Fine grinding and finishing products









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X-LOCK quick-change system

POLIVLIES® flap discs 124





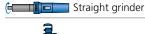
Eccentric orbital sander



Belt grinder



Belt grinder



Angle grinder



Flexible shaft drive



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 quarantee 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 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.





Fine grinding and finishing products

General information

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.



PFERDTOOL-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**.



PFERDPRAXIS brochures and theme brochures

Our **PFERD**PRAXIS 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 **PFERD**ERGONOMICS®, PFERD offers ergonomically optimized products and power tools that contribute to greater safety and working comfort, and thus to health protection.









As part of **PFERD**EFFICIENCY®, 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

Fine grinding and finishing products Quick product selection guide





Work type	Face-down grinding Products with backing pad						P	Belt grinding roducts for belt grinde	Ť
Work steps		COMPIDICOR	Page			Page			Page
Changing geometrical profiles		COMBIDISC® abrasive discs diamond abrasive di	29–33 scs 33	60	COMBICLICK® fibre discs	13–14	1	Abrasive belts	42–47
		COMBIDISC® mini fibre discs	32	0	Fibre discs	20–21			
		COMBIDISC® Mini-POLIFAN®	28		PSA discs	23–24			
Step-by-step fine grinding Reducing roughness depths		COMBIDISC® abrasive discs non-woven discs	29–33 34–36		PSA discs	23–24	1	Abrasive belts	42–47
		Poliflex® finishing wheels	114		Velcro-backed abrasive discs	25			
	0	COMBICLICK® fibre discs non-woven discs	13–14 15–16	0	Fibre discs	20–21			
	(3)	POLINOX® unitized discs	88		POLINOX® fibre-backindiscs	ng 102			
Fine grinding Very fine grinding		COMBIDISC® abrasive discs non-woven discs	29–33 34–36	0	Fibre discs	20–21	1	Abrasive belts	42–47
		Poliflex® finishing wheels	114		PSA discs	23–24	88	Surface conditioning belts	45, 48
	()	POLINOX® unitized discs	88	0	COMBICLICK® fibre discs non-woven discs	13–14 15–16			
Cleaning		COMBIDISC® non-woven discs	34–36		POLIVLIES® hook and loop discs	104	88	Surface conditioning belts	45, 48
	69	COMBIDISC® POLICLEAN® PLUS disc	s 34	60	POLICLEAN® PLUS discs	107			
A COMPANY OF THE PROPERTY OF T	0	COMBICLICK® non-woven discs	15–16		POLINOX® fibre-backin discs	ng 102			
	00	POLIVLIES® flap discs	103						
Creating visual effects		COMBIDISC® non-woven discs	34–36		POLIVLIES® hook and loop discs	104	88	Surface conditioning belts	45, 48
	00	POLIVLIES® flap discs	103	0	COMBICLICK® non-woven discs	15–16			
		POLINOX® fibre-backin discs	g 102						
Polishing	0	COMBIDISC® felt discs	37	00	Felt flap discs	118	<u> </u>	Felt polishing belt	45
1000	00	COMBICLICK® felt discs	17						



Fine grinding and finishing products Quick product selection guide

Peripheral grinding Mounted/unmounted products Page Page							Manual grind		Page	
	Abrasive spiral bands	55–56						·		
	POLIROLL® cartridge rolls	59								
	POLICAP® seamless abrasive caps	62–68								
	Abrasive spiral bands	55–56	0	Unmounted flap w for angle grinders	heels 77		Abrasive sheets, cloth/paper	48–49		
	POLIROLL® cartridge rolls	59		Flap drums	78		Shop rolls, cloth/paper	51		
	POLICAP® seamless abrasive caps	62–68		POLISTAR-TUBE	81					
	Mounted flap wheels	71–73	0	Unmounted flap wheels	75					
	POLIROLL® cartridge rolls	59		POLINOX® unitized wheels	87	Ì.	Abrasive sheets, cloth/paper	48–49	Screen rolls	52
	POLINOX® convolute wheels	91	-	Poliflex® fine grindi points	ng 110–113		Shop rolls, cloth/paper	51	Abrasive cord	53
	POLINOX® mounted flap wheels	94–95		POLINOX® finishing drums	100–101		Abrasive sheets, cloth/paper	48–49	Non-woven shop rolls	52
0	POLINOX® unmounte flap wheels	d 97–99		POLICLEAN® PLUS wheels	106		POLINOX® hand pads	50	Screen rolls	52
	POLINOX® cross buffs	96	8	POLICLEAN® PLUS mounted wheels	107		Shop rolls, cloth/paper	51		
	POLINOX® mounted flap wheels	94–95		POLIFLAP® grinding wheel	79–80		POLINOX® hand pads	50	INOX SHINER	123
0	POLINOX® unmounte flap wheels	ed 97–99		Flap drums	78		Non-woven shop rolls	52		
	POLINOX® finishing drums	100–101					High-strength masking tape	102		
	Felt points and moun felt flap wheels	ted 16–117		Buffing drum	120		Diamond polishing pastes	122	Grinding pastes	121
0	Felt wheels	118		Cloth rings	119		Polishing paste bars	121	Universal cleaner	123

Fine grinding and finishing products

Coated abrasives



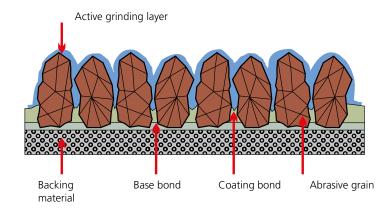
Structure of coated abrasives

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.



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/m². 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.

+ 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 (). 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 () ensures that the abrasive grain is fixed in place and protects the grain against the forces and loads resulting from the grinding process.









Fine grinding and finishing products Coated abrasives

Abrasive grain

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

3 3	3	significant influence on surface quality and productivity. The most common materials for abrasive grain are.
Aluminum oxide A		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.
Ceramic oxide CO		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.
Zirconia alumina Z	2	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.
Silicon carbide SiC		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.
Diamond grain D		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.
Compact grain CK		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

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





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.

