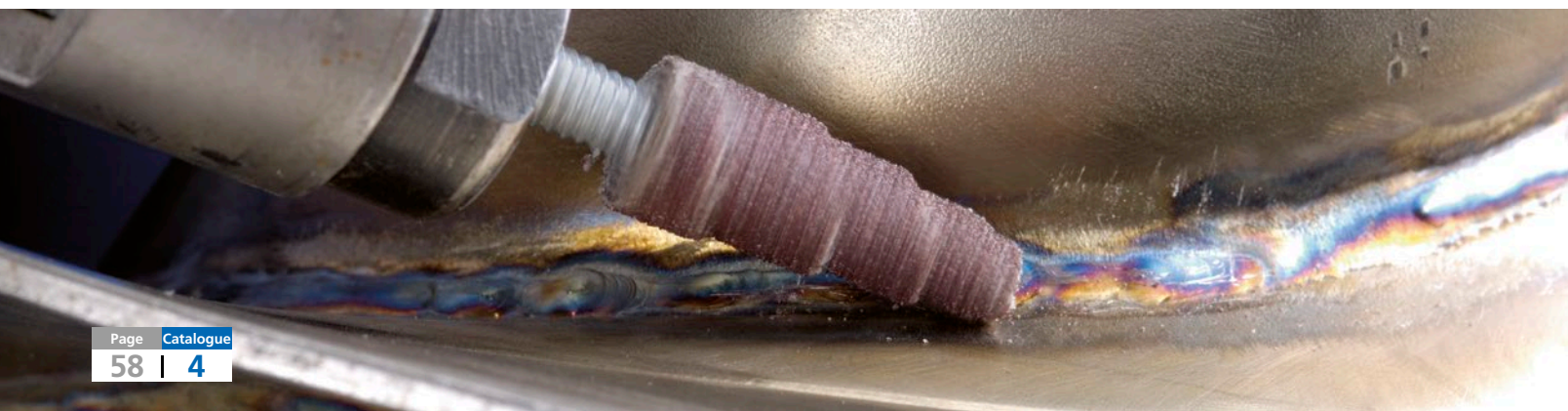
#### Example:

EDP: 41667, 3/4 x 1 cylindrical cartridge roll

Peripheral speed: 1,600 SFPM

**Rotational speed: 8,100 RPM**

| Roll dia.<br>[Inches] | Peripheral speed [SFPM] |        |        |
|-----------------------|-------------------------|--------|--------|
|                       | 1,000                   | 1,600  | 2,200  |
|                       | Rotational speeds [RPM] |        |        |
| 1/4                   | 15,300                  | 24,400 | 33,600 |
| 5/16                  | 12,000                  | 19,600 | 26,900 |
| 3/8                   | 10,200                  | 16,300 | 22,400 |
| 1/2                   | 7,600                   | 12,200 | 16,800 |
| 5/8                   | 6,100                   | 9,800  | 13,400 |
| 3/4                   | 5,100                   | 8,100  | 11,200 |
| 1                     | 3,800                   | 6,100  | 8,400  |



## Aluminum oxide A

For universal grinding work on metals and other materials.

### Workpiece materials:

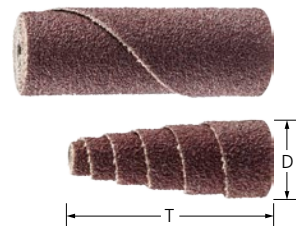
aluminum, copper, brass, grey/nodular cast iron, annealed cast iron, steel, cast steel, hardened, heat-treated steels

### Abrasive:

Aluminum oxide A

### Ordering notes:

Compatible arbor must be ordered separately.



| D<br>[Inches]     | T<br>[Inches] | Arbor hole<br>[Inches] | Grit and EDP number |       |       | Compatible<br>arbor | Opt.<br>RPM |  |
|-------------------|---------------|------------------------|---------------------|-------|-------|---------------------|-------------|-------------------------------------------------------------------------------------|
|                   |               |                        | 60                  | 80    | 120   |                     |             |                                                                                     |
| Cylindrical shape |               |                        |                     |       |       |                     |             |                                                                                     |
| 1/4               | 1             | 1/8                    | 41468               | 41469 | 41471 | 42060               | 20,000      | 50                                                                                  |
|                   | 1-1/2         | 1/8                    | 41479               | 41480 | 41482 | 42061               | 20,000      | 50                                                                                  |
| 5/16              | 1-1/2         | 1/8                    | 41512               | 41513 | 41515 | 42061               | 18,500      | 50                                                                                  |
| 3/8               | 1             | 1/8                    | 41523               | 41524 | 41526 | 42060               | 16,000      | 50                                                                                  |
|                   | 1-1/2         | 1/8                    | 41534               | 41535 | 41537 | 42061               | 16,000      | 50                                                                                  |
|                   | 2             | 1/8                    | 41545               | 41546 | 41548 | 42062               | 16,000      | 50                                                                                  |
| 1/2               | 1             | 1/8                    | 41567               | 41568 | 41570 | 42060               | 12,000      | 50                                                                                  |
|                   | 1-1/2         | 1/8                    | 41589               | 41590 | 41592 | 42061               | 12,000      | 50                                                                                  |
|                   | 2             | 1/8                    | 41600               | 41601 | 41603 | 42062               | 12,000      | 50                                                                                  |
| 5/8               | 1-1/2         | 1/8                    | 41633               | 41634 | 41636 | 42061               | 9,500       | 50                                                                                  |
| 3/4               | 1             | 1/8                    | 41666               | 41667 | 41669 | 42060               | 8,000       | 50                                                                                  |
|                   | 1-1/2         | 3/16                   | 41677               | 41678 | 41680 | 42063               | 8,000       | 50                                                                                  |
|                   | 2             | 3/16                   | 41721               | 41722 | 41724 | 42064               | 8,000       | 50                                                                                  |
| 1                 | 1-1/2         | 1/4                    | 41743               | 41744 | 41746 | 42066               | 6,000       | 25                                                                                  |
|                   | 2             | 1/4                    | 41776               | 41777 | 41779 | 42067               | 6,000       | 25                                                                                  |

### Conical shape

|     |       |      |       |       |       |       |        |    |
|-----|-------|------|-------|-------|-------|-------|--------|----|
| 3/8 | 1     | 1/8  | 41800 | 41801 | 41803 | 42060 | 16,000 | 50 |
|     | 1-1/2 | 1/8  | 41807 | 41808 | 41810 | 42061 | 16,000 | 50 |
| 1/2 | 1     | 1/8  | 41817 | 41818 | 41820 | 42060 | 12,000 | 50 |
|     | 1-1/2 | 1/8  | 41827 | 41828 | 41830 | 42061 | 12,000 | 50 |
|     | 2     | 1/8  | 41837 | 41838 | 41840 | 42062 | 12,000 | 50 |
| 3/4 | 1-1/2 | 3/16 | 41874 | 41875 | 41876 | 42063 | 8,000  | 50 |
|     | 2     | 3/16 | 41882 | 41883 | 41884 | 42064 | 8,000  | 50 |

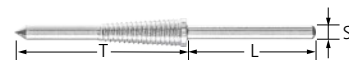
## Drive arbors

### Tapered and untapered cartridge roll holders

Arbors for POLIROLL® cartridge rolls.

### Advantages:

- Roll can be changed without unclamping the arbor from the power tool collet.



| S<br>[Inches] | P<br>[Inches] | T<br>[Inches] | L<br>[Inches] | EDP number | Max. RPM |  |
|---------------|---------------|---------------|---------------|------------|----------|---------------------------------------------------------------------------------------|
| 1/4           | 1/8           | 1             | 1             | 42060      | 25,000   | 1                                                                                     |
|               | 1/8           | 1-1/2         | 1             | 42061      | 25,000   | 1                                                                                     |
|               | 1/8           | 2             | 1             | 42062      | 24,000   | 1                                                                                     |
|               | 3/16          | 1-1/2         | 1             | 42063      | 12,000   | 1                                                                                     |
|               | 3/16          | 2             | 1             | 42064      | 12,000   | 1                                                                                     |
|               | 1/4           | 1-1/2         | 1             | 42066      | 9,000    | 1                                                                                     |
|               | 1/4           | 2             | 1             | 42067      | 9,000    | 1                                                                                     |

# POLICAP® seamless abrasive caps

## General information

The broad, material-specific range of POLICAP® abrasive caps and cones offer solutions with the highest possible stock removal rate for both universal and specialized grinding applications.

POLICAP® products have a seamless design, and the entire surface can be used.

Reusable holders are available when using abrasive caps and cones.

### Advantages:

- Abrasive caps and cones fit securely on the holder as it expands during use.
- Consistent shape accuracy and excellent fine grinding due to a special manufacturing process.
- Easy product changing.

### Applications:

- Leveling
- Surface work
- Step-by-step fine grinding

### Recommendations for use:

- To change the abrasive caps and cones, raise and lower them while turning clockwise. When doing so, leave the abrasive holder engaged in the power tool and fix in place.
- For best performance, use with a recommended peripheral speed of 2,000–4,000 SFPM.

### Compatible power tools:

- Flexible shaft drives
- Straight grinders

### Safety notes:

- The maximum permitted peripheral speed is 5,000 SFPM.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



### Accessories:

- Rubber holders for abrasive caps and cones



| Type                                                                                                                                                      | Application                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Aluminum oxide A</b><br><br>A60/80 A150 A280                        | For universal use on steel materials (hardened, heat-treated, non-hardened). Especially developed for specific applications, e.g. in tool and die making, in addition to corresponding repair tasks. Also recommended for work on plastics, wood and fillers in model-making applications.                                                                                                                                   |
| <b>SiC-COOL</b><br>(Silicon carbide with active grinding layer)<br>    | Ideal for work on components made from titanium, aluminum and their respective alloys. Ideally suited to use in aircraft and turbine construction, in addition to associated maintenance tasks.<br>The special grain selection and the active grinding additive in the bond facilitate cool grinding, reduce the workpiece temperature and prevent chips from adhering.                                                      |
| <b>CO-COOL</b><br>(Ceramic oxide grain with active grinding layer)<br> | The specific structure of the ceramic oxide grain and the active-grinding bond components make this ideal for work on stainless steels (INOX) and the high-temperature-resistant nickel-based and cobalt-based alloys that are frequently used in turbine construction, e.g. INCONEL®, HASTELLOY®. The active grinding additives prevent loading and facilitate cooler grinding with considerably higher stock removal rate. |



## Quick product selection guide

| Material group<br>▼          |                                                   |                                                                                                                 | Abrasive ►      | Aluminum oxide<br>A | Silicon carbide<br>SiC-COOL | Ceramic oxide<br>CO-COOL |
|------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------|---------------------|-----------------------------|--------------------------|
| Steel,<br>cast steel         | Non-hardened,<br>non-heat-treated<br>steels       | Construction steels, carbon steels,<br>tool steels, non-alloyed steels,<br>cast steel                           | ●               |                     | ○                           |                          |
|                              | Hardened,<br>heat-treated steels                  | Tool steels, tempering steels,<br>alloyed steels, cast steel                                                    | ○               |                     | ●                           |                          |
| Stainless steel<br>(INOX)    | Rust- and acid-resistant<br>steels                | Austenitic and<br>ferritic stainless steels                                                                     |                 |                     | ●                           |                          |
| Non-ferrous<br>metals        | Soft<br>non-ferrous metals,<br>non-ferrous metals | Soft aluminum alloys                                                                                            | ○               | ●                   | ○                           |                          |
|                              |                                                   | Brass, copper, zinc                                                                                             | ●               |                     |                             |                          |
|                              | Hard<br>non-ferrous metals                        | Hard aluminum alloys                                                                                            | ○               | ●                   |                             |                          |
|                              |                                                   | Bronze, titanium                                                                                                |                 | ●                   | ○                           |                          |
|                              | High-temperature-<br>resistant materials          | Nickel-based and cobalt-based alloys                                                                            |                 |                     | ●                           |                          |
| Cast iron                    | Grey cast iron,<br>white cast iron                | Cast iron with flake graphite, with<br>nodular graphite cast iron, white<br>annealed cast iron, black cast iron | ●               |                     | ○                           |                          |
| Plastics,<br>other materials |                                                   | Fibre-reinforced plastics,<br>thermoplastics,<br>wood, chipboard, paintwork                                     | ○               | ●                   |                             |                          |
| ● = highly recommended       |                                                   |                                                                                                                 | ○ = recommended |                     |                             |                          |

## Recommended rotational speed range

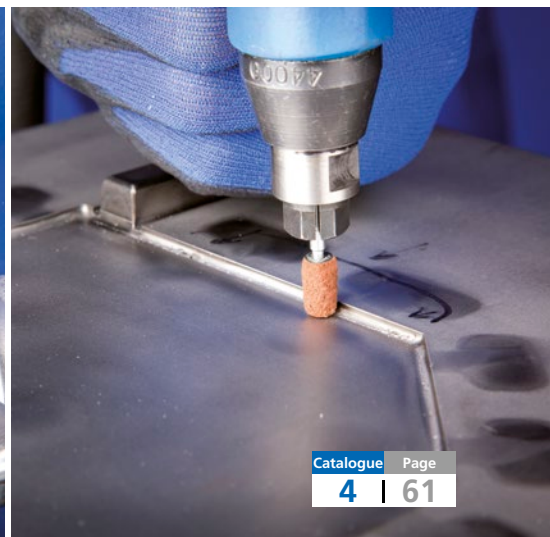
### Example:

EDP 46065, cylindrical, shape A, dia. 1/2"

Peripheral speed: 2,000–4,000 SFPM

**Rotational speed: 15,300–30,600 RPM**

| Cap dia.<br>[Inches] | Peripheral speed [SFPM] |        |        |         |
|----------------------|-------------------------|--------|--------|---------|
|                      | 2,000                   | 3,000  | 4,000  | 5,000   |
|                      | Rotational speeds [RPM] |        |        |         |
| 3/16                 | 40,700                  | 61,100 | 81,500 | 101,900 |
| 9/32                 | 27,200                  | 40,700 | 54,300 | 67,900  |
| 3/8                  | 20,400                  | 30,600 | 40,700 | 50,900  |
| 1/2                  | 15,300                  | 22,900 | 30,600 | 38,200  |
| 5/8                  | 12,200                  | 18,300 | 24,400 | 30,600  |
| 7/8                  | 8,700                   | 13,100 | 17,500 | 21,800  |
| 1-1/2                | 5,100                   | 7,600  | 10,200 | 12,700  |



# POLICAP® seamless abrasive caps

Abrasive caps, cap holders, and sets



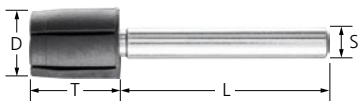
## Cylindrical, shape A

POLICAP® abrasive caps in cylindrical shape A.

### Abrasive:

Aluminum oxide A  
Grit size colour code:  
60 and 80 = brown  
150 = black  
280 = red-brown

| D<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       | Compatible<br>holder | Opt.<br>RPM |  |
|---------------|---------------|---------------------|-------|-------|-------|----------------------|-------------|-------------------------------------------------------------------------------------|
|               |               | 60                  | 80    | 150   | 280   |                      |             |                                                                                     |
| 3/16          | 3/8           | -                   | 46029 | 46030 | 46031 | 42008                | 40,000      | 50                                                                                  |
| 9/32          | 1/2           | 46032               | -     | 46033 | 46034 | 42009                | 30,000      | 50                                                                                  |
| 3/8           | 5/8           | 46035               | -     | 46036 | 46037 | 42010                | 20,000      | 50                                                                                  |
| 1/2           | 1 1/16        | 46065               | -     | 46066 | 46067 | 42021                | 16,000      | 50                                                                                  |
| 5/8           | 1             | 46068               | -     | 46069 | 46070 | 42022                | 12,000      | 50                                                                                  |



## Cylindrical, shape A holders

Matching POLICAP® abrasive cap holder in cylindrical shape A.

| D<br>[Inches] | T<br>[Inches] | S<br>[Inches] | L<br>[Inches] | EDP<br>number | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------|---------------|-------------|--------------------------------------------------------------------------------------|
| 3/16          | 3/8           | 1/8           | 1-1/4         | 42008         | 95,000      | 5                                                                                    |
| 9/32          | 1/2           | 1/8           | 1-1/4         | 42009         | 65,000      | 5                                                                                    |
| 3/8           | 5/8           | 1/8           | 1-1/4         | 42010         | 45,000      | 5                                                                                    |
| 1/2           | 1 1/16        | 1/4           | 1-5/8         | 42021         | 35,000      | 5                                                                                    |
| 5/8           | 1             | 1/4           | 1-5/8         | 42022         | 30,000      | 5                                                                                    |



## Cylindrical, shape A set

110-piece set of various POLICAP® abrasive caps with matching holders in cylindrical shape A.

### Contents:

- 105 pieces POLICAP® abrasive caps
- 5 pieces POLICAP® abrasive cap holders (see table for details)

### Advantages:

- Sturdy, reusable plastic packaging.

### Abrasive:

Aluminum oxide A  
60 and 80 = brown  
150 = black  
280 = red-brown

| Case<br>dimensions<br>[Inches] | D<br>[Inches] | T<br>[Inches] | S<br>[Inches] | Grit and<br>included EDP |       |       |       | POLICAP®<br>qty. included<br>[each] | POLICAP® holder<br>included EDP<br>[1 piece] | Set EDP<br>number |  |
|--------------------------------|---------------|---------------|---------------|--------------------------|-------|-------|-------|-------------------------------------|----------------------------------------------|-------------------|---------------------------------------------------------------------------------------|
|                                |               |               |               | 60                       | 80    | 150   | 280   |                                     |                                              |                   |                                                                                       |
| 7 x 5-3/4 x 1-1/2              | 3/16          | 3/8           | 1/8           | -                        | 46029 | 46030 | 46031 | 10                                  | 42008                                        | 46093             | 1                                                                                     |
|                                | 9/32          | 1/2           | 1/8           | 46032                    | -     | 46033 | 46034 | 10                                  | 42009                                        |                   |                                                                                       |
|                                | 3/8           | 5/8           | 1/8           | 46035                    | -     | 46036 | 46037 | 5                                   | 42010                                        |                   |                                                                                       |
|                                | 1/2           | 1 1/16        | 1/4           | 46065                    | -     | 46066 | 46067 | 5                                   | 42021                                        |                   |                                                                                       |
|                                | 5/8           | 1             | 1/4           | 46068                    | -     | 46069 | 46070 | 5                                   | 42022                                        |                   |                                                                                       |

## Cylindrical with radius end, shape C

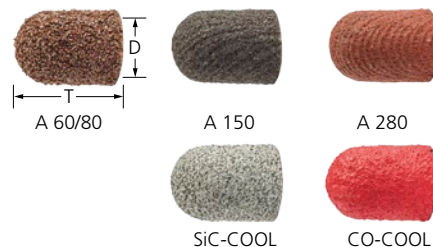
POLICAP® abrasive caps in cylindrical shape C with radius end.

### Abrasive:

Aluminum oxide A  
Silicon carbide SiC-COOL (grey)  
Ceramic oxide CO-COOL (red)

Grit size colour code for aluminum oxide A:

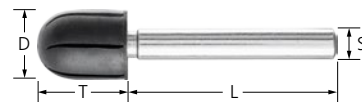
60 and 80 = brown  
150 = black  
280 = red-brown



| D<br>[Inches]            | T<br>[Inches] | Grit and EDP number |       |       |       |       | Compatible<br>holder | Opt.<br>RPM |  |
|--------------------------|---------------|---------------------|-------|-------|-------|-------|----------------------|-------------|-------------------------------------------------------------------------------------|
|                          |               | 60                  | 80    | 120   | 150   | 280   |                      |             |                                                                                     |
| Aluminum oxide A         |               |                     |       |       |       |       |                      |             |                                                                                     |
| 3/16                     | 7/16          | -                   | 46038 | -     | 46039 | 46040 | 42011                | 40,000      | 50                                                                                  |
| 9/32                     | 1/2           | 46041               | -     | -     | 46042 | 46043 | 42012                | 30,000      | 50                                                                                  |
| 3/8                      | 5/8           | 46044               | -     | -     | 46045 | 46046 | 42013                | 20,000      | 50                                                                                  |
| 1/2                      | 11/16         | 46071               | -     | -     | 46072 | 46073 | 42023                | 16,000      | 50                                                                                  |
| 5/8                      | 1             | 46074               | -     | -     | 46075 | 46076 | 42024                | 12,000      | 50                                                                                  |
| Silicon carbide SiC-COOL |               |                     |       |       |       |       |                      |             |                                                                                     |
| 3/16                     | 7/16          | -                   | 46101 | -     | 46102 | -     | 42011                | 40,000      | 50                                                                                  |
| 9/32                     | 1/2           | -                   | 46104 | -     | 46105 | -     | 42012                | 30,000      | 50                                                                                  |
| 3/8                      | 5/8           | -                   | 46107 | -     | 46108 | -     | 42013                | 20,000      | 50                                                                                  |
| 1/2                      | 11/16         | -                   | 46110 | -     | 46111 | -     | 42023                | 16,000      | 50                                                                                  |
| 5/8                      | 1             | -                   | 46113 | -     | 46114 | -     | 42024                | 12,000      | 50                                                                                  |
| Ceramic oxide CO-COOL    |               |                     |       |       |       |       |                      |             |                                                                                     |
| 3/16                     | 7/16          | -                   | 46116 | 46117 | -     | -     | 42011                | 40,000      | 50                                                                                  |
| 9/32                     | 1/2           | -                   | 46119 | 46120 | -     | -     | 42012                | 30,000      | 50                                                                                  |
| 3/8                      | 5/8           | -                   | 46122 | 46123 | -     | -     | 42013                | 20,000      | 50                                                                                  |
| 1/2                      | 11/16         | -                   | 46125 | 46126 | -     | -     | 42023                | 16,000      | 50                                                                                  |
| 5/8                      | 1             | -                   | 46128 | 46129 | -     | -     | 42024                | 12,000      | 50                                                                                  |

## Cylindrical with radius end, shape C holders

Matching POLICAP® abrasive cap holder in cylindrical shape C with radius end.



| D<br>[Inches] | T<br>[Inches] | S<br>[Inches] | L<br>[Inches] | EDP<br>number | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------|---------------|-------------|---------------------------------------------------------------------------------------|
| 3/16          | 7/16          | 1/8           | 1-1/4         | 42011         | 95,000      | 5                                                                                     |
| 9/32          | 1/2           | 1/8           | 1-1/4         | 42012         | 65,000      | 5                                                                                     |
| 3/8           | 5/8           | 1/8           | 1-1/4         | 42013         | 45,000      | 5                                                                                     |
| 1/2           | 11/16         | 1/4           | 1-5/8         | 42023         | 35,000      | 5                                                                                     |
| 5/8           | 1             | 1/4           | 1-5/8         | 42024         | 30,000      | 5                                                                                     |

# POLICAP® seamless abrasive caps

Abrasive caps, cap holders, and sets



## Cylindrical with radius end, shape C set

110-piece set of various POLICAP® abrasive caps with matching holders in cylindrical shape C with radius end.

### Contents:

- 105 pieces POLICAP® abrasive caps
- 5 pieces POLICAP® abrasive cap holders (see table for details)

### Advantages:

- Sturdy, reusable plastic packaging.

### Abrasive:

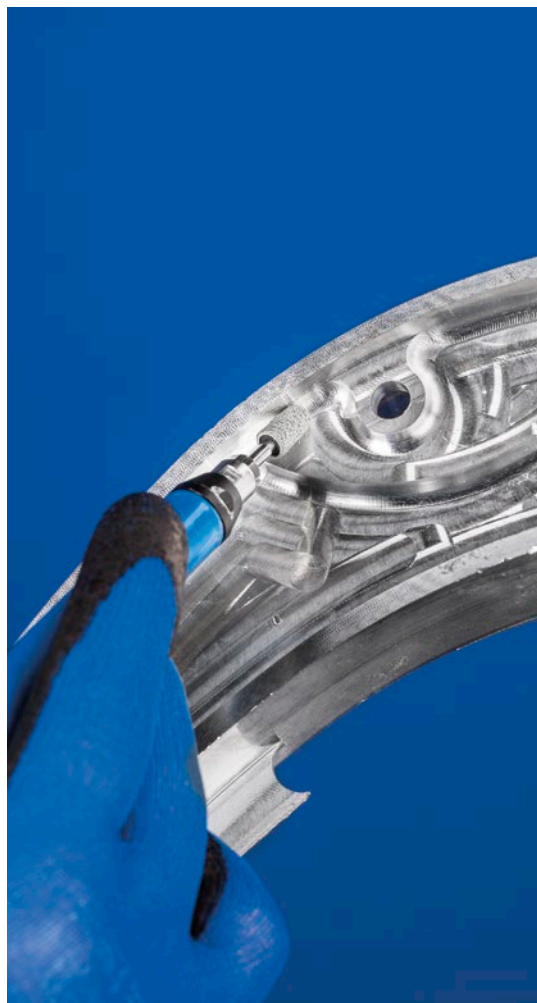
Aluminum oxide A

60 and 80 = brown

150 = black

280 = red-brown

| Case dimensions<br>[Inches] | D<br>[Inches] | T<br>[Inches] | S<br>[Inches] | Grit and included EDP |       |       |       | POLICAP®<br>qty. included<br>[each] | POLICAP® holder<br>included EDP<br>[1 piece] | Set EDP<br>number |  |
|-----------------------------|---------------|---------------|---------------|-----------------------|-------|-------|-------|-------------------------------------|----------------------------------------------|-------------------|-------------------------------------------------------------------------------------|
|                             |               |               |               | 60                    | 80    | 150   | 280   |                                     |                                              |                   |                                                                                     |
| 7 x 5-3/4 x 1-1/2           | 3/16          | 7/16          | 1/8           | -                     | 46038 | 46039 | 46040 | 10                                  | 42011                                        | 46094             | 1                                                                                   |
|                             | 9/32          | 1/2           | 1/8           | 46041                 | -     | 46042 | 46043 | 10                                  | 42012                                        |                   |                                                                                     |
|                             | 3/8           | 5/8           | 1/8           | 46044                 | -     | 46045 | 46046 | 5                                   | 42013                                        |                   |                                                                                     |
|                             | 1/2           | 11/16         | 1/4           | 46071                 | -     | 46072 | 46073 | 5                                   | 42023                                        |                   |                                                                                     |
|                             | 5/8           | 1             | 1/4           | 46074                 | -     | 46075 | 46076 | 5                                   | 42024                                        |                   |                                                                                     |





## Cylindrical with pointed cone end, shape G

POLICAP® abrasive caps in tapered conical shape G with radius end.  
The taper angle of the cone is 30°.

### Abrasive:

Aluminum oxide A

Grit size colour code:

60 and 80 = brown

150 = black

280 = red-brown



| D<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       | Compatible<br>holder | Opt.<br>RPM |  |
|---------------|---------------|---------------------|-------|-------|-------|----------------------|-------------|-------------------------------------------------------------------------------------|
|               |               | 60                  | 80    | 150   | 280   |                      |             |                                                                                     |
| 3/16          | 7/16          | -                   | 46047 | 46048 | 46049 | 42014                | 40,000      | 50                                                                                  |
| 9/32          | 1/2           | 46050               | -     | 46051 | 46052 | 42015                | 30,000      | 50                                                                                  |
| 3/8           | 5/8           | 46053               | -     | 46054 | 46055 | 42016                | 20,000      | 50                                                                                  |
| 1/2           | 11/16         | 46077               | -     | 46078 | 46079 | 42025                | 16,000      | 50                                                                                  |
| 5/8           | 1             | 46080               | -     | 46081 | 46082 | 42026                | 12,000      | 50                                                                                  |

## Cylindrical with pointed cone end, shape G holders

Matching POLICAP® abrasive cap holder in tapered shape G with radius end.



| D<br>[Inches] | T<br>[Inches] | S<br>[Inches] | L<br>[Inches] | EDP<br>number | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------|---------------|-------------|--------------------------------------------------------------------------------------|
| 3/16          | 7/16          | 1/8           | 1-1/4         | 42014         | 95,000      | 5                                                                                    |
| 9/32          | 1/2           | 1/8           | 1-1/4         | 42015         | 65,000      | 5                                                                                    |
| 3/8           | 5/8           | 1/8           | 1-1/4         | 42016         | 45,000      | 5                                                                                    |
| 1/2           | 11/16         | 1/4           | 1-5/8         | 42025         | 35,000      | 5                                                                                    |
| 5/8           | 1             | 1/4           | 1-5/8         | 42026         | 30,000      | 5                                                                                    |

## Cylindrical with pointed cone end, shape G set

110-piece set of various POLICAP® abrasive caps with matching holders in tapered conical shape G with radius end.