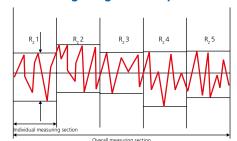
There is a differentiation between the following roughness depths:

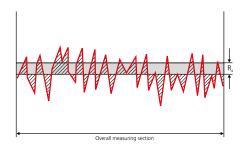
The **individual roughness depth R**_{zi} is the sum of the height of the largest profile peak and the depth of the largest profile trough within an individual measuring section.

The **roughness depth R**_z is the largest individual roughness depths (R_{z}) 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.

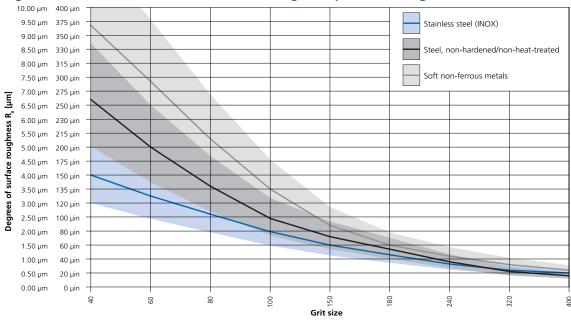




Reference values for roughness depths in the case of different applications

Application	Roughness depth
Coarse stock removal: Grit sizes 24 to 150	$R_a = 0.70 \text{ to } 12 \mu\text{m}$ (25 to 470 μin)
Fine finishing: Grit sizes 180 to 400	$R_a = 0.20 \text{ to } 0.70$ (8 to 25 µin)
Very fine finishing: Grit sizes 500 to 1200	$R_a = 0.05 \text{ to } 0.20 \mu\text{m}$ (2 to 8 μin)
Mirror finishing: Step 1:	R _a = 0.10 to 0.20 μm (4 to 8 μin)
Step 2:	$R_a = 0.04 \text{ to } 0.10$ (2 to 4 µin)
Step 3:	$R_a = < 0.01 \ \mu m$ (< 1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Pharmaceutical grade:	R _a = 0.20 to 0.70 μm (8 to 25 μin)
Sanitary food grade/ directional matte finish:	$R_a = .10 \text{ to } 0.70 \mu\text{m}$ (4 to 25 μ in)

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









COMBICLICK® quick-mounting system General information

The patented guick-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.

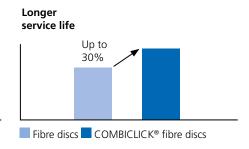
The special geometry of the cooling slots ensures high air throughput, which considerably reduces the thermal load on the abrasive material and the

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 Up to 25% Fibre discs COMBICLICK® fibre discs



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 facedown 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.









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 highquality 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 gro ▼	Material group Abrasive ▶ ▼			Zirconia Alumina Z	Ceramic oxide CO	Silicon carbide SiC	Aluminum oxide A-COOL	Ceramic oxide CO-COOL
Steel,	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel						
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						
	Soft non-ferrous metals, non-ferrous metals	Soft aluminum alloys						
		Brass, copper, zinc						
Non-ferrous metals	Hard non-ferrous	Hard aluminum alloys						
metais	metals	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 materia	als	Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork						

= highly recommended

= recommended



Fibre discs

Aluminum oxide A

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

Aluminum oxide A

Ordering notes:

Please order COMBICLICK® backing pad separately.

PFERDVALUE®:











D				Max.	\Longrightarrow			
[Inches]	24	36	50	60	80	120	RPM	
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

PFERDVALUE®:















separately.

D				Max.	\Longrightarrow			
[Inches]	24	36	50	60	80	120	RPM	
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.











D				Max.	\Longrightarrow			
[Inches]	24	36	50	60	80	120	RPM	
4-1/2	40697	40698	40699	40700	40701	40703	13,300	25
5	40704	40705	40706	40707	40708	40710	12,200	25

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		Grit and El		Max.	\Longrightarrow	
[Inches]	36	60	80	120	RPM	
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				Max.	\blacksquare				
[Inches]	50	60	80	120	150	180	220	RPM	
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.			,			
						Energy Saving	Waste Saving	Time Saving	
D		Grit and EDP number							
		GITC BITC EDI TIGILIDEI							
[Inches]	24	36	50	60	80	120		RPI	
[24	30	50	00	80	120		•••	

D				Max.	\Longrightarrow			
[Inches]	24	36	50	60	80	120	RPM	
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



Non-woven discs

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)

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.

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.













COMMITTIES IN THE STATE OF THE	D COMECCE AND COME
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D	(Grit and EDP number	r	Opt.	Max.	
[Inches]	100 C	180 M	240 F	RPM	RPM	
4-1/2	48100	48101	48103	3,300	10,500	10
5	48110	48111	48113	3,100	9,650	10

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®:







rate, surface quality, thermal load on the workpiece and disc wear.								
D	Grit and EDP numbe	Opt.	Max.	\Longrightarrow				
[Inches] 100	180	280	RPM	RPM				

48133



4-1/2

5

48131

48135

Unitized discs

48132

48136

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).

3,300

3,100

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.

10,500

9,650

PFERDVALUE®:







10

10







Resource Saving

D [Inches]	Abrasives	Grit size	Hardness	Spec	EDP number	Opt. RPM	Max. 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
	А	fine	Н	MA8	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
	А	fine	Н	MA8	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

Consistent performance over the entire lifespan due to high dimensional stability.











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





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















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



Fibre discsGeneral information

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 highquality 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.



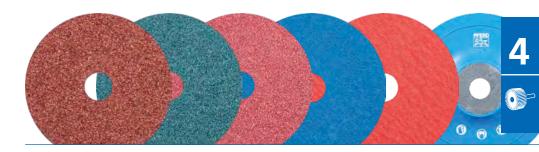












Quick product selection guide

Material gro ▼	up	Abrasive >	Aluminum oxide A	Zirconia alumina Z	Ceramic oxide CO	Zirconia alumina Z-COOL	Ceramic oxide CO-COOL
Steel,	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel					
cast steel	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel					
Stainless steel (INOX)	Rust- and acid-resistant steels						
	Soft non-ferrous metals,	Soft aluminum alloys					
Non-	non-ferrous metals	Brass, copper, zinc					
ferrous	Hard non-ferrous metals	Hard aluminum alloys					
metals	riaid fiori-ferrous filetais	Bronze, titanium					
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys					
Cast iron	Grey cast iron, white 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					

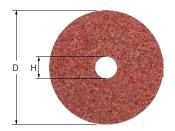
= highly recommended

= recommended

Fibre discs

Fibre discs





Aluminum oxide A

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

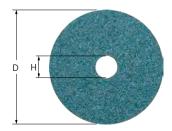
Abrasive²

Aluminum oxide A

Ordering notes:

Please order backing pad separately. See page 22.

D	Н		Grit and EDP number								\Longrightarrow
[Inches]	[Inches]	16	24	36	50	60	80	100	120	RPM	
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

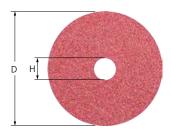
Ordering notes:

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	н		Grit and EDP number					\Longrightarrow
[Inches]	[Inches]	24	36	50	60	80	RPM	
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	н		Grit and EDP number					\Longrightarrow
[Inches]	[Inches]	24	36	50	60	80	RPM	
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





Fibre discs

Zirconia alumina Z-COOL

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

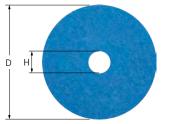
Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

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	Н		Grit and E	Max.	\Rightarrow		
[Inches]	[Inches]	36	50	60	80	RPM	
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.

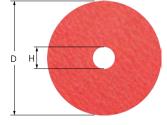
Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

Abrasive:

Ceramic oxide CO-COOL

Ordering notes:

Please order backing pad separately. See page 22.







D								Max.	\longrightarrow
[Inches]	[Inches]	24	36	50	60	80	120	RPM	
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



Fibre discs

Backing pads and accessories









Rubber High-

High- Temperatureperformance 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				
Rubber backing pads (ribbed surface)									
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			
High-performance	backing pads								
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			
Temperature-resista	ant backing pads								
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











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.













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_1					Gr	it and ED	P numbe	r					Opt.	Max.	\Rightarrow
[Inches]	36	40	50	60	80	100	120	150	180	220	240	320	RPM	RPM	
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:

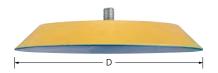
Please order disc holder separately. See

Abrasive:

Zirconia alumina Z

D ₁		Gri	t and EDP num	ber		Opt.	Max.	
[Inches]	36	40	60	80	120	RPM	RPM	
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 [Inches]	Thread	EDP number	Max. RPM	
5	5/16-24	47266	10,000	1
6	5/16-24	47268	10,000	1









Velcro-backed abrasive discs NET type

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

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.

Workpiece materials:

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

Applications:

Roughing Surface grinding Cleaning Step-by-step fine grinding

Compatible power tools:

Safety notes:











Eccentric orbital sanders

Velcro-backed abrasive discs

Ď,

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.

$D_{\scriptscriptstyle{1}}$					Grit a	nd EDP ทเ	ımber					\Longrightarrow
[Inches]	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





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.

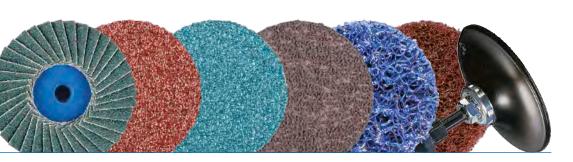












Quick product selection guide

Material gro ▼	oup	Abrasive >	Aluminum oxide A, A-PLUS, A-CONTOUR	Aluminum oxide A compact grain	Zirconia alumina Z
Steel,	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel			
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			
	Soft non-ferrous	Soft aluminum alloys			
	metals,non-ferrous metals	Brass, copper, zinc			
Non-ferrous	Hard	Hard aluminum alloys			
metals	non-ferrous metals	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 materia	als	Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork			

= highly recommended

= recommended



General information

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: $Roloc^{TM}$, 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

				Periphe	ral speed	[SFPM]			
D,	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	10,000
[Inches]			Rotatio	nal speed	s [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 Soft type, Hard type, Unitized

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®:







Tin	e Savino

	D ₁		Grit and EI	OP number		Opt.	
	[Inches]	40	60	80	120	RPM	
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.

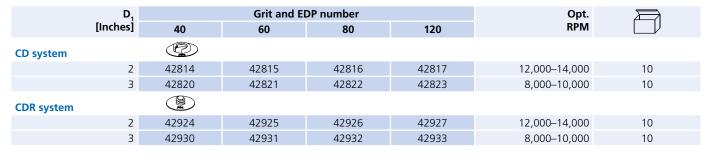
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Drive arbors



Drive arbors for Mini-POLIFAN® discs

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

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



COMBIDISC® quick-change discs Abrasive discs

Aluminum oxide A

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

Aluminum oxide A

Ordering notes:

Please order backing pad separately. See page 37.

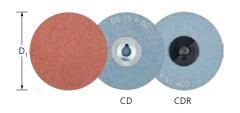
PFERDVALUE®:











	D ₁			Grit a	and EDP nu	mber			Opt.	\Longrightarrow
	[Inches	36	50	60	80	120	180	320	RPM	
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.











	D ₁		Grit and El	DP number	Opt.	\longrightarrow				
	[Inches]	36 PLUS	60 PLUS	80 PLUS	120 PLUS	RPM				
CD system	D system									
	2	42330	42331	42332	42333	8,000-13,000	100			
	3	42335	42336	42337	42338	5,000-9,000	50			
CDR system	CDR system									
	2	42670	42671	42672	42673	8,000-13,000	100			
	3	42675	42676	42677	42678	5,000-9,000	50			





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.









	D_1							Opt.	\Longrightarrow			
	[Inches]	120	180	240	320	400	600	800	1000	1200	RPM	
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





COMBIDISC® quick-change discs Abrasive discs

Zirconia alumina Z

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

Zirconia alumina Z

Recommendations for use:

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

PFERDVALUE®:









Ordering notes:

Please order backing pad separately. See page 37.

	D ₁		Grit and El	DP number	Opt.	\blacksquare	
	[Inches]	36	50	60	80	RPM	
CD system							
	2	42254	42256	42257	42258	3,800–13,000	100
	3	42261	42263	42264	42265	2,500-9,000	50
CDR system							
	2	42593	42595	42596	42597	3,800-13,000	100
	3	42600	42602	42603	42604	2,500–9,000	50

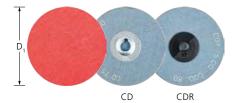






Abrasive discs





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.