### Contents:

- 105 pieces POLICAP® abrasive caps
- 5 pieces POLICAP® abrasive cap holders  
(see table for details)

### Abrasive:

Aluminum oxide A

60 and 80 = brown

150 = black

280 = red-brown

### Advantages:

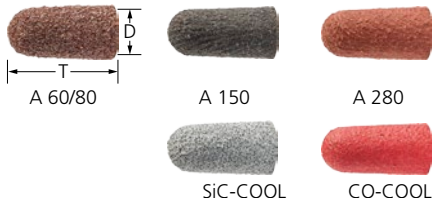
- Sturdy, reusable plastic packaging.



| Case<br>dimensions<br>[Inches] | D<br>[Inches] | T<br>[Inches] | S<br>[Inches] | Grit and<br>included EDP |       |       |       | POLICAP®<br>qty. included<br>[each] | POLICAP® holder<br>included EDP<br>[1 piece] | Set EDP<br>number |  |
|--------------------------------|---------------|---------------|---------------|--------------------------|-------|-------|-------|-------------------------------------|----------------------------------------------|-------------------|---------------------------------------------------------------------------------------|
|                                |               |               |               | 60                       | 80    | 150   | 280   |                                     |                                              |                   |                                                                                       |
| 7 x 5-3/4 x 1-1/2              | 3/16          | 7/16          | 1/8           | -                        | 46047 | 46048 | 46049 | 10                                  | 42014                                        | 46095             | 1                                                                                     |
|                                | 9/32          | 1/2           | 1/8           | 46050                    | -     | 46051 | 46052 | 10                                  | 42015                                        |                   |                                                                                       |
|                                | 3/8           | 5/8           | 1/8           | 46053                    | -     | 46054 | 46055 | 5                                   | 42016                                        |                   |                                                                                       |
|                                | 1/2           | 11/16         | 1/4           | 46077                    | -     | 46078 | 46079 | 5                                   | 42025                                        |                   |                                                                                       |
|                                | 5/8           | 1             | 1/4           | 46080                    | -     | 46081 | 46082 | 5                                   | 42026                                        |                   |                                                                                       |

# POLICAP® seamless abrasive caps

Abrasive caps, cap holders, and sets



## Tapered with radius end, shape L

POLICAP® abrasive caps in conical shape L with radius end.

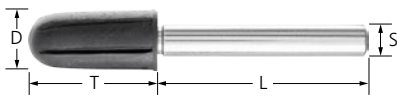
### Abrasive:

Aluminum oxide A  
Silicon carbide SiC-COOL (grey)  
Ceramic oxide CO-COOL (red)

Grit size colour code for aluminum oxide A:

60 and 80= brown  
150 = black  
280 = red-brown

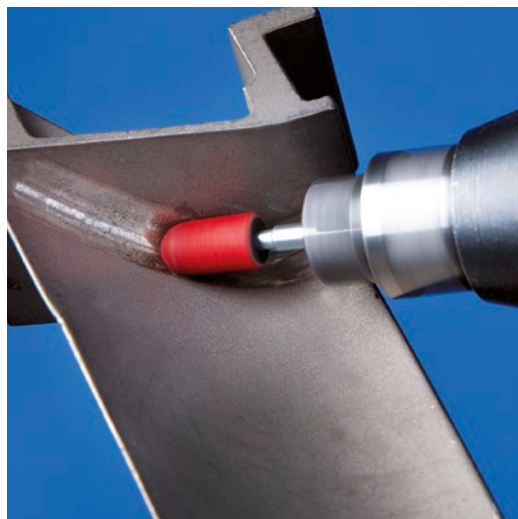
| D<br>[Inches]            | T<br>[Inches] | Grit and EDP number |       |       |       |       | Compatible<br>holder | Opt.<br>RPM |  |
|--------------------------|---------------|---------------------|-------|-------|-------|-------|----------------------|-------------|-------------------------------------------------------------------------------------|
|                          |               | 60                  | 80    | 120   | 150   | 280   |                      |             |                                                                                     |
| Aluminum oxide A         |               |                     |       |       |       |       |                      |             |                                                                                     |
| 1/4                      | 5/8           | -                   | 46083 | -     | 46084 | 46085 | 42017                | 40,000      | 50                                                                                  |
| 7/16                     | 1             | 46056               | -     | -     | 46057 | 46058 | 42018                | 20,000      | 50                                                                                  |
| 5/8                      | 1-1/4         | 46059               | -     | -     | 46060 | 46061 | 42019                | 12,000      | 50                                                                                  |
| 27/32                    | 1-9/16        | 46062               | -     | -     | 46063 | 46064 | 42020                | 9,500       | 50                                                                                  |
| Silicon carbide SiC-COOL |               |                     |       |       |       |       |                      |             |                                                                                     |
| 1/4                      | 5/8           | -                   | 46131 | -     | 46132 | -     | 42017                | 40,000      | 50                                                                                  |
| 7/16                     | 1             | -                   | 46134 | -     | 46135 | -     | 42018                | 20,000      | 50                                                                                  |
| 5/8                      | 1-1/4         | -                   | 46137 | -     | 46138 | -     | 42019                | 12,000      | 50                                                                                  |
| 27/32                    | 1-9/16        | -                   | 46140 | -     | 46141 | -     | 42020                | 9,500       | 50                                                                                  |
| Ceramic oxide CO-COOL    |               |                     |       |       |       |       |                      |             |                                                                                     |
| 1/4                      | 5/8           | -                   | 46143 | 46144 | -     | -     | 42017                | 40,000      | 50                                                                                  |
| 7/16                     | 1             | -                   | 46146 | 46147 | -     | -     | 42018                | 20,000      | 50                                                                                  |
| 5/8                      | 1-1/4         | -                   | 46149 | 46150 | -     | -     | 42019                | 12,000      | 50                                                                                  |
| 27/32                    | 1-9/16        | -                   | 46152 | 46153 | -     | -     | 42020                | 9,500       | 50                                                                                  |



## Tapered with radius end, shape L holders

Matching POLICAP® abrasive cap holder in conical shape L with radius end.

| D<br>[Inches] | T<br>[Inches] | S<br>[Inches] | L<br>[Inches] | EDP<br>number | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------|---------------|-------------|---------------------------------------------------------------------------------------|
| 1/4           | 5/8           | 1/4           | 1-5/8         | 42017         | 95,000      | 5                                                                                     |
| 7/16          | 1             | 1/4           | 1-5/8         | 42018         | 40,000      | 5                                                                                     |
| 5/8           | 1-1/4         | 1/4           | 1-5/8         | 42019         | 30,000      | 5                                                                                     |
| 27/32         | 1-9/16        | 1/4           | 1-5/8         | 42020         | 20,000      | 5                                                                                     |



## POLICAP® sets

Set of various POLICAP® abrasive caps with matching holders.

### Contents PCS 285:

- 270 pieces POLICAP® abrasive caps
- 15 pieces POLICAP® abrasive cap holders (see table for details)

### Contents PCS 650:

- 640 pieces POLICAP® abrasive caps
- 10 pieces POLICAP® abrasive cap holders (see table for details)

### Advantages:

- Sturdy, reusable plastic packaging.

### Abrasive:

Aluminum oxide A

Grit size colour code:

150 = black

280 = red-brown



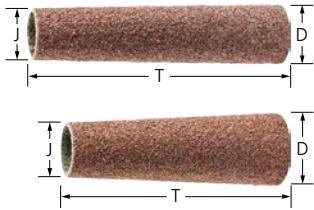
| Case dimensions<br>[Inches] | Shape | D<br>[Inches] | T<br>[Inches] | S<br>[Inches] | Grit and included EDP |       |       |       | POLICAP®<br>qty. included<br>[each] | POLICAP® holder<br>included EDP<br>[1 piece] | Set EDP<br>number |  |
|-----------------------------|-------|---------------|---------------|---------------|-----------------------|-------|-------|-------|-------------------------------------|----------------------------------------------|-------------------|-------------------------------------------------------------------------------------|
|                             |       |               |               |               | 60                    | 80    | 150   | 280   |                                     |                                              |                   |                                                                                     |
| POLICAP® set PCS 285        |       |               |               |               |                       |       |       |       |                                     |                                              |                   |                                                                                     |
| 13 x 9-1/4 x 2              | A     | 3/16          | 3/8           | 1/8           | -                     | 46029 | 46030 | 46031 | 6                                   | 42014                                        | 46090             | 1                                                                                   |
|                             |       | 9/32          | 1/2           | 1/8           | 46032                 | -     | 46033 | 46034 | 6                                   | 42015                                        |                   |                                                                                     |
|                             |       | 3/8           | 5/8           | 1/8           | 46035                 | -     | 46036 | 46037 | 6                                   | 42016                                        |                   |                                                                                     |
|                             |       | 1/2           | 11/16         | 1/4           | 46065                 | -     | 46066 | 46067 | 6                                   | 42025                                        |                   |                                                                                     |
|                             |       | 5/8           | 1             | 1/4           | 46068                 | -     | 46069 | 46070 | 6                                   | 42026                                        |                   |                                                                                     |
|                             | C     | 3/16          | 7/16          | 1/8           | -                     | 46038 | 46039 | 46040 | 6                                   | 42011                                        |                   |                                                                                     |
|                             |       | 9/32          | 1/2           | 1/8           | 46041                 | -     | 46042 | 46043 | 6                                   | 42012                                        |                   |                                                                                     |
|                             |       | 3/8           | 5/8           | 1/8           | 46044                 | -     | 46045 | 46046 | 6                                   | 42013                                        |                   |                                                                                     |
|                             |       | 1/2           | 11/16         | 1/4           | 46071                 | -     | 46072 | 46073 | 6                                   | 42023                                        |                   |                                                                                     |
|                             |       | 5/8           | 1             | 1/4           | 46074                 | -     | 46075 | 46076 | 6                                   | 42024                                        |                   |                                                                                     |
|                             | G     | 3/16          | 7/16          | 1/8           | -                     | 46047 | 46048 | 46049 | 6                                   | 42014                                        |                   |                                                                                     |
|                             |       | 9/32          | 1/2           | 1/8           | 46050                 | -     | 46051 | 46052 | 6                                   | 42015                                        |                   |                                                                                     |
|                             |       | 3/8           | 5/8           | 1/8           | 46053                 | -     | 46054 | 46055 | 6                                   | 42016                                        |                   |                                                                                     |
|                             |       | 1/2           | 11/16         | 1/4           | 46077                 | -     | 46078 | 46079 | 6                                   | 42025                                        |                   |                                                                                     |
|                             |       | 5/8           | 1             | 1/4           | 46080                 | -     | 46081 | 46082 | 6                                   | 42026                                        |                   |                                                                                     |

### POLICAP® set PCS 650

|                |   |      |       |     |   |   |       |       |    |       |       |   |
|----------------|---|------|-------|-----|---|---|-------|-------|----|-------|-------|---|
| 13 x 9-1/4 x 2 | A | 3/16 | 3/8   | 1/8 | - | - | 46030 | 46031 | 50 | 42014 | 46091 | 1 |
|                |   | 9/32 | 1/2   | 1/8 | - | - | 46033 | 46034 | 50 | 42015 |       |   |
|                |   | 3/8  | 5/8   | 1/8 | - | - | 46036 | 46037 | 25 | 42016 |       |   |
|                |   | 1/2  | 11/16 | 1/4 | - | - | 46066 | 46067 | 25 | 42025 |       |   |
|                |   | 5/8  | 1     | 1/4 | - | - | 46069 | 46070 | 10 | 42026 |       |   |
|                | G | 3/16 | 7/16  | 1/8 | - | - | 46048 | 46049 | 50 | 42014 |       |   |
|                |   | 9/32 | 1/2   | 1/8 | - | - | 46051 | 46052 | 50 | 42015 |       |   |
|                |   | 3/8  | 5/8   | 1/8 | - | - | 46054 | 46055 | 25 | 42016 |       |   |
|                |   | 1/2  | 11/16 | 1/4 | - | - | 46078 | 46079 | 25 | 42025 |       |   |
|                |   | 5/8  | 1     | 1/4 | - | - | 46081 | 46082 | 10 | 42026 |       |   |

# POLICAP® abrasive cones and holders

## Abrasive cones and holders



### Abrasive cones

POLICAP® abrasive cones with a tapered cylindrical shape.

#### Abrasive:

Aluminum oxide A

Grit size colour code:

60 = brown

150 = black

280 = red-brown

| D<br>[Inches] | J<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       | Compatible<br>holder | Opt.<br>RPM |  |
|---------------|---------------|---------------|---------------------|-------|-------|----------------------|-------------|-------------------------------------------------------------------------------------|
|               |               |               | 60                  | 150   | 280   |                      |             |                                                                                     |
| 5/16          | 3/16          | 3-3/8         | 46008               | 46009 | 46010 | 42001                | 12,000      | 10                                                                                  |
| 1/2           | 7/16          | 3-3/8         | 46011               | 46012 | -     | 42002                | 12,000      | 10                                                                                  |
| 3/4           | 5/8           | 3-3/8         | 46014               | 46015 | -     | 42003                | 12,000      | 10                                                                                  |
| 7/8           | 3/4           | 3-3/8         | 46017               | 46018 | -     | 42004                | 12,000      | 10                                                                                  |
| 3/4           | 1/2           | 2-1/2         | 46020               | 46021 | -     | 42005                | 18,500      | 10                                                                                  |
| 1-1/2         | 7/8           | 2-3/8         | 46023               | -     | -     | 42006                | 13,000      | 10                                                                                  |



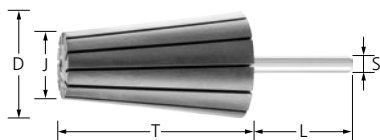
### Rubber abrasive cone holders, shape L

Matching POLICAP® rubber abrasive cone holder in conical shape L with radius end.

#### Advantages:

- The abrasive spiral bands are firmly held in place on the holder as the rubber surface offers excellent adhesion.

| D<br>[Inches] | T<br>[Inches] | S<br>[Inches] | L<br>[Inches] | EDP<br>number | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------|---------------|-------------|---------------------------------------------------------------------------------------|
| 5/16          | 3-3/8         | 1/4           | 1-9/16        | 42001         | 20,000      | 5                                                                                     |
| 1/2           | 3-3/8         | 1/4           | 1-9/16        | 42002         | 15,000      | 5                                                                                     |
| 3/4           | 3-3/8         | 1/4           | 1-9/16        | 42003         | 13,000      | 5                                                                                     |
| 7/8           | 3-3/8         | 1/4           | 1-9/16        | 42004         | 12,000      | 5                                                                                     |



### Rubber drum holder

Matching POLICAP® rubber drum holder with a tapered cylindrical shape.

#### Advantages:

- The abrasive spiral bands are firmly held in place on the holder as the holder expands during use.

| D<br>[Inches] | J<br>[Inches] | T<br>[Inches] | S<br>[Inches] | L<br>[Inches] | EDP<br>number | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------|---------------|---------------|-------------|---------------------------------------------------------------------------------------|
| 3/4           | 1/2           | 2-1/2         | 1/4           | 1-5/8         | 42005         | 26,000      | 5                                                                                     |
| 1/2           | 7/8           | 2-3/8         | 1/4           | 1-5/8         | 42006         | 15,900      | 5                                                                                     |



On mounted flap wheels, coated abrasive flaps are arranged radially around the wheel axis in a fan-type structure. Their flexibility enables them to adapt perfectly to the contours of the workpiece. The abrasive grain is embedded in the sturdy, flexible cloth backing material by means of a resinoid bond.

In ISO 3919, mounted flap wheels are designated as "flap wheels with shaft".

### Factors that influence working results:

#### ■ Flap wheel wear and thermal load:

Flap wheel wear and the thermal load of the workpiece are reduced by decreasing the contact pressure, peripheral speed, and adding grinding oil.

#### ■ Stock removal:

Stock removal rate should be increased by using a coarser granulation and not by increasing the contact pressure. This avoids unnecessary flap wheel wear and prevents the thermal load of the workpiece.

#### ■ Surface roughness:

Increasing the peripheral speed achieves a slightly finer surface. Increasing the contact pressure makes the surface slightly more coarse. The softer the material to be finished, the coarser the surface (when using the same grit sizes).

### Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- Safety is only guaranteed when:
  - The clamping depth is at least 5/8.
  - The specified maximum rotational speed is not exceeded with unsupported shank lengths.
- The contact pressure has to be reduced significantly when the optimum rotational speed is exceeded.



### PFERDVALUE®:

**PFERDERGONOMICS®** recommends mounted flap wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.



### Advantages:

- Optimum adaptation to contours due to high flexibility.
- Consistently high stock removal throughout the entire service life as new, aggressive abrasive material is constantly exposed.
- Face-down use very close to edges and in corners is possible due to the flat, molded-core design.

### Applications:

- Leveling
- Deburring
- Surface work
- Work on weld seams
- Structuring surfaces
- Step-by-step fine grinding

### Recommendations for use:

- For best performance, use with 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 flap wheel wear.
- Use grinding oil which is recommended for the material in order to considerably increase the service life and abrasive performance of the flap wheels.

### Compatible power tools:

- Flexible shaft drives
- Straight grinders



# Flap wheels

## General information – Mounted flap wheels



### Quick product selection guide

| Material group ▼          |                                             |                                                                                                           | Abrasive ► | Aluminum oxide A | Zirconia alumina Z-COOL | Ceramic oxide CO-COOL | Silicon carbide SiC-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-based 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, paintwork                                     | ○          |                  |                         | ●                     |                          |

● = highly recommended

○ = recommended

### Recommended rotational speed range

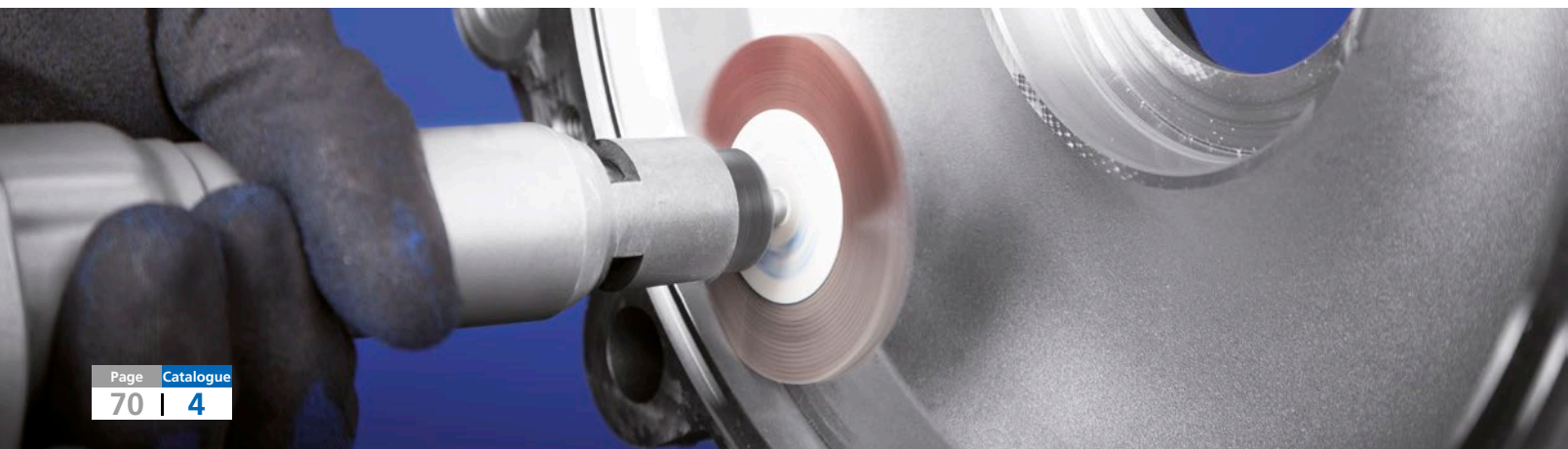
#### Example:

EDP 45251, Aluminum oxide A, dia. 2"

Peripheral speed: 3,000–4,000 SFPM

**Rotational speed: 5,700–7,600 RPM**

| Wheel dia. [Inches] | Peripheral speed [SFPM] |        |        |
|---------------------|-------------------------|--------|--------|
|                     | 3,000                   | 4,000  | 7,900  |
|                     | Rotational speeds [RPM] |        |        |
| 3/8                 | 30,600                  | 40,700 | 80,500 |
| 5/8                 | 18,300                  | 24,400 | 48,300 |
| 3/4                 | 15,300                  | 20,400 | 40,200 |
| 1                   | 11,500                  | 15,300 | 30,200 |
| 1-3/16              | 9,700                   | 12,900 | 25,400 |
| 1-3/8               | 8,300                   | 11,100 | 21,900 |
| 1-1/2               | 7,600                   | 10,200 | 20,100 |
| 2                   | 5,700                   | 7,600  | 15,100 |
| 2-1/2               | 4,600                   | 6,100  | 12,100 |
| 3                   | 3,800                   | 5,100  | 10,100 |



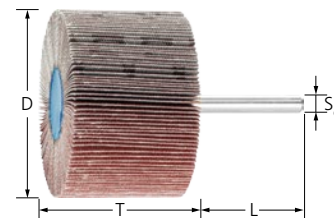
### Aluminum oxide A

For universal applications from coarse to fine grinding.

#### Abrasive:

Aluminum oxide A

#### PFERDVALUE®:



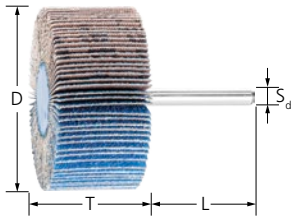
| D<br>[Inches]                                 | T<br>[Inches] | Grit and EDP number |       |       |       |       |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|-----------------------------------------------|---------------|---------------------|-------|-------|-------|-------|-------|-------|-------------|-------------|-------------------------------------------------------------------------------------|
|                                               |               | 40                  | 60    | 80    | 120   | 180   | 240   | 320   |             |             |                                                                                     |
| Shank dia. 1/8" x 1-1/2" [S <sub>d</sub> x L] |               |                     |       |       |       |       |       |       |             |             |                                                                                     |
| 3/8                                           | 3/8           | -                   | 45070 | 45071 | 45072 | 45074 | 45075 | -     | 38,000      | 75,000      | 10                                                                                  |
|                                               | 5/8           | -                   | 45077 | 45078 | 45079 | 45081 | 45082 | -     | 38,000      | 75,000      | 10                                                                                  |
| 5/8                                           | 3/8           | -                   | 45091 | 45092 | 45093 | 45095 | 45096 | -     | 25,000      | 50,000      | 10                                                                                  |
|                                               | 5/8           | -                   | 45098 | 45099 | 45100 | 45102 | 45103 | -     | 25,000      | 50,000      | 10                                                                                  |
| 3/4                                           | 3/8           | -                   | 45154 | 45155 | 45156 | 45157 | 45158 | -     | 19,000      | 38,100      | 10                                                                                  |
| 1                                             | 1             | -                   | 45178 | 45179 | 45180 | 45181 | 45182 | -     | 15,000      | 25,400      | 10                                                                                  |
| 1-3/16                                        | 3/8           | -                   | 45013 | 45014 | 45015 | 45016 | 45017 | -     | 12,000      | 25,400      | 10                                                                                  |
| Shank dia. 1/4" x 1-1/2" [S <sub>d</sub> x L] |               |                     |       |       |       |       |       |       |             |             |                                                                                     |
| 3/4                                           | 3/8           | -                   | 45160 | 45161 | 45162 | -     | -     | -     | 19,000      | 38,100      | 10                                                                                  |
| 1                                             | 5/8           | -                   | 45172 | 45173 | 45174 | 45175 | -     | -     | 15,000      | 25,000      | 10                                                                                  |
|                                               | 1             | 45463               | 45184 | 45185 | 45186 | 45187 | 45188 | 45189 | 15,000      | 25,000      | 10                                                                                  |
| 1-3/16                                        | 1/4           | -                   | 45007 | 45008 | 45009 | -     | -     | -     | 12,000      | 25,000      | 10                                                                                  |
| 1-3/8                                         | 5/8           | -                   | 45226 | 45227 | 45228 | 45229 | 45230 | -     | 10,900      | 23,000      | 10                                                                                  |
| 1-1/2                                         | 1/2           | 45244               | 45245 | 45246 | 45247 | -     | -     | -     | 9,600       | 23,000      | 10                                                                                  |
|                                               | 1             | -                   | 45232 | 45233 | 45234 | 45235 | 45236 | 45237 | 9,600       | 23,000      | 10                                                                                  |
| 2                                             | 1/2           | -                   | 45251 | 45252 | 45253 | -     | -     | -     | 7,000       | 23,000      | 10                                                                                  |
|                                               | 3/4           | -                   | 45258 | 45259 | 45260 | 45261 | -     | -     | 7,000       | 23,000      | 10                                                                                  |
|                                               | 1             | 45461               | 45238 | 45239 | 45240 | 45241 | 45242 | 45243 | 7,000       | 23,000      | 10                                                                                  |
|                                               | 1-1/2         | -                   | 45190 | 45191 | 45192 | -     | -     | -     | 7,000       | 15,000      | 10                                                                                  |
| 2-1/2                                         | 1/2           | 45305               | 45264 | 45265 | 45266 | -     | -     | -     | 6,300       | 23,000      | 10                                                                                  |
|                                               | 1             | -                   | 45270 | 45271 | 45272 | 45273 | 45274 | 45275 | 6,300       | 23,000      | 10                                                                                  |
|                                               | 1-1/2         | 45306               | 45276 | 45277 | 45278 | -     | -     | -     | 6,300       | 13,000      | 10                                                                                  |
| 3                                             | 1/2           | 45220               | 45196 | 45197 | 45198 | -     | -     | -     | 4,800       | 20,000      | 10                                                                                  |
|                                               | 1             | 45462               | 45208 | 45209 | 45210 | 45211 | 45212 | 45213 | 4,800       | 20,000      | 10                                                                                  |
|                                               | 2             | -                   | 45214 | 45215 | 45216 | -     | -     | -     | 4,800       | 6,000       | 10                                                                                  |





# Flap wheels

## Mounted flap wheels



### Zirconia alumina Z-COOL

For coarse grinding work with a high stock removal rate and cool grinding.

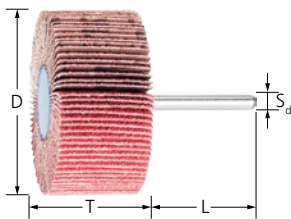
Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

**Abrasive:**  
Zirconia alumina Z-COOL

**PFERDVALUE®:**



| D<br>[Inches]                                 | T<br>[Inches] | Grit and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|-----------------------------------------------|---------------|---------------------|-------|-------|-------------|-------------|-------------------------------------------------------------------------------------|
|                                               |               | 60                  | 80    | 120   |             |             |                                                                                     |
| Shank dia. 1/4" x 1-1/2" [S <sub>d</sub> x L] |               |                     |       |       |             |             |                                                                                     |
| 1                                             | 1             | 45465               | 45466 | 45467 | 15,000      | 25,000      | 10                                                                                  |
| 1-1/2                                         | 1             | 45469               | 45470 | 45471 | 9,600       | 25,000      | 10                                                                                  |
| 2                                             | 1             | 45473               | 45474 | 45475 | 7,000       | 23,000      | 10                                                                                  |
| 2-1/2                                         | 1             | 45477               | 45478 | 45479 | 7,000       | 23,000      | 10                                                                                  |
|                                               | 1-1/2         | 45488               | 45489 | 45490 | 6,300       | 13,000      | 10                                                                                  |
| 3                                             | 1/2           | 45497               | 45498 | 45499 | 4,800       | 20,000      | 10                                                                                  |
|                                               | 1             | 45481               | 45482 | 45483 | 4,800       | 20,000      | 10                                                                                  |



### Ceramic oxide CO-COOL

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

**Abrasive:**  
Ceramic oxide CO-COOL

**PFERDVALUE®:**



| D<br>[Inches]                                 | T<br>[Inches] | Grit and EDP number |       |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|-----------------------------------------------|---------------|---------------------|-------|-------|-------|-------------|-------------|---------------------------------------------------------------------------------------|
|                                               |               | 40                  | 60    | 80    | 120   |             |             |                                                                                       |
| Shank dia. 1/4" x 1-1/2" [S <sub>d</sub> x L] |               |                     |       |       |       |             |             |                                                                                       |
| 1                                             | 1             | 45279               | 45280 | 45281 | 45282 | 15,000      | 25,000      | 10                                                                                    |
| 1-1/2                                         | 1             | 45284               | 45285 | 45286 | 45287 | 9,600       | 25,000      | 10                                                                                    |
| 2                                             | 1             | 45289               | 45290 | 45291 | 45292 | 7,000       | 23,000      | 10                                                                                    |
| 2-1/2                                         | 1             | 45434               | 45435 | 45436 | 45437 | 7,000       | 23,000      | 10                                                                                    |
|                                               | 1-1/2         | 45443               | 45444 | 45445 | 45446 | 6,300       | 13,000      | 10                                                                                    |
| 3                                             | 1/2           | 45456               | 45457 | 45458 | 45459 | 4,800       | 20,000      | 10                                                                                    |
|                                               | 1             | 45294               | 45295 | 45296 | 45297 | 4,800       | 20,000      | 10                                                                                    |



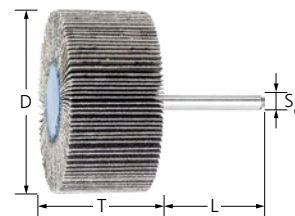


### Silicon carbide SiC

For universal grinding work on components made from aluminum, copper, bronze, titanium and fibre-reinforced plastics.  
Particularly recommended for use on titanium alloys.  
Ideally suited to use in the aeronautical industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.