	D ₁		Grit	Grit and EDP number				
	[Inches]	24	36	60	80	120	RPM	
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.









	D ₁			DP number	Opt.		
	[Inches]	36	50	80	120	RPM	
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



Abrasive 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 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:

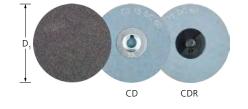
Please order backing pad separately. See page 37.

PFERDVALUE®:









	D ₁		Grit	Grit and EDP number				\Longrightarrow
	[Inches]	36	60	80	120	240	RPM	
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)

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.

Ordering notes:

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

PFERDVALUE®

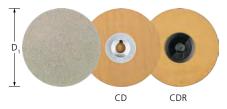


40664









2,500-5,000

	D ₁		Grit and EDP number		Opt.	\Longrightarrow
	[Inches]	D 251 / P 60	D 126 / P 120	D 76 / P 220	RPM	
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

40665

40666



10

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®:

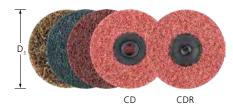








	D ₁ [inches]	EDP number	Opt. RPM		
CD system					
	2	44840	5,500-8,000	10	
	3	44841	3,800–5,000	10	
CDR system					
	2	44842	5,500-8,000	10	
	3	44843	3,800–5,000	10	



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.









	D ₁	G	rit, type and EDP numb	er	Opt.	
	[Inches]	100 C	180 M	240 F	RPM	
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



Non-woven discs

CDR

25

CD

3,800-5,000

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

3

43262

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®:





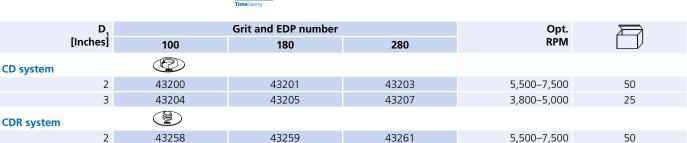


43265



43263















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".











D [Inches]	Abrasives	Grit size	Hardness	Spec	EDP number	Opt. RPM	Max. RPM	
CD system								
2	SiC	fine	W	2SF	48430	9,500	19,100	25
	А	coarse	W	2AM	48431	9,500	19,100	25
	SiC	fine	MH	6SF	48434	9,500	19,100	25
	А	fine	MH	6AF	48435	9,500	19,100	25
	А	fine	Н	8AM	48438	9,500	19,100	25
	А	coarse	Н	8AC	48439	9,500	19,100	25
3	SIC	fine	W	2SF	48440	6,400	12,500	25
	А	coarse	W	2AM	48441	6,400	12,500	25
	SIC	fine	MH	6SF	48444	6,400	12,500	25
	А	fine	MH	6AF	48445	6,400	12,500	25
	А	fine	Н	MA8	48448	6,400	12,500	25
	А	coarse	Н	8AC	48449	6,400	12,500	25
CDR system								
2	SiC	fine	W	2SF	48450	9,500	19.100	25
	А	coarse	W	2AM	48451	9,500	19.100	25
	SiC	fine	MH	6SF	48454	9,500	19.100	25
	А	fine	MH	6AF	48455	9,500	19.100	25
	А	fine	Н	MA8	48458	9,500	19.100	25
	А	coarse	Н	8AC	48459	9,500	19.100	25
3	SiC	fine	W	2SF	48460	6,400	12,500	25
	А	coarse	W	2AM	48461	6,400	12,500	25
	SiC	fine	MH	6SF	48464	6,400	12,500	25
	А	fine	MH	6AF	48465	6,400	12,500	25
	А	fine	Н	8AM	48468	6,400	12,500	25
	А	coarse	Н	8AC	48469	6,400	12,500	25



COMBIDISC® quick-change discs

Felt discs

CDR

CD

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®:









		Time saving		
	D ₁ [Inches]	EDP number	Opt. RPM	
CD system				
	2	43215	2,000–4,000	10
	3	43216	1,200–2,500	10
CDR system				
	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	S	EDP n	Max.	\Longrightarrow	
[Inches]	[Inches]	Type CD	Type CDR	RPM	
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

Туре	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

Туре	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

Туре	Full set EDP number	
Mirror finish, 2" CDR attachment	42791	1









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

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

Quick product selection guide

X - 1	dick product selection galac					ST COLUMN		13	
Material o	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
Non- hardened, non-heat- treated steels	hardened, non-heat-	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	5,000–7,000						
cast steel	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						
	Soft non-ferrous metals,	Soft aluminum alloys	5,000–8,000						
	non-ferrous metals	Brass, copper, zinc	3,000 0,000						
Non- ferrous metals	Hard non-ferrous	Hard aluminum alloys	4,000–5,000						
etais	metals	Bronze, titanium	1,000 3,000						
	High-temper- ature-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 mate	erials	Fibre-reinforced plastics, thermo- plastics, wood, chipboard, paint- work	2,000–5,000						

= highly recommended

= recommended

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		Peripheral speed [SFPM]							
roller dia.	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	
[Inches]		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]				
PFERD	Compressed-agrinder	air belt				
	90711	1/8 x 12				
	95000	1/4 x 12 3/8 x 12 1/2 x 12				
	Electric belt g	rinders				
	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				
	Angle handpieces					
	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				
3M	3M™ file belt sander	1/2 x 18				
Atlas Copco	G2410	1/4 x 12				
		1/2 x 12				
ATA	RAL20L	1/2 x 12				
Black &	PF260	1/2 x 18				
Decker	DS321	3 x 21				

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

Manufacturer	Model	Abrasive belts' width x length [Inches]
Metabo	BF 18 LTX 90	1/4-3/4 x 18
	BFE 9-20	1/4-3/4 x 18
Milwaukee	6101	1/2 x 18
Porter-Cable	352VS	3 x 21
	362V	4 x 24
Rexon	BD480A	4 x 36
	BD460M	4 X 30
Ryobi	BE319	3 x 18
	P450	3 x 18
	BD461G	4 x 36
SKIL	7510-01	3 x 18
	3376	4 x 36
Suhner	UBC 10-R	
	LBC 16 H	1/4-1/2 x 12
	WB 10	
	LBB 20 DH	1/4-1/2 x 12
Triton	TA 1200BS	3 x 21
WEN	6307	1/2 x 18
	6502	4 x 36
	6321	3 x 21

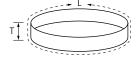




File belts







Aluminum oxide A

For universal applications from coarse to fine grinding.

Abrasive

Aluminum oxide A

L	Т			\Rightarrow		
[Inches]	[Inches]	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





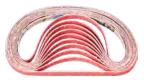
Zirconia alumina Z

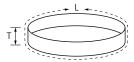
For coarse grinding work with a high stock removal rate and a long service life.

Abrasive:

Zirconia alumina Z

L	Т	Grit and EDP number				
[Inches]	[Inches]	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	Т		Grit and El	OP number		\longrightarrow
[Inches]	[Inches]	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



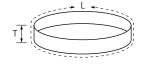
Abrasive belts, sheets, and rolls Portable belts

Aluminum oxide A

For universal grinding work from coarse to fine grinding.

Aluminum oxide A

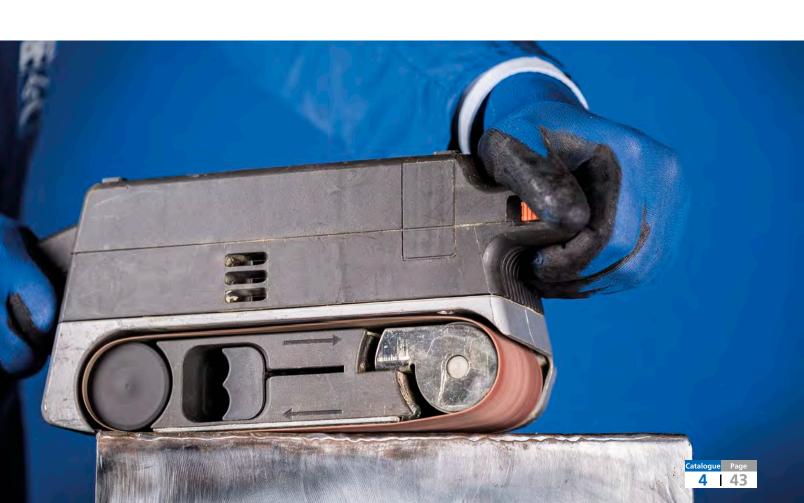




L	Т		G	rit and EDP numb	er		\Rightarrow
[Inches]	[Inches]	40	60	80	100	120	
21	3	49211	49213	49214	49215	49216	10
24	3	49250	49252	49253	49254	49255	10
	4	49360	49362	49363	49364	49365	10









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.







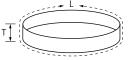






Belts and accessories for pneumatic drums





Aluminum oxide A

For universal grinding work from coarse to fine grinding.

Abrasive:

Aluminum oxide A

L	T Grit and EDP number					\Rightarrow		
[Inches]	[Inches]	40	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	т		Grit and EDP number		\Longrightarrow
[Inches]	[Inches]	40	60	80	
15-1/2	3-1/2	49641	49642	49643	10









Belts and accessories for pneumatic drums

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	T		Grit, type and EDP number				
[Inches]	[Inches]	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.

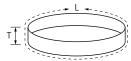
Recommendations for use:

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	T	EDP	
[Inches]	[Inches]	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	Drum diameter	Max.	Internal	EDP	Max.	
[Inches]	[Inches]	inflation	thread	number	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.

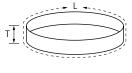


Fits power tool spindle (internal thread)		EDP number	
5/8-11	5/8-11	49986	1

Benchstand belts







Aluminum oxide A

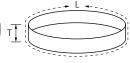
For universal grinding work from coarse to fine grinding.

Abrasive

Aluminum oxide A

L	Т		\Longrightarrow				
[Inches]	[Inches]	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

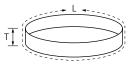
For coarse grinding work with a high stock removal rate and a long service life.

Abrasive:

Zirconia alumina Z

L	Т		\Rightarrow		
[Inches]	thes] [Inches]	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	Т					
[Inches]	[Inches]	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









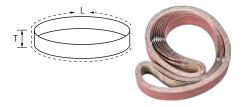


Backstand belts

Aluminum oxide A

For universal grinding work from coarse to fine grinding.

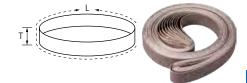
Aluminum oxide A



L	Т		Grit and EDP number		\Longrightarrow
[Inches]	[Inches]	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.



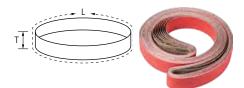
Abrasive:

Aluminum oxide A compact grain (CK)

L	Т		Grit and EDP number							
[Inches]	[Inches]	120	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	Ţ		\Rightarrow			
[Inches]	[Inches]	40	60	80	120	
132	2	49687	49688	49689	49690	10



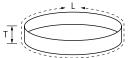




POLIVLIES® surface conditioning belts







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	Т		Grit, type and EDP number		\blacksquare
[Inches]	[Inches]	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



46919

46920

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.

46924

46925

Advantages:

Very high grain adhesion on very flexible

High abrasive performance.

Oil and kerosene-resistant.

Abrasive:

Aluminum oxide A

46921

Recommen	dations	for use	
recommen	uauons	ioi use.	

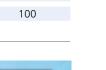
46926

Tear to the necessary size if required.

L	Т				\Longrightarrow				
[Inches]	[Inches]	40	60	80	100	120	150	180	
11	9	46912	46913	46914	46915	46916	46917	46918	50
L	Т			\Longrightarrow					
[Inches]	[Inches]	220	240	280	320	400	444	999	

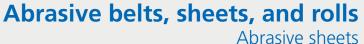
46922











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	Т				Grit a	and EDP nu	mber				\Longrightarrow
[Inches]	[Inches]	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.

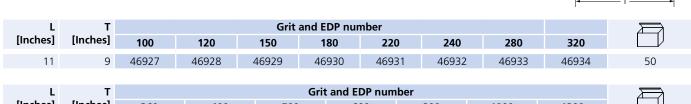
Can be used for wet and dry grinding.

Abrasive:

Silicon carbide SiC

Recommendations for use:

Tear to the necessary size if required.