**Abrasive:**  
Silicon carbide SiC

PFERDVALUE®:



| D<br>[Inches]                                 | T<br>[Inches] | Grit and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|-----------------------------------------------|---------------|---------------------|-------|-------|-------------|-------------|-------------------------------------------------------------------------------------|
|                                               |               | 60                  | 80    | 120   |             |             |                                                                                     |
| Shank dia. 1/4" x 1-1/2" [S <sub>d</sub> x L] |               |                     |       |       |             |             |                                                                                     |
| 1                                             | 1/2           | 45415               | 45416 | 45417 | 15,000      | 25,000      | 10                                                                                  |
|                                               | 1             | 45485               | 45486 | 45487 | 15,000      | 25,000      | 10                                                                                  |
| 2                                             | 1/2           | 45426               | 45427 | 45428 | 7,000       | 23,000      | 10                                                                                  |
|                                               | 1             | 45491               | 45492 | 45493 | 7,000       | 23,000      | 10                                                                                  |
| 3                                             | 1/2           | 45429               | 45438 | 45439 | 4,800       | 20,000      | 10                                                                                  |
|                                               | 1             | 45494               | 45495 | 45496 | 4,800       | 20,000      | 10                                                                                  |

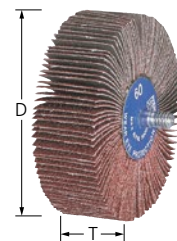
## Quick-change flap wheels and accessories

### Aluminum oxide A

This flap wheel spins on and off without the use of tools. Unique design prevents shaft from pulling out of core while maintaining perfect balance at operating speed. Each package contains 1 shank adaptor with 1/4-20 thread.

**Abrasive:**  
Aluminum oxide A

PFERDVALUE®:



| D<br>[Inches] | T<br>[Inches] | Thread | Grit and EDP number |       |       |       |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|--------|---------------------|-------|-------|-------|-------|-------|-------------|-------------|---------------------------------------------------------------------------------------|
|               |               |        | 40                  | 60    | 80    | 120   | 180   | 240   |             |             |                                                                                       |
| 1             | 5/8           | 1/4-20 | -                   | 45300 | 45301 | 45302 | -     | -     | 15,000      | 25,000      | 10                                                                                    |
|               | 1             | 1/4-20 | 45316               | 45310 | 45311 | 45312 | 45313 | 45314 | 15,000      | 25,000      | 10                                                                                    |
| 1-1/2         | 1/2           | 1/4-20 | -                   | 45330 | 45331 | 45332 | -     | -     | 9,600       | 23,000      | 10                                                                                    |
|               | 1             | 1/4-20 | 45318               | 45340 | 45341 | 45342 | -     | -     | 9,600       | 23,000      | 10                                                                                    |
| 2             | 1/2           | 1/4-20 | -                   | 45350 | 45351 | 45352 | -     | -     | 7,000       | 23,000      | 10                                                                                    |
|               | 1             | 1/4-20 | 45369               | 45370 | 45371 | 45372 | 45373 | 45374 | 7,000       | 23,000      | 10                                                                                    |
| 2-1/2         | 1/2           | 1/4-20 | -                   | 45410 | 45411 | 45412 | -     | -     | 6,300       | 23,000      | 10                                                                                    |
|               | 1             | 1/4-20 | -                   | 45420 | 45421 | 45422 | 45423 | -     | 6,300       | 23,000      | 10                                                                                    |
| 3             | 1/2           | 1/4-20 | 45317               | 45430 | 45431 | 45432 | -     | -     | 4,800       | 20,000      | 10                                                                                    |
|               | 1             | 1/4-20 | 45449               | 45450 | 45451 | 45452 | 45453 | 45454 | 4,800       | 20,000      | 10                                                                                    |

### Threaded shank adapter for quick-change flap wheels

1/4" shank with 1/4-20 female thread.



| Shank dia.<br>[Inches] | Thread | EDP number |  |
|------------------------|--------|------------|---------------------------------------------------------------------------------------|
| 1/4                    | 1/4-20 | 45299      | 10                                                                                    |

# Flap wheels

## Unmounted flap wheels and accessories

On unmounted flap wheels, coated abrasive flaps are arranged radially around the wheel axis in a fan-type structure. Their flexibility enables them to adapt perfectly to the contours of the workpiece. The abrasive grain is embedded in the sturdy, flexible cloth backing material by means of a resinoid bond.

In ISO 5429, unmounted flap wheels are designated as "flap wheels".

### Factors that influence working results:

#### ■ Flap wheel wear and thermal load:

Flap wheel wear and the thermal load of the workpiece are reduced by decreasing the contact pressure and peripheral speed, and adding grinding oil.

#### ■ Stock removal:

Stock removal rate should be increased by using a coarser grit and not by increasing the contact pressure. This avoids unnecessary flap wheel wear and prevents the thermal load of the workpiece.

#### ■ Surface roughness:

Increasing the peripheral speed achieves a slightly finer surface. Increasing the contact pressure makes the surface slightly more coarse. The softer the material to be finished, the coarser the surface (when using the same grit sizes).

### Advantages:

- Optimum adaptation to contours due to high flexibility.
- Consistently high stock removal throughout the entire service life as new, aggressive abrasive material is constantly freed up.
- Face-down use very close to edges and in corners is possible due to the special clamping system.

### Workpiece materials:

- Can be used on nearly all materials.

### Applications:

- Leveling
- Deburring
- Surface work
- Work on weld seams
- Structuring surfaces
- Step-by-step fine grinding

### Recommendations for use:

- For best performance, use with a recommended peripheral speed of 3,000–6,000 SFPM. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and service life.
- Use grinding oil which is recommended for the material in order to considerably increase the service life and abrasive performance of the flap wheels.
- For best performance, use a power tool with 1,000–1,500 watts.

### Ordering notes:

- 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".

### Safety notes:

- Unmounted flap wheels are generally to be used with the matching clamping flanges.
- The maximum permitted peripheral speed is defined as follows:
  - Unmounted flap wheels = 9,800 SFPM
  - Unmounted flap wheels for angle grinders = 15,800 SFPM
- Flap drums = 6,300 SFPM
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The contact pressure has to be reduced significantly when the optimum rotational speed is exceeded.



### Accessories:

- Arbors with clamping flange
- Reducing flanges for unmounted flap wheels

### PFERDVALUE®:

PFERDERGONOMICS® recommends unmounted flap wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.



### Recommended rotational speed range

#### Example:

EDP 45620, Aluminum oxide A, dia. 6"

Peripheral speed: 3,000–6,000 SFPM

Rotational speed: 1,900–3,800 RPM

| Wheel dia.<br>[Inches] | Peripheral speed [SFPM] |       |       |       |       |       |        |
|------------------------|-------------------------|-------|-------|-------|-------|-------|--------|
|                        | 3,000                   | 4,000 | 5,000 | 6,000 | 7,900 | 9,900 | 15,800 |
|                        | Rotational speeds [RPM] |       |       |       |       |       |        |
| 4                      | 2,900                   | 3,800 | 4,800 | 5,700 | 7,500 | 9,500 | 15,100 |
| 4-1/2                  | 2,500                   | 3,400 | 4,200 | 5,100 | 6,700 | 8,400 | 13,400 |
| 5                      | 2,300                   | 3,100 | 3,800 | 4,600 | 6,000 | 7,600 | 12,100 |
| 6                      | 1,900                   | 2,500 | 3,200 | 3,800 | 5,000 | 6,300 | 10,100 |
| 7                      | 1,600                   | 2,200 | 2,700 | 3,300 | 4,300 | 5,400 | 8,600  |
| 8                      | 1,400                   | 1,900 | 2,400 | 2,900 | 3,800 | 4,700 | 7,500  |

### Aluminum oxide A

For universal applications from coarse to fine grinding.

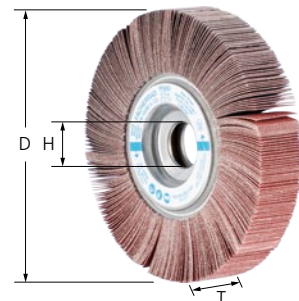
#### Abrasive:

Aluminum oxide A

#### Compatible power tools:

flexible shaft drive, straight grinder

#### PFERDVALUE®:



#### Ordering notes:

- Please order the matching arbor separately.
- Matching arbor for a diameter of 4–6":  
EDP 45714
- Matching arbor for a diameter of 8–10":  
EDP 45715

| D<br>[Inches] | T<br>[Inches] | H<br>[Inches] | Grit and EDP number |       |       |       |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------------|-------|-------|-------|-------|-------|-------------|-------------|-------------------------------------------------------------------------------------|
|               |               |               | 40                  | 60    | 80    | 120   | 180   | 240   |             |             |                                                                                     |
| 4             | 1             | 1             | 45530               | 45532 | 45533 | 45535 | 45536 | -     | 5,500       | 9,500       | 2                                                                                   |
|               | 2             | 1             | -                   | 45552 | 45553 | 45555 | -     | -     | 5,500       | 9,500       | 2                                                                                   |
| 6             | 1             | 1             | 45600               | 45602 | 45603 | 45605 | 45607 | -     | 3,500       | 6,300       | 2                                                                                   |
|               | 1-1/2         | 1             | 45610               | 45612 | 45613 | -     | -     | -     | 3,500       | 6,300       | 2                                                                                   |
|               | 2             | 1             | 45620               | 45622 | 45623 | 45625 | 45626 | 45627 | 3,500       | 6,300       | 2                                                                                   |
| 8             | 1             | 1-3/4         | -                   | 45642 | 45643 | 45645 | -     | -     | 2,600       | 4,700       | 2                                                                                   |
|               | 2             | 1-3/4         | -                   | 45652 | 45653 | 45655 | -     | -     | 2,600       | 4,700       | 2                                                                                   |

### Ceramic oxide CO-COOL

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

#### Abrasive:

Ceramic oxide CO-COOL

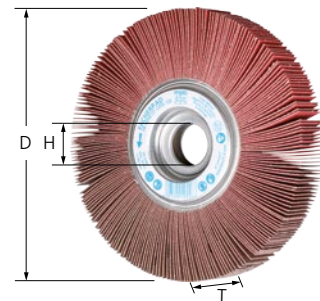
#### Compatible power tools:

flexible shaft drive, straight grinder

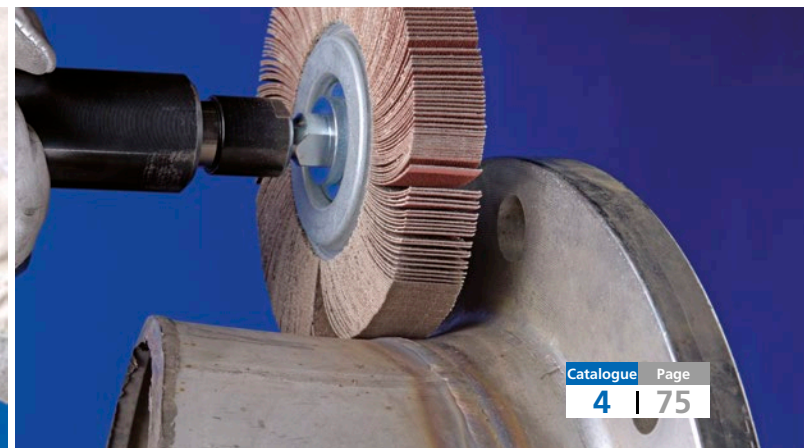
#### Ordering notes:

- Please order the matching arbor separately.
- Matching arbor for a diameter of 6":  
EDP 45714

#### PFERDVALUE®:

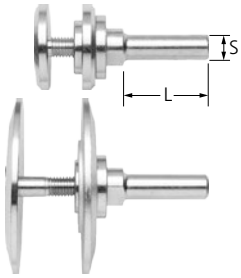


| D<br>[Inches] | T<br>[Inches] | H<br>[Inches] | Grit and EDP number |       |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------------|-------|-------|-------|-------------|-------------|---------------------------------------------------------------------------------------|
|               |               |               | 40                  | 60    | 80    | 120   |             |             |                                                                                       |
| 6             | 1             | 1             | 45840               | 45841 | 45842 | 45843 | 3,500       | 6,300       | 2                                                                                     |
|               | 2             | 1             | 45844               | 45845 | 45846 | 45847 | 3,500       | 6,300       | 2                                                                                     |



# Flap wheels

## Unmounted flap wheels and accessories



### Clamping flanges for unmounted flap wheels

For mounting PFERD unmounted flap wheels.  
The clamping flanges are designed to lie countersunk in the wheel.

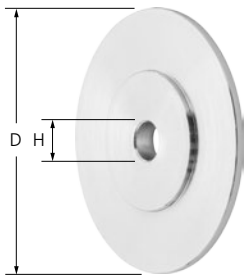
#### Advantages:

- Can be used face-down very close to edges and in angles due to special clamping system.

#### Ordering notes:

- Included in delivery: Arbor, clamping diameter of 1/2", 2 flanges and matching screws (for different unmounted flap wheel widths).
- Contents include one arbor (1/2" clamping dia.), two flanges, compatible clamping screws (for various flap wheel widths)

| S<br>[Inches] | L<br>[Inches] | Fits arbor hole size<br>[Inches] | For wheel diameter<br>[Inches] | EDP<br>number |  |
|---------------|---------------|----------------------------------|--------------------------------|---------------|-------------------------------------------------------------------------------------|
| 1/2           | 1-1/2         | 1                                | 4-6                            | 45714         | 1                                                                                   |
| 1/2           | 1-1/2         | 1-3/4                            | 8-10                           | 45715         | 1                                                                                   |



### Reducing flanges for unmounted flap wheels

For mounting unmounted flap wheels and POLINOX® unmounted flap wheels on drive spindles.  
The clamping flanges are designed to lie countersunk in the wheel.

#### Advantages:

- Can be adapted to an existing drive spindle by drilling.
- Can be used face-down very close to edges and in angles due to unique clamping system.

#### Ordering notes:

- Included in delivery: 1 pair

| Fits arbor hole size<br>[Inches] | D<br>[Inches] | H<br>[Inches] | Max. H<br>[Inches] | For wheel diameter<br>[Inches] | EDP<br>number |  |
|----------------------------------|---------------|---------------|--------------------|--------------------------------|---------------|---------------------------------------------------------------------------------------|
| 1                                | 1-1/2         | 1/2           | 7/8                | 4-6                            | 45720         | 1                                                                                     |
|                                  | 1-1/2         | 5/8           | 7/8                | 4-6                            | 45721         | 1                                                                                     |
|                                  | 1-1/2         | 3/4           | 7/8                | 4-6                            | 45722         | 1                                                                                     |
| 1-3/4                            | 3-1/4         | 1/2           | 1-1/2              | 8-10                           | 45725         | 1                                                                                     |
|                                  | 3-1/4         | 5/8           | 1-1/2              | 8-10                           | 45726         | 1                                                                                     |
|                                  | 3-1/4         | 3/4           | 1-1/2              | 8-10                           | 45727         | 1                                                                                     |
|                                  | 3-1/4         | 1             | 1-1/2              | 8-10                           | 45728         | 1                                                                                     |



## Aluminum oxide A

The ideal flap wheel for use on angle grinders in assembly shop operations.  
For universal applications from coarse to fine grinding.

### Advantages:

- Can be mounted directly on the angle grinder without additional clamping devices.

### Abrasive:

Aluminum oxide A

### Recommendations for use:

- For the best results, use at a recommended peripheral speed of 7,900–9,800 SFPM.

### Compatible power tools:

angle grinder, cordless angle grinder

### Safety notes:

- As a rule, unmounted flap wheels should be used with the appropriate clamping flanges for the angle grinder.

### PFERDVALUE®:



| D<br>[Inches] | T<br>[Inches] | Thread | Grit and EDP number |       |       |       |       |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|--------|---------------------|-------|-------|-------|-------|-------|-------|-------------|-------------|-------------------------------------------------------------------------------------|
|               |               |        | 40                  | 60    | 80    | 120   | 180   | 240   | 320   |             |             |                                                                                     |
| 4-1/2         | 3/4           | 5/8-11 | 45751               | 45753 | 45754 | 45755 | 45757 | 45758 | 45759 | 7,500       | 13,300      | 2                                                                                   |
| 5             | 3/4           | 5/8-11 | 45761               | 45763 | 45764 | 45765 | 45767 | 45768 | 45769 | 6.850       | 12.200      | 2                                                                                   |

## Ceramic oxide CO-COOL

The ideal flap wheel for use on angle grinders in assembly shop operations.  
For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

### Advantages:

- Can be mounted directly on the angle grinder without additional clamping devices.

### Abrasive:

Ceramic oxide CO-COOL

### Recommendations for use:

- For the best results, use at a recommended peripheral speed of 7,900–9,800 SFPM.

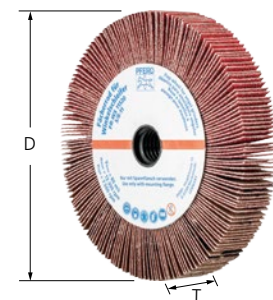
### Compatible power tools:

angle grinder, cordless angle grinder

### Safety notes:

- As a rule, unmounted flap wheels should be used with the appropriate clamping flanges for the angle grinder.

### PFERDVALUE®:

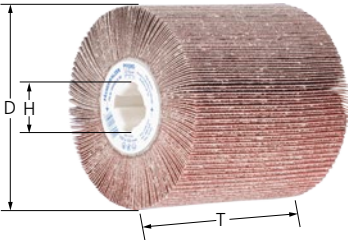


| D<br>[Inches] | T<br>[Inches] | Thread | Grit and EDP number |       |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|--------|---------------------|-------|-------|-------|-------------|-------------|---------------------------------------------------------------------------------------|
|               |               |        | 40                  | 60    | 80    | 120   |             |             |                                                                                       |
| 4-1/2         | 5/8           | 5/8-11 | 45740               | 45741 | 45742 | 45743 | 7,500       | 13,300      | 2                                                                                     |
| 5             | 5/8           | 5/8-11 | 45744               | 45745 | 45746 | 45747 | 6,850       | 12,200      | 2                                                                                     |



# Flap wheels

## Flap drums



### Aluminum oxide A

For universal work on medium-sized and large metallic surfaces, e.g. fine grinding work on large radii in container, food service and apparatus construction, and achieving consistent linear scratch patterns on large surfaces and contours in manual applications.

Ideal for all conventional keyway systems.

#### Abrasive:

Aluminum oxide A

#### Recommendations for use:

- For the best results, use at a recommended peripheral speed of 3,000-6,000 SFPM.

#### Compatible power tools:

drum grinders

#### Ordering notes:

- Additional drum products can be found on pages 44, 45, 100, 101 and 120, as well as in catalogue section 8.
- Refer to our “Power tools” catalogue section 9 for information on the linear finishing tool, EDP 91217.

#### PFERDVALUE®:



| D<br>[Inches] | T<br>[Inches] | H<br>[Inches] | Grit and EDP number |       |       |       |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------------|-------|-------|-------|-------|-------|-------------|-------------|-------------------------------------------------------------------------------------|
|               |               |               | 40                  | 60    | 80    | 120   | 150   | 180   |             |             |                                                                                     |
| 4             | 4             | 3/4           | 45780               | 45781 | 45782 | 45783 | 45784 | 45785 | 3,800       | 6,100       | 1                                                                                   |



The POLIFAP® system is ideal for blending and restoring surface textures, fine grinding of radii, contours, curved areas or large surfaces.

### Safety notes:

- The maximum permitted peripheral speed is 6,300 SFPM.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



### Accessories:

- POLIFAP® abrasive flaps
- POLIFAP® rubber flaps

### PFERDVALUE®:

PFERDERGONOMICS® recommends the POLIFAP® system to sustainably reduce vibration and noise levels during use and to improve working comfort.



POLIFAP® system

### POLIFAP® wheel

The wheel consists of a shank-mounted support and rubber flaps. It must be completed with appropriate abrasive flaps. The customized arrangement of abrasive and rubber flaps results in a highly versatile product.

#### Advantages:

- Optimal harmonization of different surface structures.
- Creates a consistently high surface quality over the entire service life as new, sharp abrasive is constantly exposed.
- Comfortable to use due to particularly lightweight design.

#### Recommendations for use:

- For optimum results on stainless steel (INOX), use at a rotational speed between 1,400–1,700 RPM.
- In the event of excessive wear, we recommend replacing the flaps frequently.

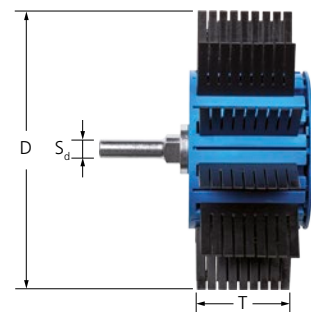
#### Compatible power tools:

flexible shaft drive, straight grinder

#### Ordering notes:

- Supplied without abrasive flaps. Please order abrasive flaps separately in the desired grit size.

### PFERDVALUE®:



4

| D<br>[Inches] | T<br>[Inches] | S <sub>d</sub><br>[Inches] | EDP<br>number | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|----------------------------|---------------|-------------|-------------|---------------------------------------------------------------------------------------|
| 7             | 2-3/8         | 3/8                        | 45950         | 1,500       | 3,500       | 1                                                                                     |

### POLIFAP® abrasive flaps

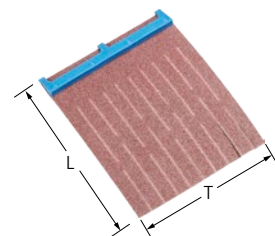
Abrasive flaps for POLIFAP® grinding wheels, for achieving visual effects ranging from coarse to very fine.

#### Advantages:

- Comfortable to use and easy to replace once worn.

#### Ordering notes:

- The packaging unit corresponds to a complete POLIFAP® grinding wheel.

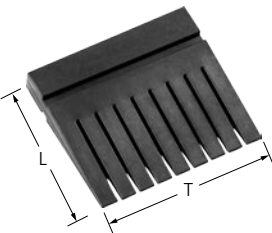


#### Abrasive:

Aluminum oxide A

| L<br>[Inches] | T<br>[Inches] | Grit and EDP number |       |       |       |       |       |       |       |  |
|---------------|---------------|---------------------|-------|-------|-------|-------|-------|-------|-------|---------------------------------------------------------------------------------------|
|               |               | 60                  | 80    | 100   | 120   | 150   | 180   | 220   | 320   |                                                                                       |
| 2-3/8         | 3             | 45960               | 45961 | 45962 | 45963 | 45964 | 45965 | 45966 | 45968 | 12                                                                                    |





POLIFAP® rubber flaps

Rubber flaps to match the POLIFAP® grinding wheel. They lie between the abrasive flaps, and support the abrasive effect and the flexibility of the system.

Advantages:

- Comfortable to use as easy to replace once worn.

Ordering notes:

- The packaging unit corresponds to a complete POLIFAP® grinding wheel.

| L<br>[Inches] | T<br>[Inches] | EDP<br>number |  |
|---------------|---------------|---------------|-------------------------------------------------------------------------------------|
| 2             | 2             | 45951         | 12                                                                                  |





POLISTAR-TUBE consists of multi-layered coated abrasive stars riveted together. They are designed specifically for working on the inner surfaces of pipes and pipe bends.

They are used in combination with the matching flexible shafts from catalogue section 9:

■ For diameters 2" to 3-1/8" – 4 PST-T DIN 10/M4 (EDP 94264)

■ For diameters 3-1/2" to 4" – 7 PST-T DIN 10/M5 (EDP 94274)

### Advantages:

- Optimum adaptation to contours due to high flexibility.
- For achieving very fine surface quality grades of up to 8 µin (0.2 µm).
- Stainless steel rivets prevents contamination of stainless steel (INOX) workpieces.

### Recommendations for use:

- For best performance, use with a recommended peripheral speed of 3,000–4,000 SFPM.
- Select the POLISTAR diameter based on the respective pipe's inner diameter:
  - Dia. 2" for inner pipe dia. 1-3/8"–1-5/8"
  - Dia. 2-1/4" for inner pipe dia. 1-5/8"–1-3/4"
  - Dia. 2-3/4" for inner pipe dia. 1-3/4"–2"
  - Dia. 3-1/8" for inner pipe dia. 2"–2-1/4"
  - Dia. 3-1/2" for inner pipe dia. 2-1/4"–2-3/8"
  - Dia. 4" for inner pipe dia. 2-3/8"–2-5/8"
- Select the appropriate grit size for the desired roughness value:
  - Grit size 60 = 39–51 µin (1.0 - 1.3 µm) R<sub>a</sub>
  - Grit size 120 = 24–39 µin (0.6 - 1.0 µm) R<sub>a</sub>
  - Grit size 180 = 16–24 µin (0.4 - 0.6 µm) R<sub>a</sub>
  - Grit size 240 = 12–16 µin (0.3 - 0.4 µm) R<sub>a</sub>
  - Grit size 320 = 8–12 µin (0.2 - 0.3 µm) R<sub>a</sub>

### Compatible power tools:

- Flexible shaft drives
- Straight grinders

### Ordering notes:

- Please order arbors separately.
- POLISTAR-TUBE with a grit size of 60 are always supplied with 4 layers.

### Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



### Accessories:

- Arbors for POLISTAR-TUBE

### PFERDVALUE®:

PFERDERGONOMICS® recommends POLISTAR-TUBE to sustainably reduce vibration and noise levels during use and to improve working comfort.



## POLISTAR-TUBE

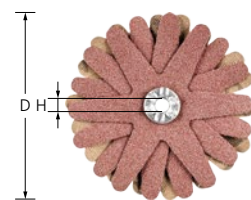
### POLISTAR-TUBE

Engineered for use in pipes and pipe bends.

#### Abrasive:

Aluminum oxide A

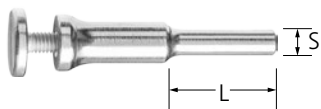
#### PFERDVALUE®:



| D<br>[Inches] | H<br>[mm] | No. of<br>Layers | Grit and EDP number |       |       |       |       | Compatible<br>arbor | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|-----------|------------------|---------------------|-------|-------|-------|-------|---------------------|-------------|-------------|---------------------------------------------------------------------------------------|
|               |           |                  | 60                  | 120   | 180   | 240   | 320   |                     |             |             |                                                                                       |
| 2             | 4         | 6                | 44015               | 44016 | 44017 | 44018 | 44019 | 44062               | 3,000       | 7,650       | 10                                                                                    |
| 2-1/4         | 4         | 6                | 44020               | 44021 | 44022 | 44023 | 44024 | 44062               | 2,500       | 6,350       | 10                                                                                    |
| 2-3/4         | 4         | 6                | 44025               | 44026 | 44027 | 44028 | 44029 | 44062               | 2,200       | 5,450       | 10                                                                                    |
| 3-1/8         | 4         | 6                | 44030               | 44031 | 44032 | 44033 | 44034 | 44062               | 1,900       | 4,750       | 10                                                                                    |
| 3-1/2         | 5         | 8                | 44035               | 44036 | 44037 | 44038 | 44039 | 44063               | 1,700       | 4,250       | 10                                                                                    |
| 4             | 5         | 8                | 44040               | 44041 | 44042 | 44043 | 44044 | 44063               | 1,500       | 3,820       | 10                                                                                    |

# Flap wheels

## Arbors for POLISTAR-TUBE



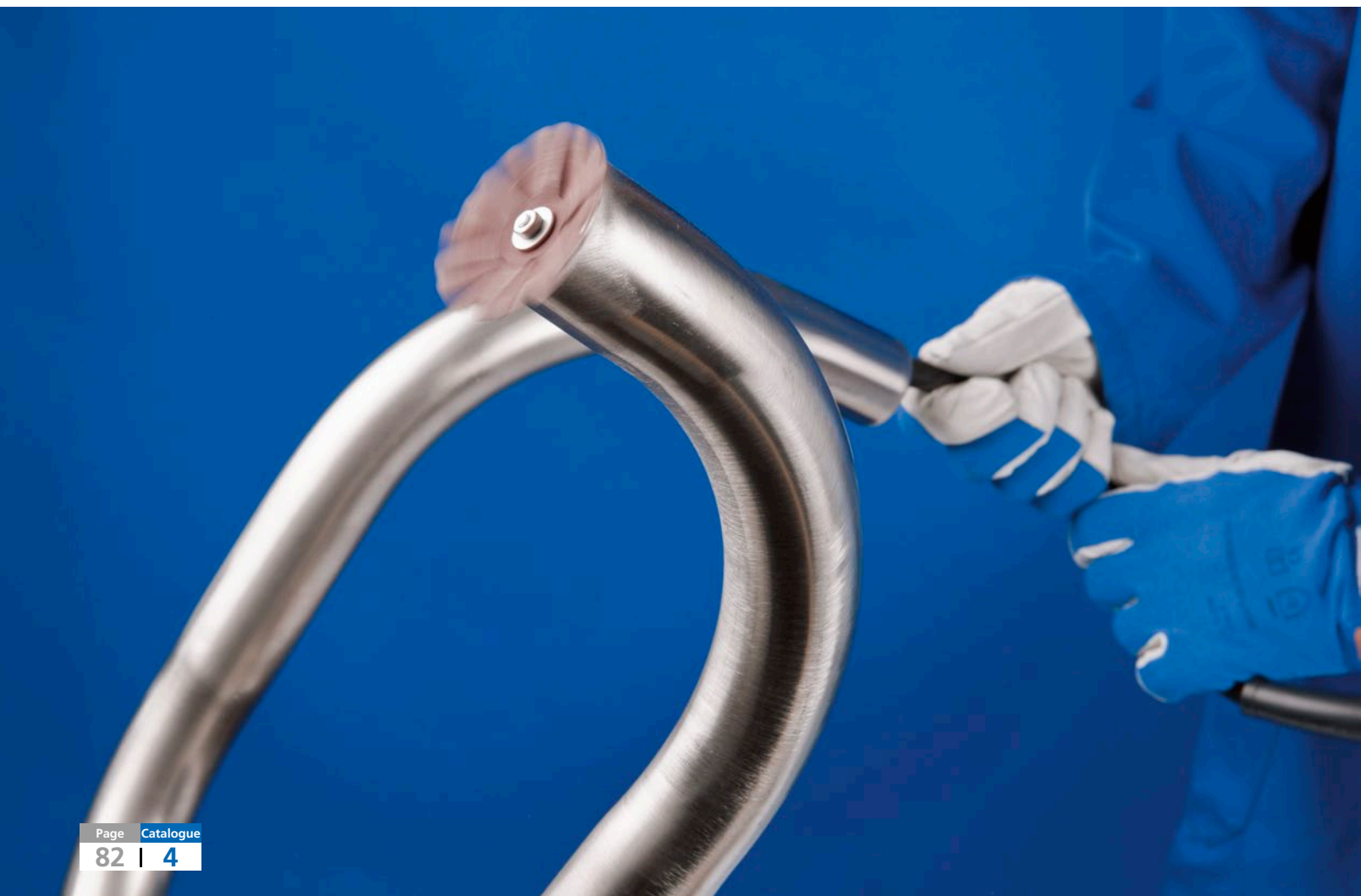
### Arbors for POLISTAR-TUBE

Matching arbor for POLISTAR-TUBE.

#### Advantages:

- High productivity as the consumable can be changed quickly.

| Fits arbor hole size [mm] | S [Inches] | L [Inches] | Clamping width [Inches] | EDP number |  |
|---------------------------|------------|------------|-------------------------|------------|-------------------------------------------------------------------------------------|
| 4                         | 1/4        | 1          | 0 - 3/8                 | 44062      | 1                                                                                   |
| 5                         | 1/4        | 1          | 0 - 3/8                 | 44063      | 1                                                                                   |



Grinding products for work on metallic and non-metallic workpieces are sub-divided into three groups:

■ **Bonded abrasives**

(e.g. grinding discs)

■ **Flexible abrasives**

(e.g. belts, discs, strips, rolls) These products are used for coarse, fine and very fine grinding, in addition to stock removal.

■ **Non-woven abrasives**

This group is primarily designed for surface structuring and conditioning.

Non-woven abrasives consist of polyamide fibres, synthetic resins and abrasive grain.

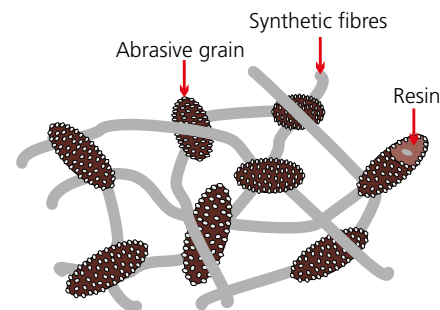
The non-woven fibre structure is impregnated or interspersed with resin and abrasive grain. The very loose connection between the individual fibres ensures a high level of flexibility and gives a strong spring-type effect to the non-woven material. It is flexible and supple, and leaves behind a very distinctive surface structure.

The satin-finished grinding result is unique and cannot be achieved with other abrasives.

The consistent distribution of the abrasive grain in the non-woven structure guarantees a continuous supply of new, fresh and sharp abrasive grain throughout the entire grinding application.

Although non-woven abrasives have a completely differently structure to coated abrasives, the same abrasive materials are used for both groups of products:

- Aluminum oxide ( $Al_2O_3$ ) is very durable, features an extremely long service life and has very high aggressiveness on hardened steel. The achieved surface finish is distinguished by its increased shine. Discolouration is prevented when working on aluminum.
- Silicon carbide (SiC) is even sharper, harder and cuts very easily. In no time at all, it produces a finer grinding pattern on the surfaces of many materials which remains slightly matte for a long time.



The user selects a specific grit size for conventionally bonded abrasives or coated abrasives. The designation system for non-woven abrasives is outlined in the following table:

| PFERD designation | Comparable grit size [mesh] |
|-------------------|-----------------------------|
| Very coarse       | 50– 80                      |
| Coarse            | 80–100                      |
| Medium            | 100–180                     |
| Fine              | 180–220                     |
| Very fine         | 220–400                     |

4



### Use

The use of non-woven abrasives begins where other grinding products reach their limits or no longer achieve the desired results. The elastic properties of the polyamide fibres and the positive effect of the non-woven abrasives result in finishing products which produce outstanding results yet work gently.

Non-woven abrasives are water-tight, washable and very durable. They don't load, leave no rust behind on surfaces and are non-conductive.

Non-woven abrasive can be used to outstanding effect for deburring, cleaning and for work on the surfaces of many metals, including aluminum, brass, copper, nickel, stainless steel (INOX) and titanium. It is also ideal for work on other materials which are difficult to grind, such as ceramic, glass and plastic. Non-woven abrasive can be used for wet or dry grinding.



### Non-woven products

Non-woven abrasives are recommended for manufacturing a wide range of different products, such as hand pads, drums, discs, belts, points and mounted grinding wheels.

The abrasive properties of these products are tailored to a variety of applications and represent outstanding solutions for numerous metal machining and processing tasks.

The PFERD range comprises:

- COMBICLICK®/COMBIDISC® non-woven discs
- Non-woven shop rolls, hand pads
- POLINOX® mounted flap wheels, grinding discs, grinding wheels and finishing drums

### Additional types

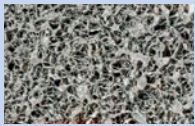
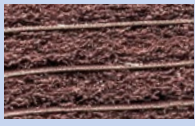
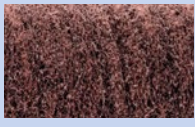
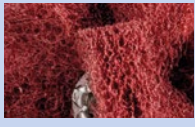
Non-woven abrasive can also be manufactured with a fabric reinforcement. The non-woven abrasive material gains considerably higher aggressiveness and stability as a result.

Fabric-reinforced, non-woven abrasive is ideal for manufacturing discs and non-woven belts.

The PFERD range comprises:

- COMBICLICK®/COMBIDISC® non-woven discs
- POLIVLIES® flap discs and hook and loop discs
- Abrasive belts, non-woven type

### PFERD designation

|                                                                                                                                        |                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Unitized<br/>PNER</b>                              | <p>Due to different combinations of compaction, fibres, grain and the appropriate bond, this product can be used for a wide range of surface finishing applications, from relatively coarse grinding to preparing the surface for polishing.</p>                                                  |
| <b>Convolute<br/>PNK</b>                             | <p>The non-woven abrasive is wound around a core and foamed up. The products can be optimized for a variety of applications by implementing different foam, fibre, grain and bond combinations. The spectrum of application ranges from fine deburring through to preparations for polishing.</p> |
| <b>Radial<br/>construction<br/>PNL</b>              | <p>Made of radially arranged flaps of non-woven abrasive material. The flaps are very tightly packed, which achieves a longer service life. The flap wheel's main application is surface work.</p>                                                                                                |
| <b>Interleaved<br/>construction<br/>PNZ</b>         | <p>The non-woven abrasive is arranged in multiple radial flaps, with one abrasive cloth interlayer between each set of flaps. This flap combination facilitates greater stock removal and a coarser surface finish.</p>                                                                           |
| <b>Corrugated<br/>construction<br/>PNG</b>          | <p>The non-woven abrasive comprises several very wavy strips of non-woven material wound around a core. The wavy structure of the non-woven material permits seamless brush matting of surfaces.</p>                                                                                              |
| <b>Axial-<br/>layered<br/>construction<br/>PNR</b>  | <p>The non-woven abrasive is arranged in multiple (axial) disc layers. Since the individual non-woven discs are not interconnected, the abrasive surface adapts easily to different workpiece contours, e.g. when working on profiles or pipes.</p>                                               |
| <b>Cross buffs<br/>PNST</b>                         | <p>The non-woven abrasive is star-shaped and stacked in layers which are connected in the centre. It offers outstanding performance, specifically when used for tight work areas such as holes, recesses and hard-to-reach places.</p>                                                            |



POLINOX® unitized wheels and discs consist of multiple heavily compressed, non-woven layers, which are bonded together by a special grain/resin system.

This particular bond results in non-woven products with a very good surface finish, high stock removal rate and long service life. These properties are particularly apparent when deburring, blending, finishing and polishing soft metals, alloyed and high-alloy steels, in addition to titanium alloys.

Four different types are available:

| Type        | Colour code | Properties                                                                                                                                                                             |
|-------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Soft        | <b>W</b>    | Soft variant with outstanding adaptability. At the same time, durability, abrasive performance and very high surface quality are all maintained. Ideally suited to machining contours. |
| Medium-soft | <b>MW</b>   | Medium-soft variant with increased edge strength and extended service life, for tough blending and polishing applications. Well suited to machining contours.                          |
| Medium-hard | <b>MH</b>   | Medium-hard variant with increased edge strength and extended service life, for tough deburring and cleaning applications.                                                             |
| Hard        | <b>H</b>    | Hard variant with very high stock removal rate, good edge strength and long service life, for tough deburring and polishing applications.                                              |



### Comparison table

| PFERD<br>Unitized wheels |             |          |        | 3M                                     | Standard<br>Abrasives | Norton                | BIBIELLE |
|--------------------------|-------------|----------|--------|----------------------------------------|-----------------------|-----------------------|----------|
| Type                     | Colour code | Abrasive | Grain  |                                        |                       |                       |          |
| Soft                     | <b>W</b>    | SiC      | Fine   | EXL 2S fine                            | 532                   | UW1-2SF or<br>Nex-2SF | BUH 2SF  |
|                          |             | A        | Coarse | EXL 2A medium                          | 521                   | UW1-2AM or<br>Nex-2AM | BUH 2AM  |
| Medium-soft              | <b>MW</b>   | SiC      | Fine   | EXL 4S fine or<br>SST 3S fine          | 632                   | UW1-4SF               | BUH 3SF  |
|                          |             | A        | Fine   | EXL 4A fine or<br>SST 3A fine          | 631                   | UW1-4AF               | -        |
| Medium-hard              | <b>MH</b>   | A        | Fine   | Cut & polish 5A fine or<br>SST 5A fine | 731                   | UW1-6AF or<br>Nex-6AF | -        |
| Hard                     | <b>H</b>    | A        | Fine   | Cut & polish 7A medium or 9A medium    | 821                   | UW1-8AM or<br>Nex-8AM | BUH 6AM  |
|                          |             | A        | Coarse | Cut & polish 7A coarse or 9A coarse    | 811                   | UW1-8AC or<br>Nex-8AC | BUH 8AC  |



# Non-woven products

## General information – POLINOX® unitized wheels and discs

### Advantages:

- Increased economic efficiency due to high abrasive performance and long service life.
- For achieving very good surface quality standards.
- Perfect adaptation to contours due to free profiling.

### Workpiece materials:

- Can be used on nearly all materials.

### Applications:

#### Cleaning

- Universal cleaning before painting.
- Removal of rust, scratches, coatings, heavy scaling, oxide layers of aluminum and heat discolouration.

#### Deburring

- Deburring of gear components, aircraft wing spars and turbine blade edges.
- Removal of heavy burrs, in addition to moderate blemishes and scratches.
- Edge breaking and rounding.

### Blending

- Blending and finishing work on engine blade surfaces, turbine blades and rotor blades.
- Removal of smaller blemishes, scratches and joints on cast workpieces.

### Polishing

- Polishing of fillet welds on turbine blades and aircraft parts.
- Polishing of soft metals before the coating process, and of hardened steel when repairing molds and dies.
- Polishing and finishing of surgical instruments and implants.

### Recommendations for use:

- Considerably reduce peripheral speed for work on materials with poor heat-conducting properties, e.g. titanium and stainless steel.
- For best performance, use at a recommended peripheral speed of 3,000–6,900 SFPM. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and unitized wheel wear.

### Compatible power tools:

- Flexible shaft drives
- Straight grinders
- Bench grinders

### Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

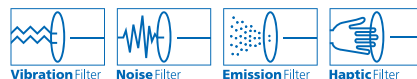


### Accessories:

- Arbor for POLINOX® unitized wheels

### PFERDVALUE®:

PFERDERGONOMICS® recommends POLINOX® unitized wheels and unitized discs to sustainably reduce vibration, noise and dust levels produced by products and to improve working comfort.



### Recommended rotational speed range

#### Example:

EDP 48288, 3" POLINOX® unitized wheel  
Peripheral speed: 5,000 SFPM

**Rotational speed: 6,300 RPM**

| Wheel dia.<br>[Inches] | Peripheral speed [SFPM] |        |        |        |        |        |        |
|------------------------|-------------------------|--------|--------|--------|--------|--------|--------|
|                        | 3,000                   | 4,000  | 5,000  | 6,000  | 6,300  | 7,000  | 9,900  |
|                        | Rotational speeds [RPM] |        |        |        |        |        |        |
| 1                      | 11,400                  | 15,200 | 19,000 | 22,900 | 24,400 | 26,700 | 38,100 |
| 2                      | 5,700                   | 7,600  | 9,500  | 11,400 | 12,200 | 13,300 | 19,000 |
| 3                      | 3,800                   | 5,000  | 6,300  | 7,600  | 8,100  | 8,900  | 12,700 |
| 4                      | 2,800                   | 3,800  | 4,700  | 5,700  | 6,100  | 6,600  | 9,500  |
| 4-1/2                  | 2,400                   | 3,300  | 4,100  | 4,900  | 5,300  | 5,800  | 8,300  |
| 5                      | 2,200                   | 3,000  | 3,800  | 4,500  | 4,800  | 5,300  | 7,600  |
| 6                      | 1,900                   | 2,500  | 3,100  | 3,800  | 4,000  | 4,400  | 6,300  |



### POLINOX® unitized wheels

#### Type for straight grinders, flexible shafts and bench grinders:

Ideal for work on smaller surfaces.

#### Type for variable-speed angle grinders and fillet weld grinders:

They are ideal for work on fillet welds and very hard-to-reach slots or indentations.

#### Abrasive:

Aluminum oxide A  
Silicon carbide SiC

#### PFERD designation:

PNR

#### PFERDVALUE®:



#### Recommendations for use:

- Grinding wheels with a 6-inch diameter can also be used on bench grinders, such as for reworking surgical instruments.



| D<br>[Inches]                                                                      | T<br>[Inches] | H<br>[Inches] | Abrasive | Grit size | Hardness | Spec. | EDP<br>number | Opt.<br>RPM | Max.<br>RPM | Compatible<br>arbors |    |
|------------------------------------------------------------------------------------|---------------|---------------|----------|-----------|----------|-------|---------------|-------------|-------------|----------------------|----|
| Unitized wheels for straight grinders, flexible shaft machines, and bench grinders |               |               |          |           |          |       |               |             |             |                      |    |
| 2                                                                                  | 1/8           | 1/4           | A        | fine      | H        | 8AM   | 48268         | 9,500       | 15,300      | 69029                | 10 |
| 3                                                                                  | 1/8           | 1/4           | A        | fine      | H        | 8AM   | 48288         | 6,400       | 10,200      | 69029                | 10 |
|                                                                                    |               |               | A        | coarse    | W        | 2AM   | 48247         | 6,400       | 10,200      | 69029                | 10 |
|                                                                                    |               |               | A        | fine      | MH       | 6AF   | 48248         | 6,400       | 10,200      | 69029                | 10 |
|                                                                                    |               |               | A        | coarse    | H        | 8AC   | 48249         | 6,400       | 10,200      | 69029                | 10 |
|                                                                                    |               |               | SiC      | fine      | W        | 2SF   | 48245         | 6,400       | 10,200      | 69029                | 10 |
|                                                                                    |               |               | SiC      | fine      | MW       | 3SF   | 48246         | 6,400       | 10,200      | 69029                | 10 |
|                                                                                    | 1/4           | 1/4           | SiC      | fine      | W        | 2SF   | 48290         | 6,400       | 10,200      | 69029                | 5  |
|                                                                                    |               |               | A        | coarse    | W        | 2AM   | 48291         | 6,400       | 10,200      | 69029                | 5  |
|                                                                                    |               |               | SiC      | fine      | MW       | 3SF   | 48292         | 6,400       | 10,200      | 69029                | 5  |
|                                                                                    |               |               | A        | fine      | MW       | 3AF   | 48293         | 6,400       | 10,200      | 69029                | 5  |
|                                                                                    |               |               | A        | fine      | MH       | 6AF   | 48295         | 6,400       | 10,200      | 69029                | 5  |
|                                                                                    |               |               | A        | coarse    | H        | 8AC   | 48299         | 6,400       | 10,200      | 69029                | 5  |
|                                                                                    | 1/2           | 1/4           | SiC      | fine      | W        | 2SF   | 48310         | 6,400       | 10,200      | 69029                | 5  |
|                                                                                    |               |               | A        | coarse    | W        | 2AM   | 48311         | 6,400       | 10,200      | 69029                | 5  |
|                                                                                    |               |               | SiC      | fine      | MW       | 3SF   | 48312         | 6,400       | 10,200      | 69029                | 5  |
|                                                                                    |               |               | A        | fine      | MW       | 3AF   | 48313         | 6,400       | 10,200      | 69029                | 5  |
|                                                                                    |               |               | A        | fine      | MH       | 6AF   | 48315         | 6,400       | 10,200      | 69029                | 5  |
|                                                                                    |               |               | A        | coarse    | H        | 8AC   | 48319         | 6,400       | 10,200      | 69029                | 5  |
| 6                                                                                  | 1             | 1             | SiC      | fine      | W        | 2SF   | 48420         | 3,200       | 5,100       | 45714                | 1  |
|                                                                                    |               |               | SiC      | fine      | MW       | 3SF   | 48422         | 3,200       | 5,100       | 45714                | 1  |
|                                                                                    |               |               | A/O      | fine      | MW       | 3AF   | 48423         | 3,200       | 5,100       | 45714                | 1  |
|                                                                                    |               |               | A/O      | fine      | MH       | 6AF   | 48425         | 3,200       | 5,100       | 45714                | 1  |
|                                                                                    |               |               | A/O      | coarse    | H        | 8AC   | 48429         | 3,200       | 5,100       | 45714                | 1  |

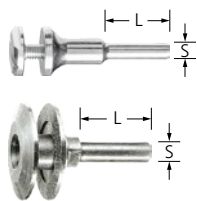
#### Unitized wheels for variable-speed angle grinders, and fillet weld grinders

|   |     |     |     |        |    |     |       |       |       |   |   |
|---|-----|-----|-----|--------|----|-----|-------|-------|-------|---|---|
| 5 | 1/4 | 7/8 | SiC | fine   | MW | 3SF | 48352 | 4,500 | 6,100 | - | 5 |
|   |     |     | A   | fine   | MW | 3AF | 48353 | 4,500 | 6,100 | - | 5 |
|   |     |     | A   | fine   | MH | 6AF | 48355 | 4,500 | 6,100 | - | 5 |
|   |     |     | A   | fine   | H  | 8AM | 48358 | 4,500 | 6,100 | - | 5 |
|   |     |     | A   | coarse | H  | 8AC | 48359 | 4,500 | 6,100 | - | 5 |
| 6 | 1/8 | 1   | SiC | fine   | MW | 3SF | 48360 | 3,800 | 5,100 | - | 5 |
|   |     |     | SiC | fine   | MH | 6SF | 48361 | 3,800 | 5,100 | - | 5 |
|   |     |     | A   | fine   | H  | 8AM | 48362 | 3,800 | 5,100 | - | 5 |
|   | 1/4 | 1   | SiC | fine   | W  | 2SF | 48363 | 3,800 | 5,100 | - | 5 |
|   |     |     | SiC | fine   | MW | 3SF | 48364 | 3,800 | 5,100 | - | 5 |
|   |     |     | A   | fine   | H  | 8AM | 48365 | 3,800 | 5,100 | - | 5 |



## Non-woven products

### Arbors for POLINOX® unitized wheels



#### Arbors for POLINOX® unitized wheels

Matching arbor for POLINOX® unitized wheels.

##### Advantages:

- Increased economic efficiency as the arbor can be changed quickly.

| Fits arbor hole size [Inches] | S [Inches] | L [Inches] | Clamping width [Inches] | EDP number |  |
|-------------------------------|------------|------------|-------------------------|------------|-------------------------------------------------------------------------------------|
| 1/2                           | 1/4        | 1          | 1/8–1/4                 | 69029      | 1                                                                                   |
| 1                             | 1/2        | 1-1/2      | 1–2                     | 45714      | 1                                                                                   |

### POLINOX® unitized discs



#### POLINOX® unitized discs

POLINOX® unitized discs are used for face-down grinding on variable-speed angle grinders. Especially well-suited to work on larger surfaces. The compressed, non-woven material is bonded to a glass-fabric base.

##### Abrasive:

Silicon carbide SiC

##### Ordering notes:

T = thickness

##### PFERD designation:

PNER

##### PFERDVALUE®:



| D [Inches]              | T [Inches] | H [Inches] | Abrasive | Grit size | Hardness | Spec. | EDP number | Opt. RPM | Max. RPM |  |
|-------------------------|------------|------------|----------|-----------|----------|-------|------------|----------|----------|---------------------------------------------------------------------------------------|
| <b>Plain arbor hole</b> |            |            |          |           |          |       |            |          |          |                                                                                       |
| 4-1/2                   | 1/2        | 7/8        | SiC      | fine      | W        | 2SF   | 48470      | 6,000    | 10,000   | 5                                                                                     |
|                         |            |            |          |           | MW       | 3SF   | 48472      | 6,000    | 10,000   | 5                                                                                     |
|                         |            |            |          |           | MH       | 6SF   | 48474      | 6,000    | 10,000   | 5                                                                                     |
| 5                       | 1/2        | 7/8        | SiC      | fine      | W        | 2SF   | 48480      | 5,400    | 10,000   | 5                                                                                     |
|                         |            |            |          |           | MW       | 3SF   | 48482      | 5,400    | 10,000   | 5                                                                                     |
|                         |            |            |          |           | MH       | 6SF   | 48484      | 5,400    | 10,000   | 5                                                                                     |

#### Threaded hub

|       |     |        |     |      |    |     |       |       |        |   |
|-------|-----|--------|-----|------|----|-----|-------|-------|--------|---|
| 4-1/2 | 1/2 | 5/8-11 | SiC | fine | W  | 2SF | 48490 | 6,000 | 10,000 | 5 |
|       |     |        |     |      | MW | 3SF | 48492 | 6,000 | 10,000 | 5 |
|       |     |        |     |      | MH | 6SF | 48494 | 6,000 | 10,000 | 5 |
| 5     | 1/2 | 5/8-11 | SiC | fine | W  | 2SF | 48500 | 5,400 | 10,000 | 5 |
|       |     |        |     |      | MW | 3SF | 48502 | 5,400 | 10,000 | 5 |
|       |     |        |     |      | MH | 6SF | 48504 | 5,400 | 10,000 | 5 |





POLINOX® convolute wheels consist of non-woven abrasive which is spiral-wound around a core and foamed up. The foam supports the non-woven component and improves its service life and abrasive performance.

This particular bond results in non-woven wheels with a very good surface finish, high stock removal rate and long service life. These properties are particularly apparent when deburring, blending, finishing and polishing soft metals, alloyed and high-alloy steels, in addition to titanium alloys. The wheels can be used on automated appliances and bench grinders, in addition to portable power tools such as straight grinders. By dressing the wheels, they can also be adapted to the geometry of special workpieces.

**Five different types are available:**

| Type        | Colour code                                                                        | Properties                                                                                                                                                                              |
|-------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Soft        |   | Soft variant with very good abrasive performance on contours. Very good for blending surfaces.                                                                                          |
| Medium-soft |   | Medium-soft variant with increased flexibility and extended service life for tough blending applications and for light deburring and polishing work. Well suited to machining contours. |
| Medium-hard |   | Medium-hard variant with increased edge strength and extended service life, for tough deburring applications and other deburring, blending and cleaning work.                           |
| Hard        |   | Hard variant with very high stock removal rate, good edge strength and long service life, for moderate to heavy-duty deburring and polishing applications.                              |
| Extra-hard  |  | Extra-hard variant with very high edge strength for demanding deburring work.                                                                                                           |



4



### Comparison table

| PFERD<br>Convolute wheels |                                                                                     |          |        | 3M                | Standard<br>Abrasives | Norton          | BIBIELLE     |
|---------------------------|-------------------------------------------------------------------------------------|----------|--------|-------------------|-----------------------|-----------------|--------------|
| Type                      | Colour code                                                                         | Abrasive | Grain  |                   |                       |                 |              |
| Soft                      |  | A        | Coarse | CP-WL 5AM         | MF CV 5AM             | MF CF 5AM       | BCW-MF 5AM   |
| Medium-soft               |  | SiC      | Fine   | LDW 7SF           | LDW 7SF               | Series 2000 7SF | BCW-DB 7SF   |
| Medium-hard               |  | SiC      | Fine   | EXL Deburring 8SF | Deburring 8SF         | Series 1000 8SF | BCW-DB 8SF   |
|                           |                                                                                     | A        | Coarse | EXL Deburring 8AM | GP Plus 8AM           | Series 1000 8AM | BCW-DB 8AM   |
| Hard                      |  | SiC      | Fine   | Deburring 9SF     | EXL Deburring 9SF     | Series 1000 9SF | BCW-DB 9SF   |
| Extra-hard                |  | SiC      | Fine   | XP-WL 10SF        | GP Plus 10SF          | Series 4000 9SF | BCW-DB 9SF-R |



# Non-woven products

## General information – POLINOX® convolute wheels

### Advantages:

- Increased profitability due to high abrasive performance and long service life.
- For achieving very good surface quality standards.
- Perfect adaptation to contours due to free profiling.