L	Т			Grit	t and EDP num	ber			Ā
[Inches]	[Inches]	360	400	500	600	800	1000	1200	L
11	9	46935	46936	46937	46938	46939	46940	46941	

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:

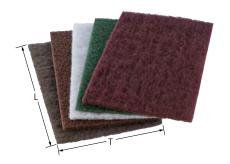
Tear to the necessary size if required.

L	Т			Grit and El	OP number						
[Inches]	[Inches]	40	60	8	0	100	120				
11	9	46942	46943	469	944	46945	46946	100			
L	Т		Grit and EDP number								
[Inches]	[Inches]	150	180	220	240	280	400				
11	9	46947	46948	46949	46950	46951	46952	100			



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 [Inches]	T [Inches]	EDP 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	S	EDP	Max.	
[Inches]	[Inches]	number	RPM	
7/8	1/4	44837	14,000	1



General information – Shop rolls and holders

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	Т	D		Grit and EDP number										
[Yards]	[Inches]	[Inches]	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	T	D		Grit and EDP number											\blacksquare
[Yards]	[Inch.]	[Inch.]	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

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.

Туре	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	Т				
Yards]	[Inches]	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.

Recommendations for use:

Cut to the necessary size if required.

Advantages:

Highly flexible, enabling optimal adjustment to the contour.

Hard-to-reach areas can be accessed. Can be used for wet and dry grinding.

Aluminum oxide A Silicon carbide SiC

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



Abrasive cord

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:

Abrasive:

D = Abrasive cord diameter

Aluminum oxide A Silicon carbide SiC



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

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

	i	Peripheral speed [SFPM]					
Band dia.	4,000	5,000	6,000					
[Inches]	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 gro ▼	oup	Abrasive >	Aluminum oxide A	Zirconia alumina Z-COOL	Ceramic oxide CO-COOL
Steel,	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel			
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			
	Soft non-ferrous metals,	Soft aluminum alloys			
	non-ferrous metals	Brass, copper, zinc			
Non-ferrous metals	Hard non-ferrous metals	Hard aluminum alloys			
metais	Tidiu fiori-leffous filetais	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 materia	als	Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork			

= highly recommended = recommended

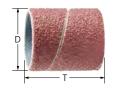
Abrasive spiral bands

Aluminum oxide A

For universal applications from coarse to fine grinding.

Abrasive:

Aluminum oxide A



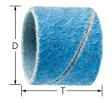


D	J	T			Grit and El	Grit and EDP number			Compatible	Opt.	
[Inches]	[Inches]	[Inches]	40	50	60	80	150	240	holder	RPM	
Cylindric	Cylindrical type										
3/8	-	3/4	-	-	-	41022	41023	41024	41966	30,000–44,000	100
1/2	-	1	-	-	-	41046	41049	-	41970	30,000–44,000	100
5/8	-	1-1/8	-	41068	41069	41070	41072	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 t	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	T		Grit and El	OP number	Compatible	Opt.		
[Inches]	[Inches]	36	50	80	150	holder	RPM	
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	J	J T		Grit and El	OP number	Compatible	Opt.	\Longrightarrow	
[Inches]	[Inches]	[Inches]	36	60	80	120	holder	RPM	
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





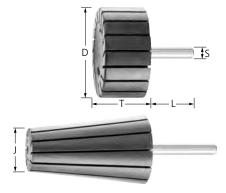




Abrasive spiral bands Rubber drum holders

Rubber drum holders

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



D [Inches]	J [Inches]	T [Inches]	S [Inches]	L [Inches]	EDP number	Max. RPM	
Cylindrical shape							
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
Tapered shape							
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

		Peripheral speed [SFPM						
Roll dia.	1,000	1,600	2,200					
[Inches]	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					









Cartridge rolls

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	Т	Arbor hole	Grit	and EDP nun	nber	Compatible	Opt.	\Longrightarrow
[Inches]	[Inches]	[Inches]	60	80	120	arbor	RPM	
Cylindrical sha	pe							
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

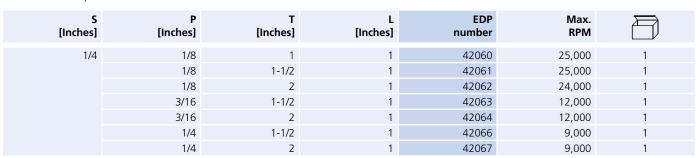
Drive arbors

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.



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.













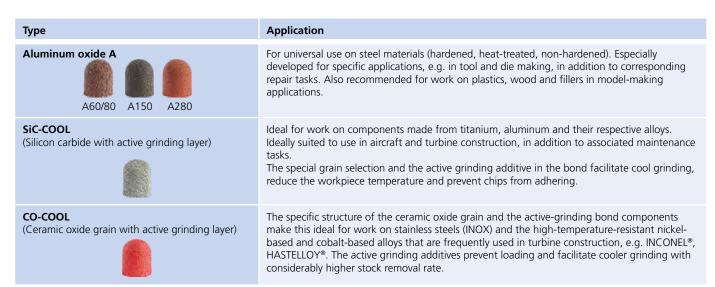
Accessories:

Rubber holders for abrasive caps and cones











POLICAP® seamless abrasive caps General information

Quick product selection guide

Material grou ▼	ıp	Abrasive	Aluminum oxide A	Silicon carbide SiC-COOL	Ceramic oxide CO-COOL
Steel,	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel			
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			
	Soft	Soft aluminum alloys			
	non-ferrous metals, non-ferrous metals	Brass, copper, zinc			
Non-ferrous metals	Hard	Hard aluminum alloys			
metals	non-ferrous metals	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 roce		- recommended			

= 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

		Peripheral s	peed [SFPM]	
Cap dia.	2,000	3,000	4,000	5,000
[Inches]		Rotational s	peeds [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









Abrasive caps, cap holders, and sets







A 150



A 280

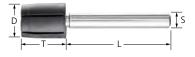
Cylindrical, shape A

POLICAP® abrasive caps in cylindrical shape A.