### Workpiece materials:

- Can be used on nearly all materials.

### Abrasive:

- Aluminum oxide A
- Silicon carbide SiC

### Applications:

- Rounding of edges.
- Fine grinding of implants.
- Matte finishing of flat surfaces.
- Removing joints on cast and forged parts.
- Weld dressing of intersections on turbine blades.
- Polishing molds and dies.
- Removal of processing traces on surgical instruments.

### Recommendations for use:

- Considerably reduce peripheral speed for work on materials with poor heat-conducting properties, e.g. titanium and stainless steel.
- For best performance, use with a recommended peripheral speed of 4,000 SFPM. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and convolute wheel wear.

### Compatible power tools:

- Flexible shaft drives
- Straight grinders
- Bench grinders

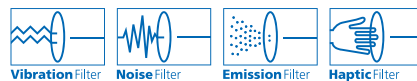
### Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The spiral-wound construction requires that these wheels only be run in a single indicated direction. Failure to do so will lead to destruction of the wheel and an increased risk of accidents.



### PFERDVALUE®:

**PFERDERGONOMICS®** recommends POLINOX® convolute wheels to sustainably reduce vibration, noise and dust levels produced by products and to improve working comfort.



### Recommended rotational speed range

#### Example:

EDP: 48200, 6 x 1/2 x 1

Peripheral speed: 4,000 SFPM

**Rotational speed: 2,500 RPM**

| Wheel dia.<br>[Inches] | Peripheral speed [SFPM] |       |       |       |       |
|------------------------|-------------------------|-------|-------|-------|-------|
|                        | 3,000                   | 4,000 | 5,000 | 6,000 | 8,000 |
|                        | Rotational speeds [RPM] |       |       |       |       |
| 6                      | 1,900                   | 2,500 | 3,100 | 3,800 | 5,000 |
| 8                      | 1,400                   | 1,900 | 2,400 | 2,900 | 3,800 |
| 10                     | 1,100                   | 1,500 | 1,900 | 2,200 | 3,000 |



### POLINOX® convolute wheels

Varied application options, for example:

- Rounding of edges
- Fine grinding of implants
- Weld dressing of intersections on turbine blades
- Removal of processing traces on surgical instruments
- Create matte surface finishes.

#### PFERD designation:

PNK

#### PFERDVALUE®:



#### Abrasive:

- Aluminum oxide A
- Silicon carbide SiC

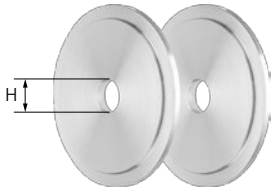
| D<br>[Inches] | T<br>[Inches] | H<br>[Inches] | Abrasive | Grit<br>size | Hardness | Spec. | EDP<br>number | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|---------------|----------|--------------|----------|-------|---------------|-------------|-------------|-------------------------------------------------------------------------------------|
| 6             | 1/2           | 1             | SiC      | fine         | MW       | 7SF   | 48200         | 2,500       | 5,100       | 1                                                                                   |
|               |               |               | A        | coarse       | MH       | 8AM   | 48201         | 2,500       | 5,100       | 1                                                                                   |
|               |               |               | SiC      | fine         | MH       | 8SF   | 48202         | 2,500       | 5,100       | 1                                                                                   |
|               |               |               | SiC      | fine         | H        | 9SF   | 48203         | 2,500       | 5,100       | 1                                                                                   |
|               |               |               | SiC      | fine         | EH       | 10SF  | 48222         | 2,500       | 5,100       | 1                                                                                   |
|               | 1             | 1             | A        | coarse       | W        | 5AM   | 48199         | 2,500       | 5,100       | 1                                                                                   |
|               |               |               | SiC      | fine         | MW       | 7SF   | 48204         | 2,500       | 5,100       | 1                                                                                   |
|               |               |               | A        | coarse       | MH       | 8AM   | 48205         | 2,500       | 5,100       | 1                                                                                   |
|               |               |               | SiC      | fine         | MH       | 8SF   | 48206         | 2,500       | 5,100       | 1                                                                                   |
|               |               |               | SiC      | fine         | H        | 9SF   | 48207         | 2,500       | 5,100       | 1                                                                                   |
| 8             | 1/2           | 3             | SiC      | fine         | MW       | 7SF   | 48208         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | A        | coarse       | MH       | 8AM   | 48209         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | SiC      | fine         | MH       | 8SF   | 48210         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | SiC      | fine         | H        | 9SF   | 48211         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | SiC      | fine         | EH       | 10SF  | 48224         | 1,900       | 3,850       | 1                                                                                   |
|               | 1             | 3             | A        | coarse       | W        | 5AM   | 48220         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | SiC      | fine         | MW       | 7SF   | 48212         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | A        | coarse       | MH       | 8AM   | 48213         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | SiC      | fine         | MH       | 8SF   | 48214         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | SiC      | fine         | H        | 9SF   | 48215         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | SiC      | fine         | EH       | 10SF  | 48225         | 1,900       | 3,850       | 1                                                                                   |
|               | 2             | 3             | A        | coarse       | W        | 5AM   | 48221         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | SiC      | fine         | MW       | 7SF   | 48216         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | A        | coarse       | MH       | 8AM   | 48217         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | SiC      | fine         | MH       | 8SF   | 48218         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | SiC      | fine         | H        | 9SF   | 48219         | 1,900       | 3,850       | 1                                                                                   |
|               |               |               | SiC      | fine         | EH       | 10SF  | 48226         | 1,900       | 3,850       | 1                                                                                   |





## Non-woven products

### Reducing flanges for POLINOX® convolute wheels



#### Reducing flanges for POLINOX® convolute wheels

For mounting POLINOX® convolute wheels with an 8" diameter on stationary machines such as double grinding machines (bench grinders).

##### Advantages:

- High accuracy of fit.
- Hole can be expanded as desired.

##### Ordering notes:

- Included in delivery: 1 pair

| Fits arbor hole size<br>[Inches] | H<br>[Inches] | EDP<br>number |  |
|----------------------------------|---------------|---------------|-------------------------------------------------------------------------------------|
| 1                                | 1/2           | 45720         | 1                                                                                   |
|                                  | 5/8           | 45721         | 1                                                                                   |
|                                  | 3/4           | 45722         | 1                                                                                   |
| 3                                | 5/8           | 45690         | 1                                                                                   |
|                                  | 1             | 45692         | 1                                                                                   |
|                                  | 1-1/4         | 45693         | 1                                                                                   |





POLINOX® mounted and unmounted flap wheels and cross buffs consist of non-woven polyamide abrasive, into which abrasive grain is integrated.

The wide range of hardness grades and different configurations allow a variety of surface structures and roughness levels to be achieved.

### Advantages:

- Optimum adaptation to contours due to high flexibility.
- Cool grinding and low thermal load of the workpiece.
- No loading due to open structure and high flexibility of the non-woven material.

### Workpiece materials:

- Can be used on nearly all materials.

### Recommendations for use:

- For best performance, use with a recommended peripheral speed of 2,000–4,000 SFPM. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and flap wheel/cross buff wear.

### Accessories:

- Arbors for POLINOX® cross buffs and unmounted flap wheels

### Safety notes:

- The maximum permitted peripheral speed is 6,300 SFPM.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



### PFERDVALUE®:

PFERDERGONOMICS® recommends POLINOX® mounted and unmounted flap wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.



### Recommended rotational speed range

#### Example:

46223, Interleaved construction 4" mounted flap wheel

Peripheral speed: 3,000 SFPM

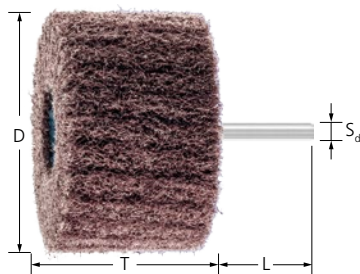
**Rotational speed: 2,900 RPM**

| Wheel dia.<br>[Inches] | Peripheral speed [SFPM] |        |        |        |        |
|------------------------|-------------------------|--------|--------|--------|--------|
|                        | 2,000                   | 3,000  | 4,000  | 6,000  | 6,300  |
|                        | Rotational speeds [RPM] |        |        |        |        |
| 3/4                    | 10,200                  | 15,300 | 20,400 | 30,600 | 32,100 |
| 1-1/2                  | 5,100                   | 7,600  | 10,200 | 15,300 | 16,000 |
| 2                      | 3,800                   | 5,700  | 7,600  | 11,500 | 12,000 |
| 2-1/2                  | 3,100                   | 4,600  | 6,100  | 9,200  | 9,600  |
| 4                      | 1,900                   | 2,900  | 3,800  | 5,700  | 6,000  |
| 5                      | 1,500                   | 2,300  | 3,100  | 4,600  | 4,800  |
| 6                      | 1,300                   | 1,900  | 2,500  | 3,800  | 4,000  |
| 8                      | 1,000                   | 1,400  | 1,900  | 2,900  | 3,000  |



# Non-woven products

## POLINOX® mounted flap wheels



### Radial construction

Made of radially arranged flaps of non-woven abrasive material. A long service life is achieved through the dense packing of the flaps.

This flap wheel is recommended for surface work.

**Abrasive:**  
Aluminum oxide A

**Compatible power tools:**  
flexible shaft drive, straight grinder

**PFERD designation:**  
PNL

**PFERDVALUE®:**



| D<br>[Inches] | T<br>[Inches] | S <sub>d</sub><br>[Inches] | L<br>[Inches] | Grit and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|----------------------------|---------------|---------------------|-------|-------|-------------|-------------|-------------------------------------------------------------------------------------|
|               |               |                            |               | 100                 | 180   | 280   |             |             |                                                                                     |
| 1             | 1             | 1/4                        | 1-1/2         | 46198               | 46199 | 46200 | 10,000      | 20,000      | 10                                                                                  |
| 1-1/2         | 3/4           | 1/4                        | 1-1/2         | 46201               | 46202 | 46203 | 7,500       | 15,000      | 10                                                                                  |
| 2             | 1             | 1/4                        | 1-1/2         | 46204               | 46205 | 46206 | 6,000       | 12,000      | 10                                                                                  |
| 2-3/8         | 2             | 1/4                        | 1-1/2         | 46207               | 46208 | 46209 | 5,000       | 10,000      | 10                                                                                  |
| 3             | 1             | 1/4                        | 1-1/2         | 46251               | 46252 | 46253 | 4,000       | 7,500       | 10                                                                                  |
|               | 2             | 1/4                        | 1-1/2         | 46210               | 46211 | 46212 | 4,000       | 7,500       | 10                                                                                  |



### Interleaved construction

The non-woven abrasive material is arranged in multiple radial flaps, with abrasive cloth interlayers.

This flap structure facilitates improved stock removal and achieves a coarser surface finish.

**Abrasive:**  
Aluminum oxide A

**Compatible power tools:**  
flexible shaft drive, straight grinder

**PFERD designation:**  
PNZ

**PFERDVALUE®:**



| D<br>[Inches] | T<br>[Inches] | S <sub>d</sub><br>[Inches] | L<br>[Inches] | Grit and EDP number |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|----------------------------|---------------|---------------------|-------|-------------|-------------|---------------------------------------------------------------------------------------|
|               |               |                            |               | 100                 | 180   |             |             |                                                                                       |
| 1             | 1             | 1/4                        | 1-1/2         | 46196               | 46197 | 10,000      | 20,000      | 10                                                                                    |
| 1-1/2         | 3/4           | 1/4                        | 1-1/2         | 46219               | 46225 | 7,500       | 15,000      | 10                                                                                    |
| 2             | 1             | 1/4                        | 1-1/2         | 46220               | 46226 | 6,000       | 12,000      | 10                                                                                    |
| 2-3/8         | 2             | 1/4                        | 1-1/2         | 46221               | 46227 | 5,000       | 10,000      | 10                                                                                    |
| 3             | 1             | 1/4                        | 1-1/2         | 46269               | 46270 | 4,000       | 7,500       | 10                                                                                    |
|               | 2             | 1/4                        | 1-1/2         | 46222               | 46228 | 4,000       | 7,500       | 10                                                                                    |
| 4             | 2             | 1/4                        | 1-1/2         | 46223               | 46229 | 3,000       | 6,000       | 10                                                                                    |





### Corrugated construction

Made of several wavyly arranged strips of non-woven abrasive material, wound around a core.

The wavy structure of the non-woven abrasive material permits seamless matte finishing of surfaces.

#### Abrasive:

Aluminum oxide A

Silicon carbide SiC

#### PFERD designation:

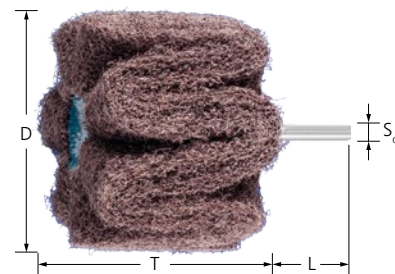
PNG

#### PFERDVALUE®:



#### Compatible power tools:

flexible shaft drive, straight grinder



| D<br>[Inches]         | T<br>[Inches] | S <sub>d</sub><br>[Inches] | L<br>[Inches] | Grit and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|-----------------------|---------------|----------------------------|---------------|---------------------|-------|-------|-------------|-------------|-------------------------------------------------------------------------------------|
|                       |               |                            |               | 100                 | 180   | 280   |             |             |                                                                                     |
| Aluminum oxide A      |               |                            |               |                     |       |       |             |             |                                                                                     |
| 3                     | 2             | 1/4                        | 1-1/2         | 46236               | 46237 | 46238 | 4,000       | 7,500       | 10                                                                                  |
| 4                     | 2             | 1/4                        | 1-1/2         | 46232               | 46230 | 46231 | 3,000       | 6,000       | 5                                                                                   |
| Silicon carbide (SiC) |               |                            |               |                     |       |       |             |             |                                                                                     |
| 3                     | 2             | 1/4                        | 1-1/2         | 46239               | 46240 | 46241 | 4,000       | 7,500       | 10                                                                                  |
| 4                     | 2             | 1/4                        | 1-1/2         | 46233               | 46234 | 46235 | 3,000       | 6,000       | 5                                                                                   |

### Axial-layered construction

The non-woven abrasive material is arranged in multiple (axial) disc layers.

Since the individual non-woven discs are not interconnected, the abrasive surface adapts easily to different workpiece contours, e.g. when working on profiles or pipes.

#### Abrasive:

Aluminum oxide A

#### PFERD designation:

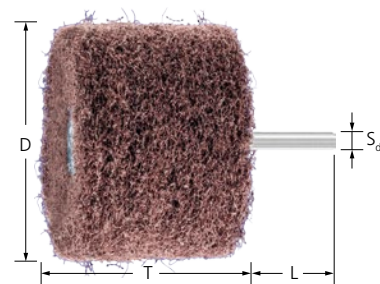
PNR

#### PFERDVALUE®:



#### Compatible power tools:

flexible shaft drive, straight grinder

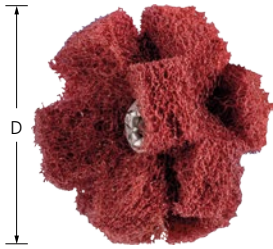


| D<br>[Inches] | T<br>[Inches] | S <sub>d</sub><br>[Inches] | L<br>[Inches] | Grit and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|----------------------------|---------------|---------------------|-------|-------|-------------|-------------|---------------------------------------------------------------------------------------|
|               |               |                            |               | 100                 | 180   | 280   |             |             |                                                                                       |
| 2-3/8         | 2             | 1/4                        | 1-1/2         | 46213               | 46214 | 46215 | 5,000       | 10,000      | 10                                                                                    |
| 3             | 2             | 1/4                        | 1-1/2         | 46216               | 46217 | 46218 | 4,000       | 7,500       | 10                                                                                    |



# Non-woven products

## POLINOX® cross buffs and accessories



### POLINOX® cross buffs

Ideal for cleaning, deburring and fine grinding of inner surfaces and contours.  
Highly recommended for hard-to-reach places such as drilled holes and indentations.

**Abrasive:**  
Aluminum oxide A

**Compatible power tools:**  
flexible shaft drive, straight grinder

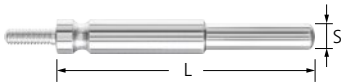
**Ordering notes:**  
■ Please order the matching arbor separately.

**PFERD designation:**  
PNST

**PFERDVALUE®:**



| D<br>[Inches] | No. of<br>layers<br>[pcs.] | Thread | Grit and EDP number |       |       | Compatible<br>arbor | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|----------------------------|--------|---------------------|-------|-------|---------------------|-------------|-------------|-------------------------------------------------------------------------------------|
|               |                            |        | 80                  | 100   | 280   |                     |             |             |                                                                                     |
| 3/4           | 2                          | 8-32   | -                   | 44198 | 44199 | 44830               | 15,000      | 25,100      | 20                                                                                  |
| 1             | 2                          | 8-32   | 44202               | 44200 | 44201 | 44830               | 10,000      | 19,100      | 20                                                                                  |
| 1-1/2         | 3                          | 8-32   | 44210               | 44208 | 44209 | 44830               | 7,500       | 12,600      | 20                                                                                  |
| 2             | 2                          | 8-32   | 44212               | 44213 | 44214 | 44830               | 5,500       | 9,500       | 20                                                                                  |

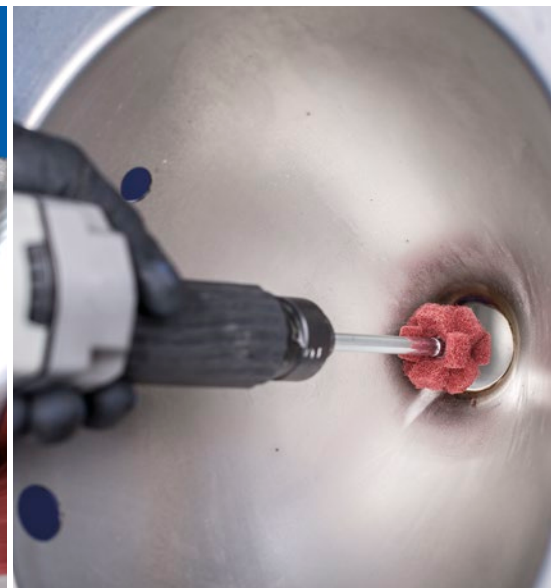


### Drive arbor for POLINOX® cross buffs

Arbors for POLINOX® cross buffs.

**Advantages:**  
■ Increased economic efficiency due to quick cross buff changes.

| S<br>[Inches] | L<br>[Inches] | Thread | Mounting length<br>[Inches] | EDP<br>number | Max.<br>RPM |  |
|---------------|---------------|--------|-----------------------------|---------------|-------------|---------------------------------------------------------------------------------------|
| 1/4           | 3             | 8-32   | 1-1/4                       | 44830         | 25,000      | 1                                                                                     |





### Radial construction

Made of radially arranged flaps of non-woven abrasive material. A long service life is achieved through the dense packing of the flaps.

This unmounted flap wheel is ideal for work on large surfaces.

**Abrasive:**

Aluminum oxide A

**PFERD designation:**

PNL

**Compatible power tools:**

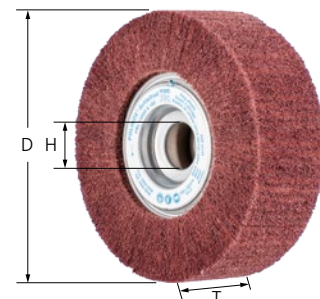
flexible shaft drive, straight grinder, bench grinder

**PFERDVALUE®:**



**Ordering notes:**

■ Please order the matching arbor separately.



| D<br>[Inches] | T<br>[Inches] | H<br>[Inches] | Grit and EDP number |       |       | Compatible arbor | Opt. RPM | Max. RPM |  |
|---------------|---------------|---------------|---------------------|-------|-------|------------------|----------|----------|-------------------------------------------------------------------------------------|
|               |               |               | 100                 | 180   | 280   |                  |          |          |                                                                                     |
| 6             | 2             | 1             | 43128               | 43129 | 43130 | 45714            | 2,000    | 4,000    | 1                                                                                   |
| 8             | 2             | 1-3/4         | 43137               | 43138 | 43139 | 45715            | 1,500    | 3,000    | 1                                                                                   |

### Interleaved construction

The non-woven abrasive material is arranged in multiple radial flaps, with abrasive cloth interlayers. This flap structure facilitates improved stock removal and achieves a coarser surface finish.

This unmounted flap wheel is ideal for work on large surfaces.

**Abrasive:**

Aluminum oxide A

**PFERD designation:**

PNZ

**Compatible power tools:**

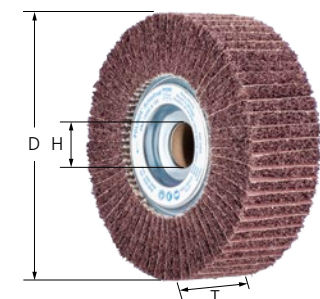
flexible shaft drive, straight grinder, bench grinder

**PFERDVALUE®:**



**Ordering notes:**

■ Please order the matching arbor separately.



| D<br>[Inches] | T<br>[Inches] | H<br>[Inches] | Grit and EDP number |       | Compatible arbor | Opt. RPM | Max. RPM |  |
|---------------|---------------|---------------|---------------------|-------|------------------|----------|----------|---------------------------------------------------------------------------------------|
|               |               |               | 100                 | 180   |                  |          |          |                                                                                       |
| 6             | 2             | 1             | 43045               | 43046 | 45714            | 2,000    | 4,000    | 1                                                                                     |
| 8             | 2             | 1-3/4         | 43048               | 43049 | 45715            | 1,500    | 3,000    | 1                                                                                     |

### Corrugated construction

Made of several wavy arranged strips of non-woven abrasive material, wound around a core.

The wavy structure of the non-woven abrasive material permits seamless matte finishing of surfaces.

**Abrasive:**

Aluminum oxide A

**PFERD designation:**

PNG

**Compatible power tools:**

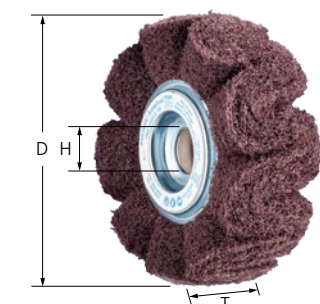
flexible shaft drive, straight grinder, bench grinder

**PFERDVALUE®:**



**Ordering notes:**

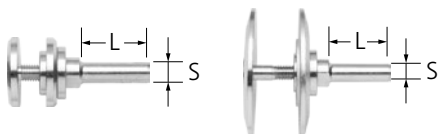
■ Please order the matching arbor separately.



| D<br>[Inches] | T<br>[Inches] | H<br>[Inches] | Grit and EDP number |       |       | Compatible arbor | Opt. RPM | Max. RPM |  |
|---------------|---------------|---------------|---------------------|-------|-------|------------------|----------|----------|---------------------------------------------------------------------------------------|
|               |               |               | 100                 | 180   | 280   |                  |          |          |                                                                                       |
| 6             | 2             | 1             | 43030               | 43031 | 43032 | 45714            | 2,000    | 4,000    | 1                                                                                     |
| 8             | 2             | 1-3/4         | 43036               | 43037 | 43038 | 45715            | 1,500    | 3,000    | 1                                                                                     |

# Non-woven products

## POLINOX® unmounted flap wheels and accessories



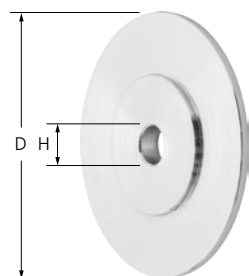
### Drive arbors

Matching arbor for POLINOX® unmounted flap wheels.

#### Advantages:

- Increased economic efficiency due to quick flap wheel changes.

| Fits arbor hole size [Inches] | S [Inches] | L [Inches] | Clamping width [Inches] | For wheel diameter [Inches] | EDP number |  |
|-------------------------------|------------|------------|-------------------------|-----------------------------|------------|-------------------------------------------------------------------------------------|
| 1                             | 1/2        | 1-1/2      | 1-2                     | 4-6                         | 45714      | 1                                                                                   |
| 1-3/4                         | 1/2        | 1-1/2      | 1-2                     | 8-10                        | 45715      | 1                                                                                   |



### Reducing flanges

For mounting unmounted flap wheels and POLINOX® unmounted flap wheels on drive spindles. The clamping flanges are designed to lie countersunk in the flap wheel.

#### Advantages:

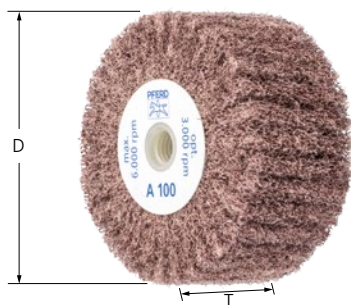
- Can be adapted to an existing drive spindle by drilling.
- Can be used face-down very close to edges and in angles due to special clamping system.

#### Ordering notes:

- Included in delivery: 1 pair

| Fits arbor hole size [Inches] | D [Inches] | H [Inches] | Max. H [Inches] | For wheel diameter [Inches] | EDP number |  |
|-------------------------------|------------|------------|-----------------|-----------------------------|------------|--------------------------------------------------------------------------------------|
| 1                             | 1-1/2      | 1/2        | 7/8             | 4-6                         | 45720      | 1                                                                                    |
|                               | 1-1/2      | 5/8        | 7/8             | 4-6                         | 45721      | 1                                                                                    |
|                               | 1-1/2      | 3/4        | 7/8             | 4-6                         | 45722      | 1                                                                                    |
| 1-3/4                         | 3-1/4      | 1/2        | 1-1/2           | 8-10                        | 45725      | 1                                                                                    |
|                               | 3-1/4      | 5/8        | 1-1/2           | 8-10                        | 45726      | 1                                                                                    |
|                               | 3-1/4      | 3/4        | 1-1/2           | 8-10                        | 45727      | 1                                                                                    |
|                               | 3-1/4      | 1          | 1-1/2           | 8-10                        | 45728      | 1                                                                                    |

## POLINOX® unmounted flap wheels, threaded



### Radial construction

Made of radially arranged flaps of non-woven abrasive material. A long service life is achieved through the dense packing of the flaps.

The unmounted flap wheel is designed for working on medium-sized surfaces with variable-speed angle grinders and fillet weld grinders, and can be mounted directly onto the drive system's spindle without the need for additional clamping devices.

#### Abrasive:

Aluminum oxide A

#### Compatible power tools:

angle grinder, cordless angle grinder

#### PFERD designation:

PNL

#### PFERDVALUE®:



| D [Inches] | T [Inches] | Thread [Inches] | Grit and EDP number |       |       | Opt. RPM | Max. RPM |  |
|------------|------------|-----------------|---------------------|-------|-------|----------|----------|---------------------------------------------------------------------------------------|
|            |            |                 | 100                 | 180   | 280   |          |          |                                                                                       |
| 4          | 2          | 5/8-11          | 43188               | 43189 | 43190 | 3,000    | 6,000    | 5                                                                                     |

### Interleaved construction

The non-woven abrasive material is arranged in multiple radial flaps, with abrasive cloth interlayers. This flap structure facilitates improved stock removal and achieves a coarser surface finish.

The unmounted flap wheel is designed for working on medium-sized surfaces with variable-speed angle grinders and fillet weld grinders, and can be mounted directly onto the drive system's spindle without the need for additional clamping devices.

**Abrasive:**

Aluminum oxide A

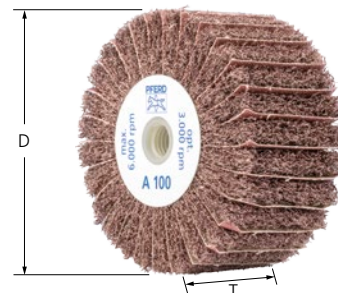
**PFERD designation:**

PNZ

**Compatible power tools:**

angle grinder, cordless angle grinder

**PFERDVALUE®:**



| D<br>[Inches] | T<br>[Inches] | Thread<br>[Inches] | Grit and EDP number |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|--------------------|---------------------|-------|-------------|-------------|-------------------------------------------------------------------------------------|
|               |               |                    | 100                 | 180   |             |             |                                                                                     |
| 4             | 2             | 5/8-11             | 43013               | 43014 | 3,000       | 6,000       | 5                                                                                   |

### Corrugated construction

Made of several wavily arranged strips of non-woven abrasive material, wound around a core. The wavy structure of the non-woven abrasive material permits seamless matte finishing of surfaces.

The unmounted flap wheel is designed for working on medium-sized surfaces with variable-speed angle grinders and fillet weld grinders, and can be mounted directly onto the drive system's spindle without the need for additional clamping devices.

**Abrasive:**

Aluminum oxide A

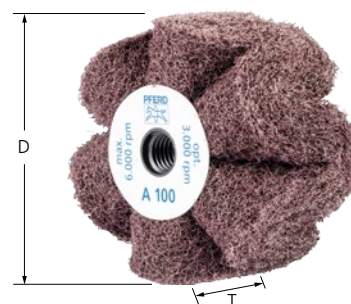
**PFERD designation:**

PNG

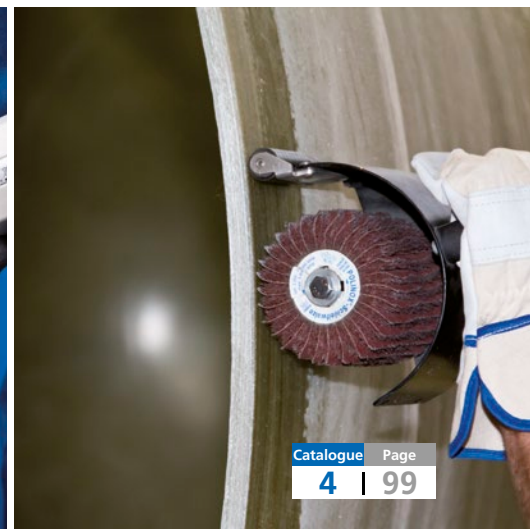
**Compatible power tools:**

angle grinder, cordless angle grinder

**PFERDVALUE®:**



| D<br>[Inches] | T<br>[Inches] | Thread<br>[Inches] | Grit and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|--------------------|---------------------|-------|-------|-------------|-------------|---------------------------------------------------------------------------------------|
|               |               |                    | 100                 | 180   | 280   |             |             |                                                                                       |
| 4             | 2             | 5/8-11             | 43024               | 43025 | 43026 | 3,000       | 6,000       | 5                                                                                     |
| 5             | 2             | 5/8-11             | 43107               | 43108 | 43109 | 2,300       | 4,900       | 1                                                                                     |





# Non-woven products

## General information – POLINOX® finishing drums

POLINOX® finishing drums are especially suited to work on flat surfaces.

### Advantages:

- Long service life due to tightly packed flaps.
- Cool grinding and low thermal load of the workpiece.
- No loading due to open structure and high flexibility of the non-woven material.

### Workpiece materials:

- Can be used on nearly all materials.



### Applications:

- Roughing
- Deburring
- Surface work
- Cleaning
- Structuring (matte finishing and satin finishing)
- Step-by-step fine grinding

### Compatible power tools:

- Drum grinders

### Ordering notes:

- The 3/4" centre hole diameter with 4 keyways fits all conventional drum grinders.
- Additional drum products can be found on pages 45, 78 and 120, as well as in catalogue section 8.

### Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

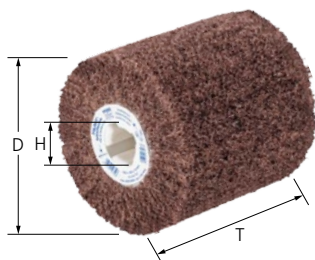


### PFERDVALUE®:

PFERDERGONOMICS® recommends POLINOX® finishing drums to sustainably reduce vibration and noise levels during use and to improve working comfort.



## POLINOX® finishing drums



### Radial construction

Made of radially arranged flaps of non-woven abrasive material. A long service life is achieved through the dense packing of the flaps.

#### Abrasive:

Aluminum oxide A

#### PFERD designation:

PNL

### PFERDVALUE®:



| D<br>[Inches] | T<br>[Inches] | Bore/<br>Thread<br>[Inches] | Grit and EDP number |       |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|-----------------------------|---------------------|-------|-------|-------|-------------|-------------|---------------------------------------------------------------------------------------|
|               |               |                             | 80                  | 100   | 180   | 280   |             |             |                                                                                       |
| 4             | 4             | 3/4                         | 43102               | 43103 | 43104 | 43105 | 2,500       | 4,800       | 1                                                                                     |
| 5             | 4             | 5/8-11                      | -                   | 46786 | 46787 | 46788 | 2,300       | 3,100       | 1                                                                                     |





## Interleaved construction

Made of radially arranged flaps of non-woven abrasive material. There is also abrasive cloth situated between the flaps. The flap structure facilitates improved stock removal and achieves a coarser surface finish.

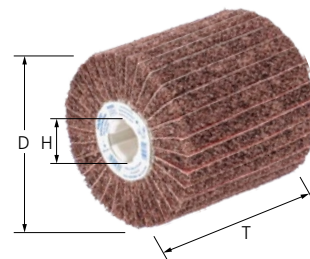
### Abrasive:

Aluminum oxide A

### PFERD designation:

PNZ

### PFERDVALUE®:



| D<br>[Inches] | T<br>[Inches] | Bore/<br>Thread<br>[Inches] | Grit and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM |   |
|---------------|---------------|-----------------------------|---------------------|-------|-------|-------------|-------------|---|
|               |               |                             | 60                  | 80    | 120   |             |             |   |
| 4             | 4             | 3/4                         | 43113               | 43114 | 43115 | 2,500       | 4,800       | 1 |
| 5             | 4             | 5/8-11                      | 46789               | 46790 | 46791 | 2,300       | 3,100       | 1 |

## Corrugated construction

Made of several wavy arranged strips of non-woven abrasive material, wound around a core. The wavy structure of the non-woven abrasive material permits seamless brush matting of large surfaces.

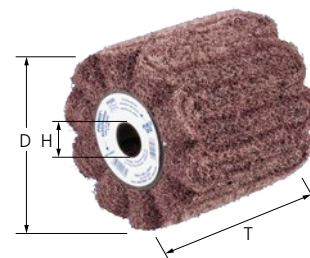
### Abrasive:

Aluminum oxide A

### PFERD designation:

PNG

### PFERDVALUE®:



| D<br>[Inches] | T<br>[Inches] | Bore<br>[Inches] | Grit and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM |   |
|---------------|---------------|------------------|---------------------|-------|-------|-------------|-------------|---|
|               |               |                  | 100                 | 180   | 280   |             |             |   |
| 4             | 4             | 3/4              | 43003               | 43004 | 43005 | 2,000       | 4,800       | 1 |

## Linear finishing set

### Linear finishing set

Complete linear finishing set for rough grinding to surface finishing. Set features linear finishing tool, as well as a selection of coated grinding belts, POLIVLIES® non-woven surface conditioning belts, and POLINOX® non-woven finishing drums. Pneumatic drum holder for belts also included.

### Contents 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® interleaved 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



| Case dimensions<br>[Inches] | EDP<br>number |   |
|-----------------------------|---------------|---|
| 6-1/3 x 10 x 22-4/5         | 49999         | 1 |

# Non-woven products

## POLINOX® fibre-backing discs



### Radial construction

Non-woven abrasive flaps with a fiberglass backer, for face-down finishing work. Densely-stacked flaps for long service life.

The disc is designed for working on large surfaces with variable-speed angle grinders.

#### Abrasive:

Aluminum oxide A

#### Compatible power tools:

angle grinder, cordless angle grinder

#### Ordering notes:

T = thickness

#### PFERD designation:

PNL

#### PFERDVALUE®:



| D<br>[Inches] | T<br>[Inches] | H<br>[Inches] | Grit and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------------|-------|-------|-------------|-------------|-------------------------------------------------------------------------------------|
|               |               |               | 100                 | 180   | 280   |             |             |                                                                                     |
| 4-1/2         | 3/4           | 7/8           | 45891               | 45892 | 45893 | 2,500       | 5,300       | 5                                                                                   |
| 5             | 3/4           | 7/8           | 45894               | 45895 | 45896 | 2,300       | 3,800       | 5                                                                                   |



### Interleaved construction

Interleaved abrasive and non-woven flaps with a fiberglass backer for face-down finishing work. Densely-stacked flaps for long service life and increased stock removal.

The disc is designed for working on large surfaces with variable-speed angle grinders.

#### Abrasive:

Aluminum oxide A

#### Compatible power tools:

angle grinder, cordless angle grinder

#### Ordering notes:

T = thickness

#### PFERD designation:

PNZ

#### PFERDVALUE®:



| D<br>[Inches] | T<br>[Inches] | H<br>[Inches] | Grit and EDP number |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------------|-------|-------------|-------------|---------------------------------------------------------------------------------------|
|               |               |               | 100                 | 180   |             |             |                                                                                       |
| 4-1/2         | 3/4           | 7/8           | 45911               | 45912 | 2,500       | 5,300       | 5                                                                                     |
| 5             | 3/4           | 7/8           | 45915               | 45916 | 2,300       | 3,800       | 5                                                                                     |

## High-strength masking tape



### High-strength masking tape

Used to create a clear separation between different grinding patterns in adjacent areas. The masking tape protects surfaces which have already been worked on, or which are not supposed to be worked on.

#### Advantages:

- 3/4" width: High elasticity and tear strength.
- 2" width: Reusable and extremely high durability.
- High edge stability.

#### Workpiece materials:

aluminum, stainless steel (INOX)

#### Recommendations for use:

- 3/4" width: Use only during finish machining with soft, flexible products, e.g. non-woven products.
- To avoid its inadvertent removal, ensure that the masking tape is only applied in the running direction of the tool.

| L<br>[Feet] | T<br>[Inches] | EDP<br>number |  |
|-------------|---------------|---------------|---------------------------------------------------------------------------------------|
| 82          | 3/4           | 43000         | 1                                                                                     |
| 10          | 2             | 43001         | 1                                                                                     |

PFERD supplies POLIVLIES® flap discs and hook and loop discs in various grit sizes, diameters and types. These are recommended for work on large surfaces made from stainless steel (INOX).

### Advantages:

- Increased economic efficiency due to high abrasive performance and long service life.
- Creates a consistently high surface quality throughout the entire service life as new, sharp abrasive material is constantly exposed.
- Conforms to contours due to high flexibility.

### Workpiece materials:

- Can be used on nearly all materials.

### Compatible power tools:

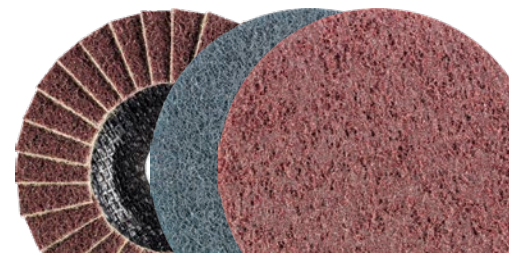
- Angle grinders
- Cordless angle grinders

### Ordering notes:

T = thickness

### Safety notes:

- The specified maximum permitted rotational speed must never be exceeded.



## Aluminum oxide A

For universal coarse to fine grinding applications in industry and professional trades.

### Abrasive:

Aluminum oxide A

Available POLIVLIES® grit sizes:

- 100 C = coarse (yellow-brown)
- 180 M = medium (red-brown)
- 240 F = fine (blue)

### Recommendations for use:

- For the best results, use at a recommended peripheral speed of 6,000–6,900 SFPM.

### PFERD designation:

PVL



4

| D<br>[Inches]    | T<br>[Inches] | H<br>[Inches] | Grit, type and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|------------------|---------------|---------------|---------------------------|-------|-------|-------------|-------------|---------------------------------------------------------------------------------------|
|                  |               |               | 100 C                     | 180 M | 240 F |             |             |                                                                                       |
| Plain arbor hole |               |               |                           |       |       |             |             |                                                                                       |
| 4-1/2            | 3/4           | 7/8           | 43273                     | 43274 | 43275 | 5,000–5,800 | 13,300      | 5                                                                                     |
| 5                | 3/4           | 7/8           | 43276                     | 43277 | 43278 | 4,600–5,300 | 12,200      | 5                                                                                     |
| Threaded hub     |               |               |                           |       |       |             |             |                                                                                       |
| 4-1/2            | 3/4           | 5/8-11        | 43285                     | 43286 | 43287 | 5,000–5,800 | 13,300      | 5                                                                                     |
| 5                | 3/4           | 5/8-11        | 43288                     | 43289 | 43290 | 4,600–5,300 | 12,200      | 5                                                                                     |

## Ceramic oxide CO-COOL

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain. Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

### Abrasive:

Coated abrasive flaps: Ceramic oxide CO-COOL

Non-woven material: Aluminum oxide A

Available POLIVLIES® grit sizes:

- 100 C = coarse (yellow-brown)
- 180 M = medium (red-brown)
- 240 F = fine (blue)

### Recommendations for use:

- For the best results, use at a recommended peripheral speed of 6,000–6,900 SFPM

### PFERD designation:

PVZ



| D<br>[Inches]    | T<br>[Inches] | H<br>[Inches] | Grit, type and EDP number |                         |                          | Opt.<br>RPM | Max.<br>RPM |  |
|------------------|---------------|---------------|---------------------------|-------------------------|--------------------------|-------------|-------------|---------------------------------------------------------------------------------------|
|                  |               |               | CO-COOL<br>60 / A 100 C   | CO-COOL<br>80 / A 180 M | CO-COOL<br>120 / A 240 F |             |             |                                                                                       |
| Plain arbor hole |               |               |                           |                         |                          |             |             |                                                                                       |
| 4-1/2            | 3/4           | 7/8           | 43297                     | 43298                   | 43299                    | 5,000–5,800 | 13,300      | 5                                                                                     |
| 5                | 3/4           | 7/8           | 43300                     | 43301                   | 43302                    | 4,600–5,300 | 12,200      | 5                                                                                     |
| Threaded hub     |               |               |                           |                         |                          |             |             |                                                                                       |
| 4-1/2            | 3/4           | 5/8-11        | 43309                     | 43310                   | 43311                    | 5,000–5,800 | 13,300      | 5                                                                                     |
| 5                | 3/4           | 5/8-11        | 43312                     | 43313                   | 43314                    | 4 600–5 300 | 12 200      | 5                                                                                     |

## Non-woven products

### POLIVLIES® hook and loop discs



#### POLIVLIES® hook and loop discs

POLIVLIES® hook and loop discs are suited to grinding large surfaces. The pre-punched holes mean that they can be ideally centred on and used with various backing pads.

##### Abrasive:

Aluminum oxide A

Available POLIVLIES® grit sizes:

100 C = coarse (yellow-brown)

180 M = medium (red-brown)

240 F = fine (blue)

##### Ordering notes:

■ Please order POLIVLIES® hook and loop disc holders separately.

##### PFERD designation:

PVKR

##### Recommendations for use:

- For the best results, use at a recommended peripheral speed of 3,000– 4,000 SFPM.
- Use with POLIVLIES® hook and loop disc holder.
- Break out the pre-punched centering hole if required.

| D <sub>1</sub><br>[Inches] | Grit, type and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM | Compatible<br>backing pad |  |
|----------------------------|---------------------------|-------|-------|-------------|-------------|---------------------------|-------------------------------------------------------------------------------------|
|                            | 100 C                     | 180 M | 240 F |             |             |                           |                                                                                     |
| 4-1/2                      | 43446                     | 43447 | 43449 | 3,300       | 5,300       | 43407                     | 10                                                                                  |
| 5                          | 43450                     | 43451 | 43453 | 3,000       | 4,850       | 43408                     | 10                                                                                  |
| 7                          | 43458                     | 43459 | 43461 | 2,200       | 3,500       | 43409                     | 10                                                                                  |

### POLIVLIES® hook and loop disc holders



#### POLIVLIES® hook and loop disc holders

Backing pads for POLIVLIES® hook and loop discs.

##### Advantages:

- Increased economic efficiency as the discs can be changed quickly.
- Enables surface finishing without visible transitions.
- Centering pin enables faster central clamping.

| D<br>[Inches]                | Thread<br>[Inches] | EDP<br>number | Max.<br>RPM |  |
|------------------------------|--------------------|---------------|-------------|---------------------------------------------------------------------------------------|
| <b>With centering pin</b>    |                    |               |             |                                                                                       |
| 4-1/2                        | 5/8-11             | 43407         | 5,300       | 1                                                                                     |
| 5                            | 5/8-11             | 43408         | 4,850       | 1                                                                                     |
| 7                            | 5/8-11             | 43409         | 3,500       | 1                                                                                     |
| <b>Without centering pin</b> |                    |               |             |                                                                                       |
| 4-1/2                        | 5/8-11             | 43410         | 5,300       | 1                                                                                     |
| 5                            | 5/8-11             | 43412         | 4,850       | 1                                                                                     |
| 7                            | 5/8-11             | 43420         | 3,500       | 1                                                                                     |





POLICLEAN® PLUS is a coarsely structured, abrasive, non-woven cleaning fabric that was developed from a special combination of synthetic fibres and abrasive grain.

The comprehensive range of POLICLEAN® PLUS products contain:

- POLICLEAN® PLUS wheels
- POLICLEAN® PLUS mounted wheels
- COMBIDISC® POLICLEAN® PLUS discs (see COMBIDISC® discs, page 34)
- POLICLEAN® PLUS discs

### Advantages:

- High flexibility and open structure mean ideal adaptation to contours and no loading of the product itself.
- The POLICLEAN® PLUS material exhibits considerably higher stock removal rates with a long service life, and is also very aggressive.

### Workpiece materials:

- Can be used on nearly all materials.

### Applications:

- Roughing
- Surface work
- Cleaning
- Removing heat discolouration
- Removing paint
- Derusting
- Descaling
- Removing oxidation

### Abrasive:

- Aluminum oxide A

### Recommendations for use:

- For best performance, use with 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 product wear.

### Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



### Recommended rotational speed range

#### Example:

EDP: 44791, 4" POLICLEAN® PLUS wheel

Peripheral speed: 3,000–4,000 SFPM

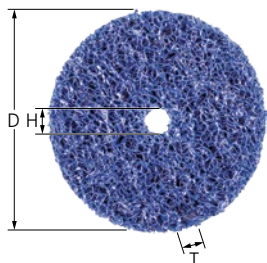
**Rotational speed: 2,900–3,800 RPM**

| Wheel dia.<br>[Inches] | Peripheral speed [SFPM] |       |       |       |        |
|------------------------|-------------------------|-------|-------|-------|--------|
|                        | 2,000                   | 3,000 | 4,000 | 6,000 | 8,000  |
|                        | Rotational speeds [RPM] |       |       |       |        |
| 3                      | 2,500                   | 3,800 | 5,100 | 7,600 | 10,200 |
| 4                      | 1,900                   | 2,900 | 3,800 | 5,700 | 7,600  |
| 4-1/2                  | 1,700                   | 2,500 | 3,400 | 5,100 | 6,800  |
| 5                      | 1,500                   | 2,300 | 3,100 | 4,600 | 6,100  |
| 6                      | 1,300                   | 1,900 | 2,500 | 3,800 | 5,100  |



# Non-woven products

## POLICLEAN® PLUS products



### POLICLEAN® PLUS wheels

For coarse cleaning work such as removing paint, scale, heat discolouration, rust and adhesive residues in peripheral grinding.

POLICLEAN® PLUS discs exhibit a higher stock removal rate with a very long service life.

#### Recommendations for use:

- For work on larger surfaces, pack several POLICLEAN® PLUS wheels with the appropriate arbor.

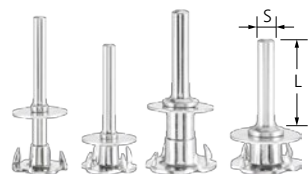
#### Compatible power tools:

flexible shaft drive, power drill, straight grinder

#### Ordering notes:

- Please order the matching arbor separately.

| D<br>[Inches] | T<br>[Inches] | H<br>[Inches] | EDP<br>number | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------|-------------|-------------|-------------------------------------------------------------------------------------|
| 3             | 1/2           | 1/4           | 44790         | 4,000–5,100 | 10,000      | 6                                                                                   |
| 4             | 1/2           | 1/2           | 44791         | 3,000–3,800 | 7,500       | 4                                                                                   |
| 6             | 1/2           | 1/2           | 44792         | 2,000–2,500 | 5,100       | 4                                                                                   |



### Drive arbors for POLICLEAN® PLUS wheels

Arbors for POLICLEAN® PLUS wheels. The different variants provide space for 1 or 2 wheels.

#### Advantages:

- Increased economic efficiency due to quick wheel changes.

#### Recommendations for use:

- When replacing the wheels, leave the arbor clamped in the power tool.

| Fits arbor<br>hole size<br>[Inches] | S<br>[Inches] | L<br>[Inches] | Compatible<br>POLICLEAN® PLUS<br>wheel | EDP<br>number | No. of<br>wheels |  |
|-------------------------------------|---------------|---------------|----------------------------------------|---------------|------------------|---------------------------------------------------------------------------------------|
| 1/2                                 | 1/4           | 1-1/2         | 44790, 44791, 44972                    | 44835         | 1 wheel          | 1                                                                                     |
|                                     | 1/4           | 1-1/2         | 44790, 44791, 44972                    | 44836         | 2 wheels         | 1                                                                                     |
|                                     | 3/8           | 1-1/2         | 44790, 44791, 44972                    | 44838         | 1 wheel          | 1                                                                                     |
|                                     | 3/8           | 1-1/2         | 44790, 44791, 44972                    | 44839         | 2 wheels         | 1                                                                                     |

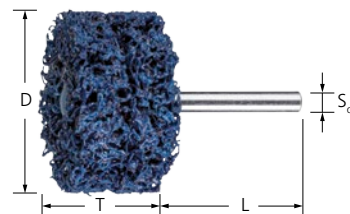


### POLICLEAN® PLUS mounted wheels

For coarse cleaning work such as removing paint, scale, heat discolouration, rust and adhesive residues in peripheral grinding.



**Compatible power tools:**  
flexible shaft drive, power drill, straight grinder



| D<br>[Inches] | T<br>[Inches] | S <sub>d</sub><br>[Inches] | L<br>[Inches] | EDP<br>number | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|----------------------------|---------------|---------------|-------------|-------------|-------------------------------------------------------------------------------------|
| 2             | 1/2           | 1/4                        | 1-1/2         | 44884         | 6,000–7,000 | 15,000      | 5                                                                                   |
|               | 1             | 1/4                        | 1-1/2         | 44885         | 6,000–7,000 | 15,000      | 5                                                                                   |
| 3             | 1/2           | 1/4                        | 1-1/2         | 44886         | 4,000–5,100 | 10,000      | 5                                                                                   |
|               | 1             | 1/4                        | 1-1/2         | 44887         | 4,000–5,100 | 10,000      | 5                                                                                   |
| 4             | 1/2           | 1/4                        | 1-1/2         | 44888         | 3,000–3,800 | 7,500       | 5                                                                                   |

### POLICLEAN® PLUS discs

The non-woven cleaning material is glued to a fibreglass backer. This makes POLICLEAN® PLUS discs ideal for use in face-down grinding.

For coarse cleaning work such as removing paint, scale, heat discolouration, rust and adhesive residues.

POLICLEAN® PLUS discs exhibit a high stock removal rate with a very long service life.



**Recommendations for use:**

- Preferably for use on slow-running angle grinders.
- For the best results, use at a recommended peripheral speed of 6,000–6,900 SFPM.

**Compatible power tools:**

angle grinder, cordless angle grinder

**Ordering notes:**

T = thickness



| D<br>[Inches]           | T<br>[Inches] | H<br>[Inches] | EDP<br>number | Opt.<br>RPM | Max.<br>RPM |  |
|-------------------------|---------------|---------------|---------------|-------------|-------------|---------------------------------------------------------------------------------------|
| <b>Plain arbor hole</b> |               |               |               |             |             |                                                                                       |
| 4-1/2                   | 1/2           | 7/8           | 44874         | 5,000–7,000 | 10,000      | 5                                                                                     |
| 5                       | 1/2           | 7/8           | 44875         | 5,000–7,000 | 10,000      | 5                                                                                     |
| <b>Threaded hub</b>     |               |               |               |             |             |                                                                                       |
| 4-1/2                   | 1/2           | 5/8-11        | 44879         | 5,000–7,000 | 10,000      | 5                                                                                     |
| 5                       | 1/2           | 5/8-11        | 44880         | 5,000–7,000 | 10,000      | 5                                                                                     |



# Poliflex® finishing points

## General information



Poliflex® finishing points are manufactured with high shape accuracy, consistent quality and tight dimensional tolerances.

They are ideal for fine grinding, structuring and preparations for polishing work, and are very frequently used for tool and die making applications.

### Advantages:

- For achieving very high surface quality standards.
- High productivity due to long service life and very high stock removal rate.
- Excellent working comfort due to precise concentricity.



### Applications:

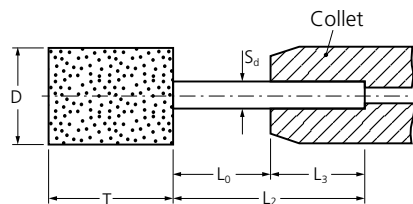
- Structuring (matte finishing, brush matting and satin finishing)
- Step-by-step fine grinding

### Recommendations for use:

- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing products.

### Explanation of the code system according to EN 12413:

- D = Grinding point outer diameter  
 T = Grinding point width  
 $S_d$  = Shank diameter  
 $L_0$  = Unsupported shank length  
 $L_2$  = Shank length  
 $L_3$  = Clamping length of shank



### Safety notes:

The following maximum operating speeds are permitted for Poliflex® finishing points:

|    |            |
|----|------------|
| GR | 3,000 SFPM |
| LR | 6,000 SFPM |

- The maximum rotational speeds for the various shank lengths and shank diameters are defined in DIN 69170 based on EN 12413. These must be adhered to in order to avoid buckling of the shank during use. Regardless of the shank length, the clamping length ( $L_3$ ) of the shank must be at least 1/2".
- Each packaging unit of PFERD finishing points comes with rotational speed specifications for the unsupported shank length ( $L_0$ ) of that wheel. Proper concentric accuracy and correct clamping of the power tool must also be ensured.



### Recommended rotational speed range

#### Example:

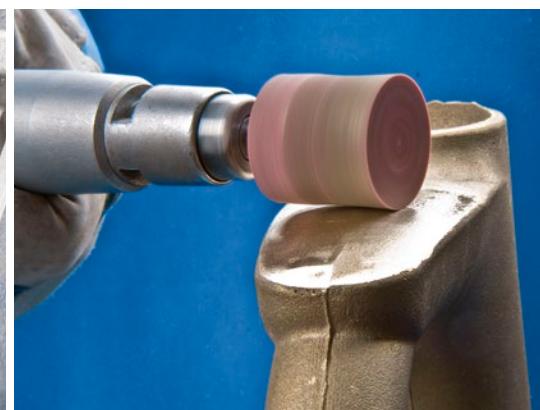
EDP 36491, A21 120 grit, rubber bond

Poliflex® dia.: 1"

Peripheral speed: 3,000 SFPM

**Rotational speed: 11,500 RPM**

| Finishing point dia. [Inches] | Peripheral speed [SFPM] |        |        |        |        |        |
|-------------------------------|-------------------------|--------|--------|--------|--------|--------|
|                               | 2,000                   | 2,400  | 3,000  | 4,000  | 5,000  | 6,000  |
|                               | Rotational speeds [RPM] |        |        |        |        |        |
| 1/4                           | 30,600                  | 36,700 | 45,800 | 61,100 | 76,400 | 91,700 |
| 5/16                          | 24,400                  | 29,300 | 36,700 | 48,900 | 61,100 | 73,300 |
| 3/8                           | 20,400                  | 24,400 | 30,600 | 40,700 | 50,900 | 61,100 |
| 1/2                           | 15,300                  | 18,300 | 22,900 | 30,600 | 38,200 | 45,800 |
| 5/8                           | 12,200                  | 14,700 | 18,300 | 24,400 | 30,600 | 36,700 |
| 11/16                         | 11,100                  | 13,300 | 16,700 | 22,200 | 27,800 | 33,300 |
| 3/4                           | 10,200                  | 12,200 | 15,300 | 20,400 | 25,500 | 30,600 |
| 7/8                           | 8,700                   | 10,500 | 13,100 | 17,500 | 21,800 | 26,200 |
| 1                             | 7,600                   | 9,200  | 11,500 | 15,300 | 19,100 | 22,900 |
| 1-1/4                         | 6,100                   | 7,300  | 9,200  | 12,200 | 15,300 | 18,300 |





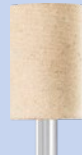
To make it easier to choose the right Poliflex® finishing point, we have designed our range around material groups, main areas of application and special operational requirements.