Ahrasive

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

D	Т		Grit and El	DP number		Compatible	Opt.	\blacksquare
[Inches]	[Inches]	60	80	150	280	holder	RPM	
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	11/16	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 [Inches]	T [Inches]	S [Inches]	L [Inches]	EDP number	Max. 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	11/16	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 dimensions	D [Inches]	T [Inches]	S [Inches]		included		Grit and included EDP			qty. included included E	POLICAP® holder included EDP	Set EDP number	
[Inches]				60	80	150	280	[each]	[1 piece]				
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	11/16	1/4	46065	-	46066	46067	5	42021				
	5/8	1	1/4	46068	-	46069	46070	5	42022				





Abrasive caps, cap holders, and sets

Cylindrical with radius end, shape C

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

Grit size colour code for aluminum oxide A: 60 and 80= brown

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

150 = black 280 = red-brown







A 150



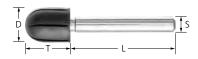
A 280

SiC-COOL CO-COOL

D	T		Grit	and EDP nun	nber		Compatible	Opt.	\blacksquare
[Inches]	[Inches]	60	80	120	150	280	holder	RPM	
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 carb	ide SiC-COC	DL							
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 oxi	ide CO-COO	L							
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 [Inches]	T [Inches]	S [Inches]	L [Inches]	EDP number	Max. 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

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 [Inches]	D [Inches]	T [Inches]	S [Inches]		Grit includ	and ed EDP		POLICAP® qty. included	POLICAP® holder included EDP	Set EDP number	
[Inches]				60	80	150	280	[each]	[1 piece]		
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		





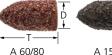




Abrasive caps, cap holders, and sets

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°.







A 150 A 280

Abrasive:

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

D	Т		Grit and E	DP number		Compatible	Opt.	\Longrightarrow
[Inches]	[Inches]	60	80	150	280	holder	RPM	
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 [Inches]	T [Inches]	S [Inches]	L [Inches]	EDP number	Max. 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)

Advantages:

Sturdy, reusable plastic packaging.

Abrasive:

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



Case dimensions	D [Inches]	T [Inches]	S [Inches]		include		Grit and included EDP		POLICAP® qty. included	included EDP	included included EDP number	Set EDP number	
[Inches]				60	80	150	280	[each]	[1 piece]				
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				

Abrasive caps, cap holders, and sets











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

A 150

SiC-COOL



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	Т		Grit	and EDP nun	nber		Compatible	Opt.	\equiv
[Inches]	[Inches]	60	80	120	150	280	holder	RPM	
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 carb	ide SiC-CO	OL							
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 oxi	de CO-COC	DL							
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 [Inches]	T [Inches]	S [Inches]	L [Inches]	EDP number	Max. 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









Abrasive caps, cap holders, and sets

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

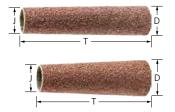


Case S dimensions	Shape	D	T	S [Inches]	Gri	t and in	cluded E	DP	POLICAP®	POLICAP® holder	Set EDP	
[Inches]		[inches]	[Inches]	[inches]	60	80	150	280	qty. included [each]	included EDP [1 piece]	number	
POLICAP® set PCS	285											
13 x 9-1/4 x 2	Α	3/16	3/8	1/8	-	46029	46030	46031	6	42014	46090	1
		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	016	
		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	А	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.

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

D	J	J	Т	Gr	it and EDP numb	er	Compatible	Opt.	\Longrightarrow
[Inches]	[Inches]	[Inches]	60	150	280	holder	RPM		
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 [Inches]	T [Inches]	S [Inches]	L [Inches]	EDP number	Max. 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.

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

D [Inches]	J [Inches]	T [Inches]	S [Inches]	L [Inches]	EDP number	Max. 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



General information – Mounted flap wheels



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).

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, moldedcore design.

Applications:

Levelina 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

Safety notes:

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

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.











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,	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel				
Cast steer	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				
	Soft non-ferrous metals,	Soft aluminum alloys				
Non-	non-ferrous metals	Brass, copper, zinc				
ferrous	Hard	Hard aluminum alloys				
metals	non-ferrous metals	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 mate	erials	Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork				

⁼ highly recommended

= recommended

Recommended rotational speed range

Example:

EDP 45251, Aluminum oxide A, dia. 2"	3/8	30,600	40,700	80,500
Peripheral speed: 3,000–4,000 SFPM Rotational speed: 5,700–7,600 RPM	5/8	18,300	24,400	48,300
Rotational speed. 5,700–7,000 KPW	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

3,000

7,600

5,700

4,600

3,800

Wheel dia. [Inches]

1-1/2

2

2-1/2

Peripheral speed [SFPM]

4,000

Rotational speeds [RPM]

10,200

7,600

6,100

5,100

7,900

20,100

15,100

12,100

10,100





Flap wheels Mounted flap wheels

Aluminum oxide A

For universal applications from coarse to fine grinding.

Abrasive:

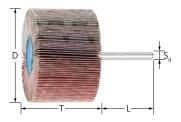
Aluminum oxide A











D	Т			Grit	and EDP nu	mber			Opt.	Max.	\Rightarrow
[Inches]	[Inches]	40	60	80	120	180	240	320	RPM	RPM	
Shank dia.	1/8" x 1-1/2'	' [S _d 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 _d 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



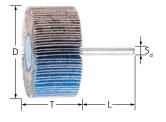




Flap wheels

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

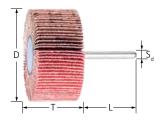
PFERDVALUE®:







D		Gri	t and EDP num	ber	Opt.	Max.	\Rightarrow			
[Inches	[Inches]	nes] 60 80 120		RPM	RPM					
Shank dia. 1/4" x 1-1/2" [S _d 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			Grit and El	DP number	Opt.	Max.	(()			
[Inches	[Inches]	40	60	80	120	RPM	RPM			
Shank dia. 1/4" x 1-1/2" [S _d 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		



Mounted flap wheels









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







I
Haptic Filter

D	Т	Gri	t and EDP num	ber	Opt.	Max.					
[Inches	[Inches]	60	80	120	RPM	RPM					
Shank dia. 1/4" x 1-1/2" [S _d 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	Т	Thread		(Grit and El	DP numbe	r		Opt.	Max.	\Longrightarrow
[Inches	[Inches]		40	60	80	120	180	240	RPM	RPM	
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. [Inches]	Thread	EDP number	
1/4	1/4-20	45299	10

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

			Periph	eral speed	[SFPM]					
Wheel dia.	3,000	4,000	5,000	6,000	7,900	9,900	15,800			
[Inches]			Rotatio	nal speeds	[RPM]	PM]				
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			



Unmounted flap wheels and accessories

Aluminum oxide A

For universal applications from coarse to fine grinding.