### How do you find the best Poliflex® finishing point?

The table below shows which variations of abrasives and bonds are recommended for various materials. The differentiation of the selection criteria allows the user to find the best finishing point by material, application and surface finish. The bond and grain mixture have a large impact on the abrasive performance, service life and aggressiveness of the points. They also determine the look of the surface.

### Choose your Poliflex® finishing point by:

- ① Material of component    ② Type of application    ③ Desired surface finish    ④ Bond    ⑤ Reference catalogue page for more information

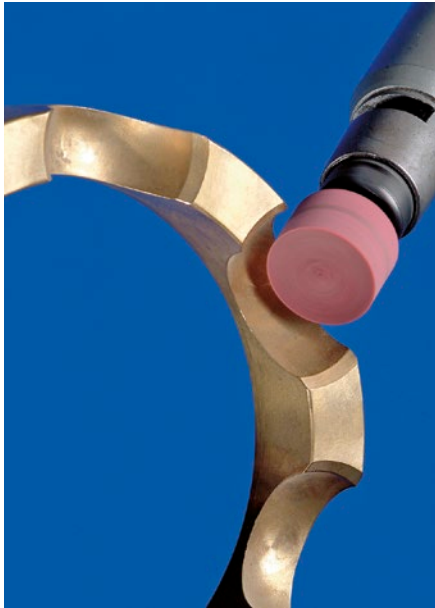
| ① Material group<br>▼                     |                                                   |                                                                                                                                        | ② Application<br>▼                                  | Bond                            | Elastomer bond                                                                      |                                                                                     |
|-------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                           |                                                   |                                                                                                                                        |                                                     | Abrasive<br>(grain mixtures)    | AR                                                                                  | AW                                                                                  |
|                                           |                                                   |                                                                                                                                        |                                                     |                                 |  |  |
|                                           |                                                   |                                                                                                                                        |                                                     | ④ Designation/<br>bond          | GR                                                                                  | LR                                                                                  |
|                                           |                                                   |                                                                                                                                        |                                                     | Recommended<br>peripheral speed | 2,000–2,400<br>SFPM                                                                 | 2,000–3,000<br>SFPM                                                                 |
|                                           |                                                   |                                                                                                                                        | ③ Surface finish                                    |                                 |                                                                                     |                                                                                     |
| Steel,<br>cast steel                      | Non-hardened,<br>non-heat-treated<br>steels       | Construction steels,<br>carbon steels, tool<br>steels, non-alloyed<br>steels, case-hardened<br>steels, tempering<br>steels, cast steel | Surface grinding                                    | Matte surface                   | ○                                                                                   |                                                                                     |
|                                           |                                                   |                                                                                                                                        |                                                     | Shiny surface                   | ●                                                                                   | ○                                                                                   |
|                                           |                                                   |                                                                                                                                        | Edge grinding<br>with high dimensional<br>stability | Matte surface                   | ○                                                                                   |                                                                                     |
|                                           |                                                   |                                                                                                                                        |                                                     | Shiny surface                   |                                                                                     |                                                                                     |
|                                           | Hardened, heat-<br>treated steels                 | Tool steels,<br>tempering steels,<br>alloyed steels,<br>alloyed cast steel                                                             | Surface grinding                                    | Matte surface                   | ○                                                                                   |                                                                                     |
|                                           |                                                   |                                                                                                                                        |                                                     | Shiny surface                   | ○                                                                                   | ●                                                                                   |
|                                           |                                                   |                                                                                                                                        | Edge grinding<br>with high dimensional<br>stability | Matte surface                   |                                                                                     |                                                                                     |
|                                           |                                                   |                                                                                                                                        |                                                     | Shiny surface                   |                                                                                     |                                                                                     |
| Stainless steel (INOX)                    | Rust- and<br>acid-resistant steels                | Austenitic and<br>ferritic stainless<br>steels                                                                                         | Surface grinding                                    | Matte surface                   |                                                                                     |                                                                                     |
|                                           |                                                   |                                                                                                                                        |                                                     | Shiny surface                   | ●                                                                                   | ○                                                                                   |
|                                           |                                                   |                                                                                                                                        | Edge grinding<br>with high dimensional<br>stability | Matte surface                   |                                                                                     |                                                                                     |
|                                           |                                                   |                                                                                                                                        |                                                     | Shiny surface                   |                                                                                     | ○                                                                                   |
|                                           |                                                   |                                                                                                                                        | General use                                         | Structured surface              |                                                                                     |                                                                                     |
|                                           |                                                   |                                                                                                                                        |                                                     |                                 |                                                                                     |                                                                                     |
| Non-ferrous<br>metals                     | Soft non-ferrous<br>metals, non-ferrous<br>metals | Aluminum alloys,<br>brass,<br>copper,<br>zinc                                                                                          | Surface grinding                                    | Matte surface                   |                                                                                     |                                                                                     |
|                                           |                                                   |                                                                                                                                        |                                                     | Shiny surface                   | ○                                                                                   | ●                                                                                   |
|                                           |                                                   |                                                                                                                                        | Edge grinding<br>with high dimensional<br>stability | Matte surface                   |                                                                                     |                                                                                     |
|                                           |                                                   |                                                                                                                                        |                                                     | Shiny surface                   | ○                                                                                   | ●                                                                                   |
|                                           | Hard non-ferrous<br>metals                        | Bronze, titanium,<br>titanium alloys,<br>hard aluminum<br>alloys                                                                       | Surface grinding                                    | Matte surface                   |                                                                                     |                                                                                     |
|                                           |                                                   |                                                                                                                                        |                                                     | Shiny surface                   | ○                                                                                   |                                                                                     |
|                                           |                                                   |                                                                                                                                        | Edge grinding<br>with high dimensional<br>stability | Matte surface                   |                                                                                     |                                                                                     |
|                                           |                                                   |                                                                                                                                        |                                                     | Shiny surface                   |                                                                                     |                                                                                     |
|                                           | High-temperature-<br>resistant materials          | Nickel-based and<br>cobalt-based alloys                                                                                                | Surface grinding                                    | Matte surface                   |                                                                                     |                                                                                     |
|                                           |                                                   |                                                                                                                                        |                                                     | Shiny surface                   | ●                                                                                   |                                                                                     |
|                                           |                                                   |                                                                                                                                        | Edge grinding<br>with high dimensional<br>stability | Matte surface                   |                                                                                     |                                                                                     |
|                                           |                                                   |                                                                                                                                        |                                                     | Shiny surface                   |                                                                                     |                                                                                     |
| ● = highly recommended    ○ = recommended |                                                   |                                                                                                                                        |                                                     | ⑤ Catalogue page                | 110–111                                                                             | 112–113                                                                             |

● = highly recommended    ○ = recommended



# Poliflex® finishing points

## Rubber bond



Poliflex® finishing points with the rubber bond are manufactured with pink aluminum oxide. The rubber (GR) bond is an elastomer-based soft bond. Ideal for use on surfaces.

### Advantages:

- For achieving a fine, shiny surface finish.
- **Rubber bond:** Soft grinding due to soft, elastic bond.

### Abrasive:

- White aluminum oxide AW

### Applications:

- Step-by-step fine grinding

### Compatible power tools:

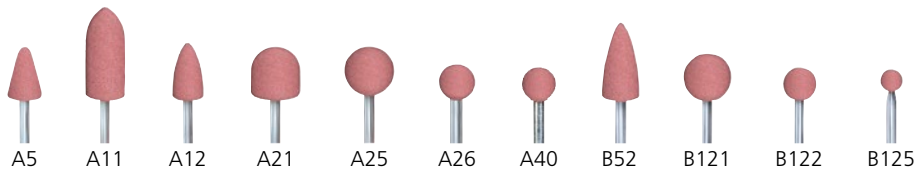
- Flexible shaft drives
- Straight grinders

### Recommendations for use:

- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing products.
- **Rubber bond:** For best performance, use with a recommended peripheral speed of 2,000–2,400 SFPM.

### Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The clamping length of the shank must be at least 1/2".



### Series A and B

Finishing points available in a variety of shapes for fine grinding of small surfaces.

Dimensional specifications:

- D = Mounted point outer diameter
- T = Mounted point width
- S<sub>d</sub> = Shank diameter
- L<sub>2</sub> = Shank length

### PFERD designation:

GR

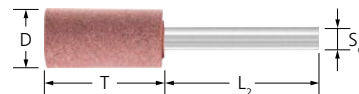
| Shape                                                               | D<br>[Inches] | T<br>[Inches] | Grit | EDP<br>number | Recom. RPM<br>1/2" overhang | Max. RPM<br>1/2" overhang | Max. RPM<br>1" overhang |    |
|---------------------------------------------------------------------|---------------|---------------|------|---------------|-----------------------------|---------------------------|-------------------------|----|
| <b>Shank diameter 1/8" x 1-1/4" [S<sub>d</sub> x L<sub>2</sub>]</b> |               |               |      |               |                             |                           |                         |    |
| B122                                                                | 3/8           | 3/8           | 120  | 36361         | 24,000                      | 68,740                    | 37,790                  | 10 |
| B125                                                                | 1/4           | 1/4           | 120  | 36401         | 36,000                      | 75,330                    | 50,640                  | 10 |
| <b>Shank diameter 1/4" x 1-1/2" [S<sub>d</sub> x L<sub>2</sub>]</b> |               |               |      |               |                             |                           |                         |    |
| A5                                                                  | 3/4           | 1-1/8         | 120  | 36461         | 12,000                      | 38,550                    | 31,270                  | 10 |
| A11                                                                 | 7/8           | 2             | 120  | 36471         | 10,000                      | 25,420                    | 20,100                  | 10 |
| A12                                                                 | 11/16         | 1-1/4         | 120  | 36481         | 13,000                      | 38,050                    | 30,790                  | 10 |
| A21                                                                 | 1             | 1             | 120  | 36491         | 9,000                       | 35,510                    | 28,840                  | 10 |
| A25                                                                 | 1             | 1             | 120  | 36451         | 9,000                       | 35,510                    | 28,840                  | 10 |
| A26                                                                 | 5/8           | 5/8           | 120  | 36431         | 14,000                      | 48,980                    | 40,410                  | 10 |
| A40                                                                 | 3/4           | 3/4           | 120  | 36441         | 12,000                      | 50,930                    | 50,930                  | 10 |
| B52                                                                 | 3/8           | 3/4           | 120  | 36501         | 24,000                      | 78,340                    | 54,390                  | 10 |
| B121                                                                | 1/2           | 1/2           | 120  | 36421         | 18,000                      | 69,310                    | 45,850                  | 10 |

### Series W

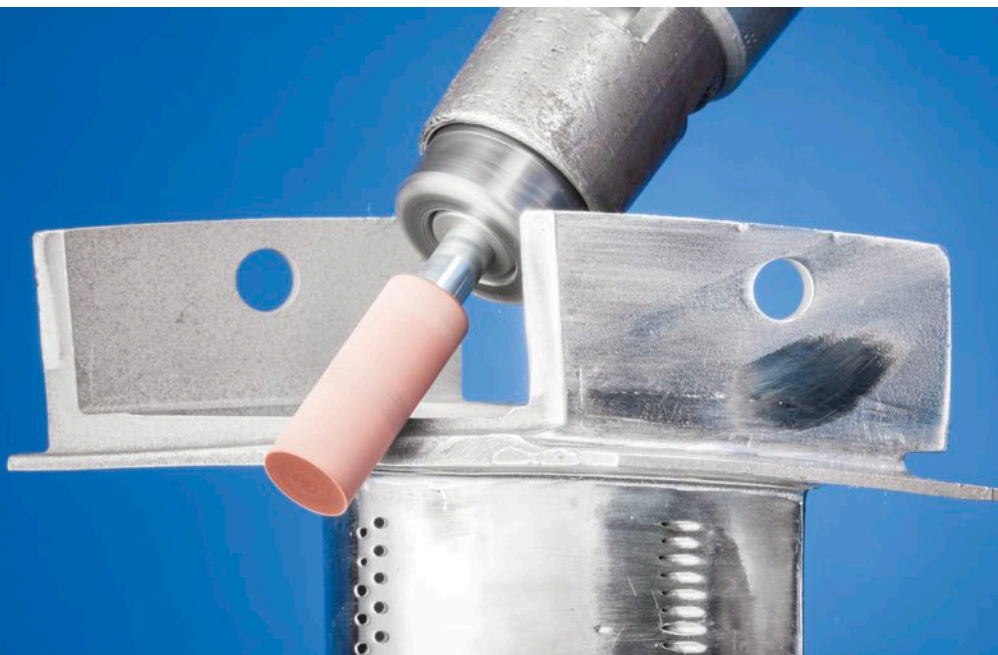
Finishing points in cylindrical shape, for fine grinding of small surfaces.

**PFERD designation:**

GR



| Shape                                                             | D<br>[Inches] | T<br>[Inches] | Grit | EDP<br>number | Recom. RPM<br>1/2" overhang | Max. RPM<br>1/2" overhang | Max. RPM<br>1" overhang |  |
|-------------------------------------------------------------------|---------------|---------------|------|---------------|-----------------------------|---------------------------|-------------------------|-------------------------------------------------------------------------------------|
| <b>Shank diameter 1/8" x 1-1/4" [<math>S_d \times L_2</math>]</b> |               |               |      |               |                             |                           |                         |                                                                                     |
| W162                                                              | 1/4           | 3/8           | 120  | 36101         | 36,000                      | 67,210                    | 44,040                  | 10                                                                                  |
| W168                                                              | 5/16          | 5/16          | 120  | 36111         | 29,000                      | 65,900                    | 42,790                  | 10                                                                                  |
| W170                                                              | 5/16          | 1/2           | 120  | 36121         | 29,000                      | 54,860                    | 34,040                  | 10                                                                                  |
| W174                                                              | 3/8           | 1/4           | 120  | 36131         | 24,000                      | 65,510                    | 42,440                  | 10                                                                                  |
| W175                                                              | 3/8           | 3/8           | 120  | 36141         | 24,000                      | 57,530                    | 35,990                  | 10                                                                                  |
| W176                                                              | 3/8           | 5/8           | 120  | 36151         | 24,000                      | 50,460                    | 30,450                  | 10                                                                                  |
| W185                                                              | 1/2           | 1/2           | 120  | 36171         | 18,000                      | 42,750                    | 24,370                  | 10                                                                                  |
| <b>Shank diameter 1/4" x 1-1/2" [<math>S_d \times L_2</math>]</b> |               |               |      |               |                             |                           |                         |                                                                                     |
| W178                                                              | 3/8           | 1             | 120  | 36191         | 24,000                      | 40,360                    | 30,780                  | 10                                                                                  |
| W193                                                              | 5/8           | 3/8           | 120  | 36231         | 14,500                      | 44,330                    | 34,340                  | 10                                                                                  |
| W196                                                              | 5/8           | 1             | 120  | 36251         | 14,500                      | 34,670                    | 25,340                  | 10                                                                                  |
| W204                                                              | 3/4           | 3/4           | 120  | 36281         | 12,000                      | 36,510                    | 27,040                  | 10                                                                                  |
| W220                                                              | 1             | 1             | 120  | 36311         | 9,000                       | 30,370                    | 21,410                  | 10                                                                                  |
| W230                                                              | 1-1/4         | 1-1/4         | 120  | 36331         | 7,200                       | 25,200                    | 16,760                  | 5                                                                                   |



# Poliflex® finishing points

## Leather bond



Poliflex® finishing points with the leather bond are manufactured with white aluminum oxide. The leather (LR) bond is a hard, sturdy bond. Ideal for use on surfaces.

### Advantages:

- For achieving a fine, shiny surface finish.
- High productivity due to long service life and very high stock removal rate.

### Abrasive:

- Aluminum oxide A

### Applications:

- Step-by-step fine grinding

### Compatible power tools:

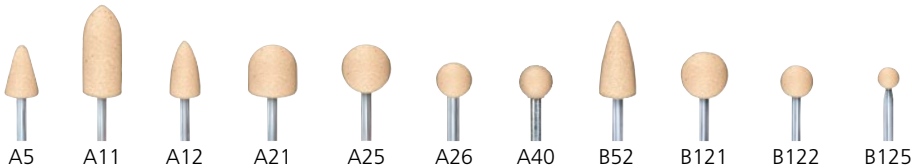
- Flexible shaft drives
- Straight grinders

### Recommendations for use:

- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing products.
- **Leather bond:** For best performance, use with a recommended peripheral speed of 3,000–4,000 SFPM.

### Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The clamping length of the shank must be at least 1/2".



### Series A and B

Finishing points available in a variety of shapes for fine grinding of small surfaces.

Dimensional specifications:

- D = Mounted point outer diameter
- T = Mounted point width
- S<sub>d</sub> = Shank diameter
- L<sub>2</sub> = Shank length

**PFERD designation:**

LR

| Shape                                                               | D<br>[Inches] | T<br>[Inches] | Grit | EDP<br>number | Recom. RPM<br>1/2" overhang | Max. RPM<br>1/2" overhang | Max. RPM<br>1" overhang |    |
|---------------------------------------------------------------------|---------------|---------------|------|---------------|-----------------------------|---------------------------|-------------------------|----|
| <b>Shank diameter 1/8" x 1-1/4" [S<sub>d</sub> x L<sub>2</sub>]</b> |               |               |      |               |                             |                           |                         |    |
| B122                                                                | 3/8           | 3/8           | 120  | 36365         | 40,000                      | 68,740                    | 37,790                  | 10 |
| B125                                                                | 5/16          | 5/16          | 120  | 36405         | 60,000                      | 75,330                    | 50,640                  | 10 |
| <b>Shank diameter 1/4" x 1-1/2" [S<sub>d</sub> x L<sub>2</sub>]</b> |               |               |      |               |                             |                           |                         |    |
| A5                                                                  | 3/4           | 1-1/8         | 120  | 36465         | 20,000                      | 38,550                    | 31,270                  | 10 |
| A11                                                                 | 7/8           | 2             | 120  | 36475         | 17,000                      | 25,420                    | 20,100                  | 10 |
| A12                                                                 | 11/16         | 1-1/4         | 120  | 36485         | 22,000                      | 38,050                    | 30,790                  | 10 |
| A21                                                                 | 1             | 1             | 120  | 36495         | 15,000                      | 35,510                    | 28,840                  | 10 |
| A25                                                                 | 1             | 1             | 120  | 36455         | 15,000                      | 35,510                    | 28,840                  | 10 |
| A26                                                                 | 5/8           | 5/8           | 120  | 36435         | 24,000                      | 48,980                    | 40,410                  | 10 |
| A40                                                                 | 3/4           | 3/4           | 120  | 36445         | 20,000                      | 50,930                    | 50,930                  | 10 |
| B52                                                                 | 3/8           | 3/4           | 120  | 36505         | 40,000                      | 78,340                    | 54,390                  | 10 |
| B121                                                                | 1/2           | 1/2           | 120  | 36425         | 30,000                      | 69,310                    | 45,850                  | 10 |

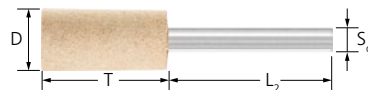


## Series W

Fine finishing points in cylindrical shape, for fine grinding of small surfaces.

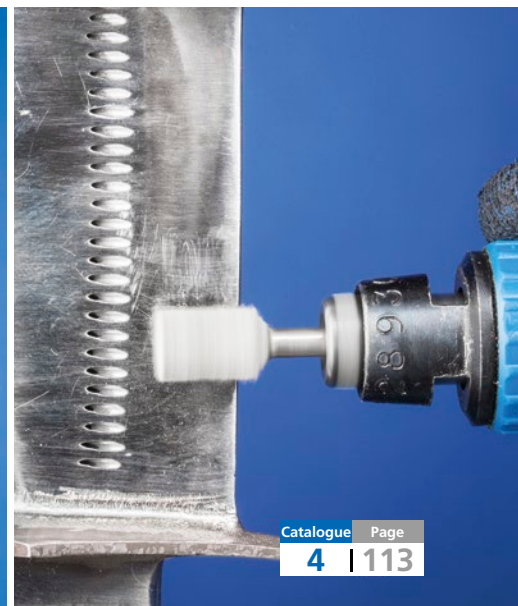
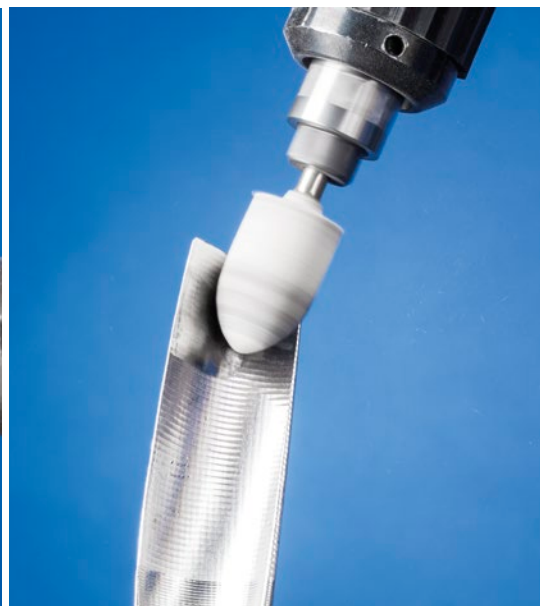
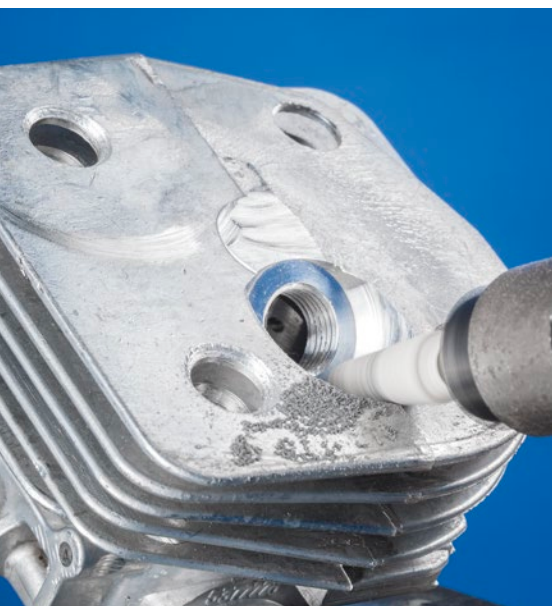
**PFERD designation:**

LR



| Shape                                                             | D<br>[Inches] | T<br>[Inches] | Grit | EDP<br>number | Recom. RPM<br>1/2" overhang | Max. RPM<br>1/2" overhang | Max. RPM<br>1" overhang |  |
|-------------------------------------------------------------------|---------------|---------------|------|---------------|-----------------------------|---------------------------|-------------------------|-------------------------------------------------------------------------------------|
| <b>Shank diameter 1/8" x 1-1/4" [<math>S_d \times L_2</math>]</b> |               |               |      |               |                             |                           |                         |                                                                                     |
| W162                                                              | 1/4           | 3/8           | 120  | 36105         | 60,000                      | 67,210                    | 44,040                  | 10                                                                                  |
| W168                                                              | 5/16          | 5/16          | 120  | 36115         | 48,000                      | 65,900                    | 42,790                  | 10                                                                                  |
| W170                                                              | 5/16          | 1/2           | 120  | 36125         | 48,000                      | 54,860                    | 34,040                  | 10                                                                                  |
| W174                                                              | 3/8           | 1/4           | 120  | 36135         | 40,000                      | 65,510                    | 42,440                  | 10                                                                                  |
| W175                                                              | 3/8           | 3/8           | 120  | 36145         | 40,000                      | 57,530                    | 35,990                  | 10                                                                                  |
| W176                                                              | 3/8           | 5/8           | 120  | 36155         | 40,000                      | 50,460                    | 30,450                  | 10                                                                                  |
| W185                                                              | 1/2           | 1/2           | 120  | 36175         | 30,000                      | 42,750                    | 24,370                  | 10                                                                                  |
| W186                                                              | 1/2           | 3/4           | 120  | 36185         | 30,000                      | 31,220                    | 15,900                  | 10                                                                                  |
| <b>Shank diameter 1/4" x 1-1/2" [<math>S_d \times L_2</math>]</b> |               |               |      |               |                             |                           |                         |                                                                                     |
| W178                                                              | 3/8           | 1             | 120  | 36195         | 40,000                      | 40,360                    | 30,780                  | 10                                                                                  |
| W193                                                              | 5/8           | 3/8           | 120  | 36235         | 24,000                      | 44,330                    | 34,340                  | 10                                                                                  |
| W196                                                              | 5/8           | 1             | 120  | 36255         | 24,000                      | 34,670                    | 25,340                  | 10                                                                                  |
| W204                                                              | 3/4           | 3/4           | 120  | 36285         | 24,000                      | 36,510                    | 27,040                  | 10                                                                                  |
| W206                                                              | 3/4           | 1-1/4         | 120  | 36295         | 20,000                      | 29,810                    | 20,870                  | 10                                                                                  |
| W220                                                              | 1             | 1             | 120  | 36315         | 15,000                      | 30,370                    | 21,410                  | 10                                                                                  |
| W230                                                              | 1-1/4         | 1-1/4         | 120  | 36335         | 13,000                      | 25,200                    | 16,760                  | 10                                                                                  |

4



# Poliflex® finishing wheels

## General information – Textile wheels



Poliflex® wheels with the textile (TX) bond are manufactured with standard aluminium oxide. The textile fabric inlays make the TX bond a very hard, sturdy bond. Recommended for use on edges.

### Advantages:

- For achieving a fine, matte surface finish.
- High profitability due to high abrasive performance and long service life.

### Abrasive:

- Aluminum oxide A

### Applications:

- Step-by-step fine grinding
- Surface grinding
- Weld removal
- Blending
- Deburring
- Edge grinding

### Compatible power tools:

- Angle grinder
- Cordless angle grinder

### Recommendations for use:

- Poliflex® textile wheels grind and finish in one operation.

### Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- Poliflex® textile wheels perform best at a recommended peripheral speed of 6,000–9,800 SFPM.



## Textile wheels



### TX INOX + ALU

Textile wheels are cotton-fibre based abrasive products developed for medium to light grinding, weld blending, deburring and surface finishing of stainless steel and aluminum. Textile wheels grind and finish in one operation.

### Workpiece materials:

stainless steel (INOX), aluminum

### Applications:

surface grinding, weld removal, blending, deburring and edge grinding

### Abrasive:

Aluminum oxide A

### PFERD designation:

TX

### Ordering notes:

U = thickness

| D<br>[Inches]                                    | U<br>[Inches] | H<br>[Inches] | Grit and EDP number |       | Max.<br>RPM |  |
|--------------------------------------------------|---------------|---------------|---------------------|-------|-------------|---------------------------------------------------------------------------------------|
|                                                  |               |               | 36                  | 54    |             |                                                                                       |
| Depressed centre (type 27) – plain arbor hole    |               |               |                     |       |             |                                                                                       |
| 4-1/2                                            | 1/4           | 7/8           | 61433               | 61434 | 13,300      | 10                                                                                    |
| Depressed centre (type 27) – threaded arbor hole |               |               |                     |       |             |                                                                                       |
| 4-1/2                                            | 1/4           | 5/8-11        | 61442               | 61443 | 13,300      | 10                                                                                    |

The comprehensive range of polishing products include:

- Felt points
- Mounted felt flap wheels
- Felt wheels
- Felt flap discs
- Cloth rings

Felt points and discs are predominantly used for high-gloss polishing.



### Advantages:

- Felt points and discs: Precise retention of geometric shapes due to the hardness of these products.
- Felt flap discs, cloth rings and mounted felt flap wheels: Excellent adaptation to contours due to high flexibility.
- Can be freely shaped, meaning they can be used on complicated geometries.

### Workpiece materials:

- Can be used on nearly all materials.

### Applications:

- Polishing

### Recommendations for use:

- For best performance, use with a recommended peripheral speed of 1,000–2,000 SFPM. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and service life.
- **Felt points and discs:**  
Use diamond polishing pastes and polishing paste bars.
- **Cloth rings and mounted felt flap wheels:**  
Use polishing and grinding pastes.
- When changing the polishing paste, use a brand-new polishing product.

### Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



### Recommended rotational speed range

#### Example:

EDP 48520, Cylindrical shape, dia. 1/4"

Peripheral speed: 1,000–2,000 SFPM

**Rotational speed: 15,300–30,600 RPM**

#### Example:

EDP 48576, Conical pointed shape, dia. 3/4"

Peripheral speed: 2,000–3,000 SFPM

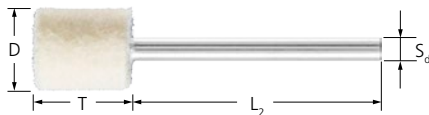
**Rotational speed: 10,200–15,300 RPM**

| Polishing product dia.<br>[Inches] | Peripheral speed [SFPM] |        |        |        |        |        |
|------------------------------------|-------------------------|--------|--------|--------|--------|--------|
|                                    | 1,000                   | 2,000  | 3,000  | 4,000  | 5,000  | 6,300  |
|                                    | Rotational speeds [RPM] |        |        |        |        |        |
| 1/4                                | 15,300                  | 30,600 | 45,800 | 61,100 | 76,400 | 96,300 |
| 5/16                               | 12,200                  | 24,400 | 36,700 | 48,900 | 61,100 | 77,000 |
| 3/8                                | 10,200                  | 20,400 | 30,600 | 40,700 | 50,900 | 64,200 |
| 1/2                                | 7,600                   | 15,300 | 22,900 | 30,600 | 38,200 | 48,100 |
| 9/16                               | 6,800                   | 13,600 | 20,400 | 27,200 | 34,000 | 42,800 |
| 3/4                                | 5,100                   | 10,200 | 15,300 | 20,400 | 25,500 | 32,100 |
| 1                                  | 3,800                   | 7,600  | 11,500 | 15,300 | 19,100 | 24,100 |
| 1-1/4                              | 2,500                   | 5,100  | 7,600  | 10,200 | 12,700 | 16,000 |
| 2                                  | 1,900                   | 3,800  | 5,700  | 7,600  | 9,600  | 12,000 |
| 2-1/4                              | 1,600                   | 3,200  | 4,800  | 6,400  | 8,000  | 10,100 |
| 3                                  | 1,300                   | 2,500  | 3,800  | 5,100  | 6,400  | 8,000  |
| 4                                  | 1,000                   | 1,900  | 2,900  | 3,800  | 4,800  | 6,000  |
| 4-1/2                              | 800                     | 1,700  | 2,500  | 3,400  | 4,200  | 5,300  |
| 5                                  | 800                     | 1,500  | 2,300  | 3,100  | 3,800  | 4,800  |
| 6                                  | 600                     | 1,300  | 1,900  | 2,500  | 3,200  | 4,000  |
| 8                                  | 500                     | 1,000  | 1,400  | 1,900  | 2,400  | 3,000  |



# Polishing products

## Felt points

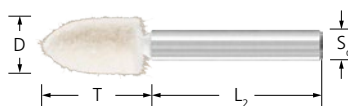


### Cylindrical shape

Cylindrical shape points, primarily for peripheral use. Feature a centre hole to facilitate face-down polishing.

**Compatible power tools:**  
flexible shaft drive, straight grinder

| D<br>[Inches]                                                       | T<br>[Inches] | EDP<br>number | Opt.<br>RPM   | Max.<br>RPM |  |
|---------------------------------------------------------------------|---------------|---------------|---------------|-------------|-------------------------------------------------------------------------------------|
| <b>Shank diameter 1/8" x 1-5/8" [S<sub>d</sub> x L<sub>2</sub>]</b> |               |               |               |             |                                                                                     |
| 1/4                                                                 | 3/8           | 48520         | 16,000–32,000 | 79,500      | 10                                                                                  |
| 5/16                                                                | 3/8           | 48521         | 12,000–24,000 | 59,500      | 10                                                                                  |
| 3/8                                                                 | 9/16          | 48522         | 10,000–20,000 | 47,500      | 10                                                                                  |
| <b>Shank diameter 1/4" x 1-5/8" [S<sub>d</sub> x L<sub>2</sub>]</b> |               |               |               |             |                                                                                     |
| 3/8                                                                 | 9/16          | 48523         | 10,000–20,000 | 47,500      | 10                                                                                  |
| 9/16                                                                | 3/4           | 48524         | 6,000–12,000  | 31,500      | 10                                                                                  |
| 3/4                                                                 | 1             | 48525         | 5,000–10,000  | 23,500      | 10                                                                                  |
| 1                                                                   | 1-1/4         | 48526         | 4,000–8,000   | 19,000      | 10                                                                                  |



### Conical pointed shape

The conical pointed shape is mainly used for work on radii and contours.

**Compatible power tools:**  
flexible shaft drive, straight grinder

| D<br>[Inches]                                                       | T<br>[Inches] | EDP<br>number | Opt.<br>RPM   | Max.<br>RPM |  |
|---------------------------------------------------------------------|---------------|---------------|---------------|-------------|---------------------------------------------------------------------------------------|
| <b>Shank diameter 1/8" x 1-5/8" [S<sub>d</sub> x L<sub>2</sub>]</b> |               |               |               |             |                                                                                       |
| 5/16                                                                | 1/2           | 48570         | 12,000–24,000 | 59,500      | 10                                                                                    |
| 3/8                                                                 | 3/4           | 48571         | 10,000–20,000 | 47,500      | 10                                                                                    |
| 1/2                                                                 | 3/4           | 48573         | 8,000–16,000  | 39,500      | 10                                                                                    |
| <b>Shank diameter 1/4" x 1-5/8" [S<sub>d</sub> x L<sub>2</sub>]</b> |               |               |               |             |                                                                                       |
| 3/8                                                                 | 3/4           | 48572         | 10,000–20,000 | 47,500      | 10                                                                                    |
| 9/16                                                                | 3/4           | 48574         | 6,000–12,000  | 31,500      | 10                                                                                    |
| 9/16                                                                | 1-1/4         | 48575         | 6,000–12,000  | 31,500      | 10                                                                                    |
| 3/4                                                                 | 1             | 48576         | 5,000–10,000  | 23,500      | 10                                                                                    |



### Conical shape with radius end

The conical shape is mainly used for work on radii.

**Compatible power tools:**  
flexible shaft drive, straight grinder

| D<br>[Inches]                                                       | T<br>[Inches] | EDP<br>number | Opt.<br>RPM  | Max.<br>RPM |  |
|---------------------------------------------------------------------|---------------|---------------|--------------|-------------|---------------------------------------------------------------------------------------|
| <b>Shank diameter 1/4" x 1-5/8" [S<sub>d</sub> x L<sub>2</sub>]</b> |               |               |              |             |                                                                                       |
| 9/16                                                                | 3/4           | 48600         | 6,000–12,000 | 31,500      | 10                                                                                    |
| 3/4                                                                 | 1             | 48601         | 5,000–10,000 | 23,500      | 10                                                                                    |
| 1                                                                   | 1-1/4         | 48602         | 4,000–8,000  | 19,000      | 10                                                                                    |
| 1-1/4                                                               | 1-3/8         | 48603         | 3,000–6,000  | 15,500      | 10                                                                                    |



### Cylindrical shape with radius end

The cylindrical shape with radius end is mainly used for work on small, concave contours.

#### Compatible power tools:

flexible shaft drive, straight grinder



| D<br>[Inches]                                                     | T<br>[Inches] | EDP<br>number | Opt.<br>RPM   | Max.<br>RPM |  |
|-------------------------------------------------------------------|---------------|---------------|---------------|-------------|-------------------------------------------------------------------------------------|
| <b>Shank diameter 1/8" x 1-5/8" [<math>S_d \times L_2</math>]</b> |               |               |               |             |                                                                                     |
| 5/16                                                              | 1/2           | 48630         | 12,000–24,000 | 59,500      | 10                                                                                  |
| 3/8                                                               | 9/16          | 48631         | 10,000–20,000 | 47,500      | 10                                                                                  |
| <b>Shank diameter 1/4" x 1-5/8" [<math>S_d \times L_2</math>]</b> |               |               |               |             |                                                                                     |
| 9/16                                                              | 3/4           | 48632         | 6,000–12,000  | 31,500      | 10                                                                                  |
| 3/4                                                               | 1             | 48633         | 5,000–10,000  | 23,500      | 10                                                                                  |
| 1                                                                 | 1-1/4         | 48634         | 4,000–8,000   | 19,000      | 10                                                                                  |

### Mounted felt flap wheels

#### Mounted felt flap wheels

Mounted felt flap wheels are used for pre-polishing and high-gloss polishing on small to medium-sized components.

#### Advantages:

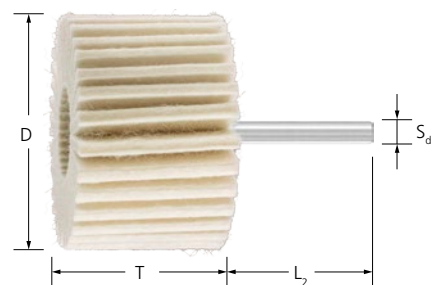
- Low thermal load on the workpiece.

#### Compatible power tools:

flexible shaft drive, straight grinder

#### Recommendations for use:

- Use the hard type for pre-polishing flat surfaces, and the soft type 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.

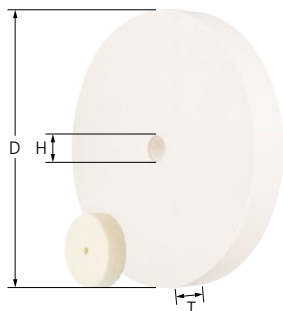


4



| D<br>[Inches]                                                   | T<br>[Inches] | Type and EDP number |             | Opt.<br>RPM | Max.<br>RPM |  |
|-----------------------------------------------------------------|---------------|---------------------|-------------|-------------|-------------|---------------------------------------------------------------------------------------|
|                                                                 |               | W<br>(soft)         | H<br>(hard) |             |             |                                                                                       |
| Shank diameter 1/4" x 1-1/2" [S <sub>a</sub> x L <sub>2</sub> ] |               |                     |             |             |             |                                                                                       |
| 1                                                               | 3/8           | 48540               | 48541       | 7,500       | 24,500      | 5                                                                                     |
| 1                                                               | 1             | 48542               | 48543       | 7,500       | 24,500      | 5                                                                                     |
| 2                                                               | 1             | 48546               | 48547       | 3,800       | 12,000      | 5                                                                                     |
| 3                                                               | 1             | 48550               | 48551       | 2,400       | 7,500       | 5                                                                                     |
| 3                                                               | 2             | 48552               | 48553       | 2,400       | 7,500       | 5                                                                                     |





### Felt wheels

Felt wheels are mainly used peripherally.

#### Compatible power tools:

flexible shaft drive, straight grinder

#### Ordering notes:

■ Please order the matching arbor separately.

| D<br>[Inches] | T<br>[Inches] | H<br>[Inches] | EDP<br>number | Opt.<br>RPM | Max.<br>RPM | Recommended<br>arbors |  |
|---------------|---------------|---------------|---------------|-------------|-------------|-----------------------|-------------------------------------------------------------------------------------|
| 1-1/4         | 1/4           | 1/4           | 48690         | 3,000–6,000 | 20,000      | 69029                 | 5                                                                                   |
| 1-3/4         | 3/8           | 1/4           | 48691         | 2,000–4,000 | 13,500      | 69029                 | 5                                                                                   |
| 2-1/4         | 3/8           | 1/4           | 48692         | 1,500–3,000 | 10,000      | 69029                 | 5                                                                                   |
| 3             | 3/8           | 3/8           | 48693         | 1,000–2,000 | 7,500       | 69027                 | 5                                                                                   |
| 4             | 3/4           | 3/8           | 48695         | 900–1,800   | 6,100       | 69031                 | 1                                                                                   |
| 5             | 3/4           | 3/4           | 48697         | 750–1,500   | 4,900       | 69032                 | 1                                                                                   |
| 6             | 1             | 3/4           | 48699         | 600–1,200   | 4,000       | 69032                 | 1                                                                                   |
| 8             | 1-1/4         | 3/4           | 48700         | 500–1,000   | 3,000       | 69032                 | 1                                                                                   |

## Felt flap discs



### Felt flap discs

Felt flap discs are used for pre-polishing and high-gloss polishing on medium-sized to large components.

#### Advantages:

■ Low thermal load on the workpiece.

#### Recommendations for use:

- Use the hard type for pre-polishing flat surfaces, and the soft type for high-gloss polishing and processing workpieces with many contours.
- If very fine finishes need to be achieved, the two types can be used successively.

#### Compatible power tools:

angle grinder, cordless angle grinder

#### Ordering notes:

T = thickness

| D<br>[Inches] | T<br>[Inches] | H<br>[Inches] | Type and EDP number |             | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------------|-------------|-------------|-------------|---------------------------------------------------------------------------------------|
|               |               |               | W<br>(soft)         | H<br>(hard) |             |             |                                                                                       |
| 4-1/2         | 7/8           | 7/8           | 48802               | 48803       | 1,650       | 8,350       | 5                                                                                     |
| 5             | 7/8           | 7/8           | 48804               | 48805       | 1,500       | 7,650       | 5                                                                                     |

### Cloth rings

Cloth rings are used for pre-polishing and high-gloss polishing with polishing pastes. If the intention is to achieve very smooth surface finishes, use several or even all variants successively.

Cloth rings are available in four types:

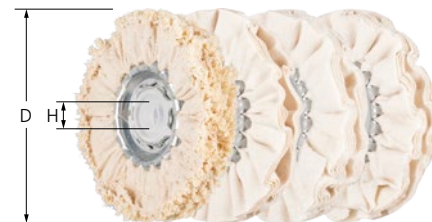
- ST (sisal cloth) = Coarse pre-polishing
- TH (hard cloth) = Pre-polishing
- TW (soft cloth) = High-gloss polishing
- FL (flannel) = High-gloss polishing/buffing

#### Recommendations for use:

- Pre-polishing of steel and INOX: Cloth rings ST or TH with green polishing paste.
- Pre-polishing of aluminum and brass: Cloth rings ST or TH with grey polishing paste.
- Pre-polishing of non-ferrous metals: Cloth rings ST or TH with brown polishing paste.
- High-gloss polishing on all metals: Cloth rings TW or FL with pink polishing paste.
- High-gloss polishing on plastics: Cloth rings TW or FL with beige polishing paste.
- Type TW and FL cloth rings achieve their best performance at a recommended peripheral speed of 1,000–3,000 SFPM.
- Type ST and TH cloth rings achieve their best performance at a recommended peripheral speed of 2,000–3,000 SFPM.

**Compatible power tools:**  
flexible shaft drive, straight grinder

**Ordering notes:**  
■ Please order arbor separately.



| D<br>[Inches] | H<br>[Inches] | Face width<br>[Inches] |                              | Type and EDP number |       |       |       | Opt.<br>RPM | Max.<br>RPM | Recommended<br>arbors |                              |  |
|---------------|---------------|------------------------|------------------------------|---------------------|-------|-------|-------|-------------|-------------|-----------------------|------------------------------|---------------------------------------------------------------------------------------|
|               |               | Sisal                  | Hard,<br>soft and<br>flannel | ST                  | TH    | TW    | FL    |             |             | Sisal                 | Hard,<br>soft and<br>flannel |                                                                                       |
| 3             | 3/8           | 3/4                    | 3/8                          | 48710               | 48720 | 48730 | 48740 | 2,500       | 7,500       | 69027                 | 69027                        | 5                                                                                     |
| 4             | 3/8           | 3/4                    | 3/8                          | 48711               | 48721 | 48731 | 48741 | 1,900       | 6,100       | 69027                 | 69027                        | 5                                                                                     |
| 6             | 3/4           | 1                      | 3/8                          | 48713               | 48723 | 48733 | 48743 | 1,250       | 4,000       | 69032                 | 69032                        | 5                                                                                     |
| 8             | 3/4           | 1                      | 3/8                          | 48714               | 48724 | 48734 | 48744 | 950         | 3,000       | 69032                 | -                            | 5                                                                                     |

### Drive arbors for cloth rings

Matching arbors for felt wheels and cloth rings.

#### Advantages:

- Increased economic efficiency due to quick product changes.

EDP 69029



EDP 84656



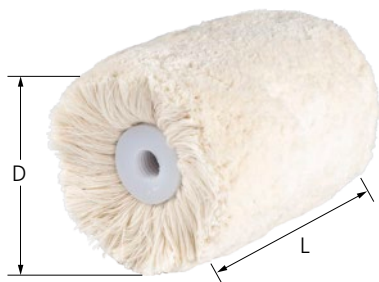
EDP 69027



EDP 69032



| Fits arbor<br>hole size<br>[Inches] | S<br>[Inches] | L<br>[Inches] | Clamping<br>width<br>[Inches] | EDP<br>number |  |
|-------------------------------------|---------------|---------------|-------------------------------|---------------|---------------------------------------------------------------------------------------|
| 1/4                                 | 1/4           | 7/8           | 3/16–3/4                      | 69029         | 1                                                                                     |
| 3/8                                 | 1/4           | 7/8           | 0–5/16                        | 69027         | 1                                                                                     |
| 1/2, 5/8                            | 1/4           | 3/4           | 1/8–1/2                       | 84656         | 1                                                                                     |
| 1/2, 3/4                            | 3/8           | 1             | 1/4–1                         | 69032         | 1                                                                                     |



### Buffing drum

Buffing drum is made from densely packed soft cotton yarn and is used for high-gloss polishing with polishing pastes. Numerous string ends hold buffing compounds and high pliability enables finishes on irregular surfaces.

#### Advantages:

- Extremely flexible for polishing contours.
- Quickly achieves a polished surface.

#### Recommendations for use:

- Use a sufficient amount of polishing paste to achieve a polished finish.

#### Compatible power tools:

drum grinder

#### Ordering notes:

- Additional drum products can be found on pages 45, 78, 100 and 101, as well as in catalogue section 8.
- Refer to our "Power tools" catalogue section 9 for information on the linear finishing tool, EDP 91217.

| D<br>[Inches] | L<br>[Inches] | Thread<br>[Inches] | EDP<br>number | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|--------------------|---------------|-------------|-------------|-------------------------------------------------------------------------------------|
| 4             | 4             | 5/8-11             | 48842         | 3,500       | 3,500       | 1                                                                                   |





PFERD offers grinding pastes for use in extremely fine grinding work, such as when grinding in valve seats, shaft bearings and as a preparation for polishing with felt polishing products and cloth rings.

PFERD offers five different polishing paste bars that are clearly marked with different colours to easily identify the respective application task. You can find the key for the respective colours in the table below.

### Advantages:

- High productivity.
- Quick results.
- Coordinated system.

### Workpiece materials:

- Can be used on nearly all materials.

### Applications:

- Polishing
- Step-by-step fine grinding



## Grinding pastes

Oil-soluble grinding pastes with sharp-edged SiC grain.



| Grit size | EDP number | Contents |         |  |
|-----------|------------|----------|---------|-------------------------------------------------------------------------------------|
|           |            | [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                                                                                   |

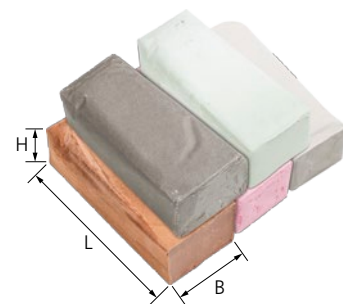
## Polishing paste bars

Apart from being used with felt products, polishing pastes are also used in combination with cloth rings and buffing drums for pre-polishing and high-gloss polishing. If the intention is to achieve very smooth surface finishes, use several or even all types successively.

Intended applications for the different types:

- ST (sisal cloth) = Coarse pre-polishing with green, grey, or brown pastes
- TH (hard cloth) = Pre-polishing with green, grey, or brown pastes
- TW (soft cloth) = High-gloss polishing with pink or beige pastes
- FL (flannel) = High-gloss polishing/buffing with pink or beige pastes

Polishing paste bars are available in a small pack and bulk packs.



| Type                 | Use for                        | EDP number | Contents |         | Colour | B<br>[Inches] | H<br>[Inches] | L<br>[Inches] |  |
|----------------------|--------------------------------|------------|----------|---------|--------|---------------|---------------|---------------|---------------------------------------------------------------------------------------|
|                      |                                |            | [oz]     | [grams] |        |               |               |               |                                                                                       |
| Bulk pack            |                                |            |          |         |        |               |               |               |                                                                                       |
| pre-polishing        | Steel + stainless steel (INOX) | 48760      | 38.8     | 1,100   | green  | 2-3/4         | 2             | 5-1/2         | 1                                                                                     |
|                      | Aluminum + brass               | 48761      | 45.8     | 1,300   | grey   | 2-3/4         | 2             | 5-1/2         | 1                                                                                     |
|                      | Non-ferrous metals             | 48762      | 40.5     | 1,150   | brown  | 2-3/4         | 2             | 5-1/2         | 1                                                                                     |
| high-gloss polishing | All metals                     | 48763      | 40.5     | 1,150   | pink   | 2-3/4         | 2             | 5-1/2         | 1                                                                                     |
|                      | plastics                       | 48764      | 38.8     | 1,100   | beige  | 2-3/4         | 2             | 5-1/2         | 1                                                                                     |
| Small pack           |                                |            |          |         |        |               |               |               |                                                                                       |
| pre-polishing        | Steel + stainless steel (INOX) | 48765      | 3.8      | 108     | green  | 1             | 1-1/4         | 3-1/2         | 1                                                                                     |
|                      | Aluminum + brass               | 48766      | 5.0      | 142     | grey   | 1             | 1-1/4         | 3-1/2         | 1                                                                                     |
|                      | Non-ferrous metals             | 48767      | 3.9      | 111     | brown  | 1             | 1-1/4         | 3-1/2         | 1                                                                                     |
| high-gloss polishing | All metals                     | 48768      | 4.7      | 132     | pink   | 1             | 1-1/4         | 3-1/2         | 1                                                                                     |
|                      | plastics                       | 48769      | 3.6      | 104     | beige  | 1             | 1-1/4         | 3-1/2         | 1                                                                                     |

# Grinding and polishing pastes

## Diamond polishing pastes



Diamond polishing pastes are used for work on hard materials, such as tungsten carbide and hardened steels. They are used in combination with felt polishing elements. Diamond polishing pastes can be diluted and dissolved with water and alcohol.

Available grit sizes:  
 30 (coarse) = P 500  
 15 (medium) = P 1200  
 10 (medium-fine) = P 2000  
 7 (fine) = P 3000  
 3 (very fine) = P 5000  
 1 (ultra-fine) = P 14000  
 (P = Grit size according to ISO 6344)

### Advantages:

- High productivity.
- Quick results.
- Precisely coordinated granulation rows.

### Workpiece materials:

- Can be used on almost all hard materials, such as tungsten carbide and hardened steels.

### Applications:

- Polishing
- Step-by-step fine grinding

### Ordering notes:

- The grit sizes are specified in  $\mu\text{m}$ .



## Diamond polishing pastes

Diamond polishing pastes guarantee quick and efficient work, particularly in tool and die making.

### Recommendations for use:

- When using diamond polishing pastes, use the coarse paste first.
- If extensive surface improvements are required, use several grit sizes one after another, each finer than the previous, cleaning well between pastes.
- When changing grit size, make sure that a new, clean polishing product (e.g. felt point or felt wheel) is used.

| Grit size<br>[ $\mu\text{m}$ ] | EDP<br>number | Contents |         | Colour of<br>sealing cap |  |
|--------------------------------|---------------|----------|---------|--------------------------|---------------------------------------------------------------------------------------|
|                                |               | [oz]     | [grams] |                          |                                                                                       |
| 30                             | 48799         | 0.35     | 10      | brown                    | 1                                                                                     |
| 15                             | 48798         | 0.35     | 10      | blue                     | 1                                                                                     |
| 10                             | 48797         | 0.35     | 10      | light blue               | 1                                                                                     |
| 7                              | 48796         | 0.35     | 10      | red                      | 1                                                                                     |
| 3                              | 48795         | 0.35     | 10      | green                    | 1                                                                                     |
| 1                              | 48794         | 0.35     | 10      | yellow                   | 1                                                                                     |

Highly effective cleaners and maintenance products that can be applied to a very wide range of components.

### Workpiece materials:

- Can be used on nearly all materials.

### Applications:

- Cleaning
- Preserving
- Protecting



### Universal cleaner

Highly effective, universal workshop cleaner for cleaning and de-greasing components as a preparation for painting. Removes polishing paste residue, processing oils, corrosion-protection oils, light waxes and other types of contamination.

#### Advantages:

- Biodegradable surfactants.
- Short drying time.
- Non-combustible.
- Appropriate for multi-purpose use.

#### Recommendations for use:

- Spray, briefly leave on, and wipe off with a cloth.



| Contents |      | EDP number |  |
|----------|------|------------|-------------------------------------------------------------------------------------|
| [fl oz]  | [ml] |            |                                                                                     |
| 16.9     | 500  | 48747      | 1                                                                                   |

### INOX SHINER maintenance product

Maintenance product for protecting and caring for stainless steel (INOX), aluminum, non-ferrous metals, glass and plastic. Removes dust, fingerprints, oil and light scale deposits.

#### Advantages:

- Leaves a dry, glossy protective film.
- Very easy to use.
- No cleaning marks.
- Appropriate for multi-purpose use.

#### Recommendations for use:

- Spray, apply evenly on the surface with a soft dry cloth or paper towel and wipe dry.
- Conduct a compatibility test beforehand on surfaces with a mirror finish.



| Contents |      | EDP number |  |
|----------|------|------------|---------------------------------------------------------------------------------------|
| [fl oz]  | [ml] |            |                                                                                       |
| 16.9     | 500  | 48748      | 1                                                                                     |

With the BOSCH X-LOCK system for angle grinders, you can change discs quickly and comfortably. Instead of a round centre hole, the X-LOCK system features an X-shaped contour, which allows the disc to be fixed on the angle grinder in a form-fitting manner. This guarantees that different discs can be mounted securely and comfortably in the shortest possible time. The unique system meets the highest quality and safety standards and even withstands tough and challenging operating conditions.

### Advantages:

- Quick and comfortable disc changes.
- Discs are fixed securely since they audibly click into place.
- X-LOCK products can also be used on conventional angle grinders with 5/8-11 thread.

### Recommendations for use:

- Place the disc on the X-LOCK quick-change system of your angle grinder and secure it by lightly pressing it down. The disc will audibly click into place.



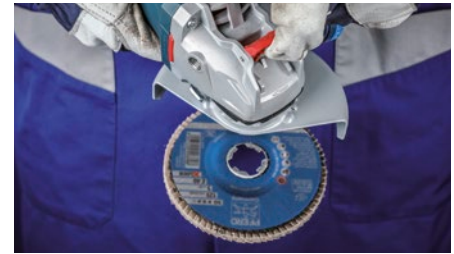
### How it works:



Place the disc on the X-LOCK holder in a form-fitting manner.



Lightly press the disc down until it audibly clicks into place.



Release the disc by using the lever.

## POLIVLIES® with X-LOCK quick-change system



### Aluminum oxide A

For universal coarse to fine grinding applications in industry and professional trades.

#### Abrasive:

Aluminum oxide A  
Available POLIVLIES® grit sizes:  
100 C = coarse (yellow-brown)  
180 M = medium (red-brown)  
240 F = fine (blue)

#### Recommendations for use:

- For the best results, use at a recommended peripheral speed of 6,000–6,900 SFPM.

#### Notes:

- For more information on POLIVLIES® flap discs, see page 103.

| D<br>[Inches] | T<br>[Inches] | H<br>[Inches] | Grit, type and EDP number |       |       | Opt.<br>RPM | Max.<br>RPM |  |
|---------------|---------------|---------------|---------------------------|-------|-------|-------------|-------------|---------------------------------------------------------------------------------------|
|               |               |               | 100 C                     | 180 M | 240 F |             |             |                                                                                       |
| X-LOCK        |               |               |                           |       |       |             |             |                                                                                       |
| 4-1/2         | 3/4           | X-LOCK (7/8)  | 43303                     | 43304 | 43305 | 5,000–5,800 | 13,300      | 5                                                                                     |
| 5             | 3/4           | X-LOCK (7/8)  | 43306                     | 43307 | 43308 | 4,600–5,300 | 12,200      | 5                                                                                     |