Aluminum oxide A

Compatible power tools:

flexible shaft drive, straight grinder

Ordering notes:

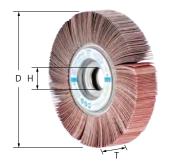
Please order the matching arbor separately. Matching arbor for a diameter of 4–6": EDP 45714 Matching arbor for a diameter of 8–10":

EDP 45715



PFERDVALUE®:





D	Т	Н			Grit and EDF	number			Opt.	Max.	
[Inches]	[Inches]	[Inches]	40	60	80	120	180 240		RPM	RPM	
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

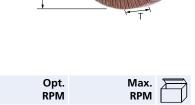
Ordering notes:

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









D	Т	Н		Grit and El	DP number	Opt.	Max.	\blacksquare	
[Inches]	[Inches]	[Inches]	40	60	80	120	RPM	RPM	
6	1	1	45840	45841	45842	45843	3,500	6,300	2
	2	1	45844	45845	45846	45847	3,500	6,300	2





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:

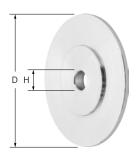
Can be used face-down very close to edges and in angles due to special clamping

Ordering notes:

Included in delivery: Arbor, clamping diameter of 1/2", 2 flanges and matching screws (for different unmounted flap wheel

Contents include one arbor (1/2" clamping dia.), two flanges, compatible clamping screws (for various flap wheel widths)

S [Inches]	L [Inches]	Fits arbor hole size [Inches]	For wheel diameter [Inches]	EDP 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

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 [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



Flap wheels for angle grinders



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:

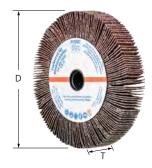
As a rule, unmounted flap wheels should be used with the appropriate clamping flanges for the angle grinder.

PFERDVALUE®:









D	Т	Thread		Grit and EDP number							Max.	\Longrightarrow
[Inches]	[Inches]		40	60	80	120	180	240	320	RPM	RPM	
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

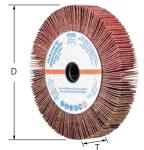
Safety notes:

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







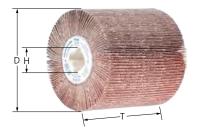


D	Т	Thread		Grit and El	Opt.	Max.	\Longrightarrow		
[Inches]	[Inches]		40	60	80	120	RPM	RPM	
4-1/2	5/8	5/8-11	45740	45741	45742	45743	7,500	13,300	2
5	5/8	5/8-11	45744	45745	45746	45747	6,850	12,200	2



Flap 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.







D	Т	Н				Opt.	Max.	\longrightarrow			
[Inches]	[Inches]	[Inches]	40	60	80	120	150	180	RPM	RPM	
4	4	3/4	45780	45781	45782	45783	45784	45785	3,800	6,100	1







The POLIFLAP® 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.











POLIFLAP® rubber flaps

Accessories:

PFERDVALUE®:

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





POLIFLAP® abrasive flaps





POLIFLAP® system

POLIFLAP® 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

PFERDVALUE®:









D	T	S _d	EDP	Opt.	Max.	
[Inches]	[Inches]	[Inches]	number	RPM	RPM	
7	2-3/8	3/8	45950	1,500	3,500	1

POLIFLAP® abrasive flaps

Abrasive flaps for POLIFLAP® 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 POLIFLAP® grinding wheel.

Abrasive:

Aluminum oxide A

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

Flap wheels POLIFAP® system





POLIFLAP® rubber flaps

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

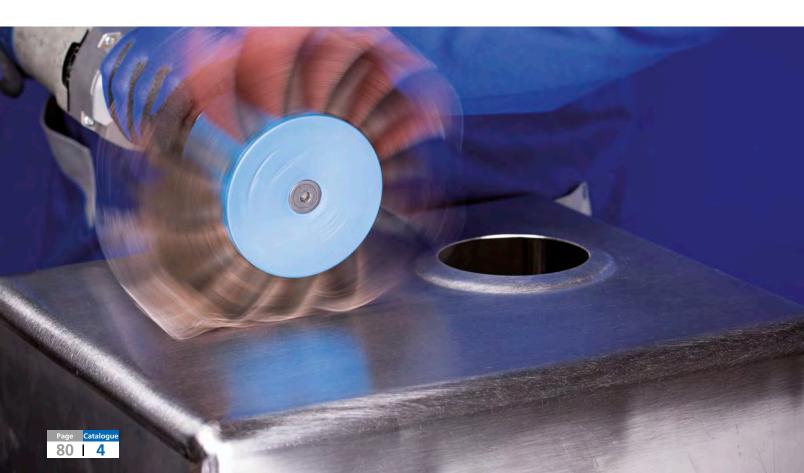
Advantages:

Comfortable to use as easy to replace once worn.

Ordering notes:

The packaging unit corresponds to a complete POLIFLAP® grinding wheel.

L	T	EDP	
[Inches]	[Inches]	number	
2	2	45951	12



PFERDVALUE®:

comfort.

PFERDERGONOMICS® recommends POLISTAR-

TUBE to sustainably reduce vibration and noise

levels during use and to improve working

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 $60 = 39-51 \mu in (1.0 1.3 \mu m) R_3$
- Grit size $120 = 24-39 \mu in (0.6 1.0 \mu m) R_3$
- Grit size $180 = 16-24 \mu in (0.4 0.6 \mu m) R_3$
- Grit size $240 = 12-16 \mu in (0.3 0.4 \mu m) R_0$
- Grit size $320 = 8-12 \mu in (0.2 0.3 \mu m) R_a$

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



POLISTAR-TUBE

POLISTAR-TUBE

Engineered for use in pipes and pipe bends.

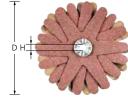
Abrasive:

Aluminum oxide A









									_		
D	Н	No. of		Grit	and EDP nu	mber		Compatible	Opt.	Max.	\Rightarrow
[Inches]	[mm]	Layers	60	120	180	240	320	arbor	RPM	RPM	
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





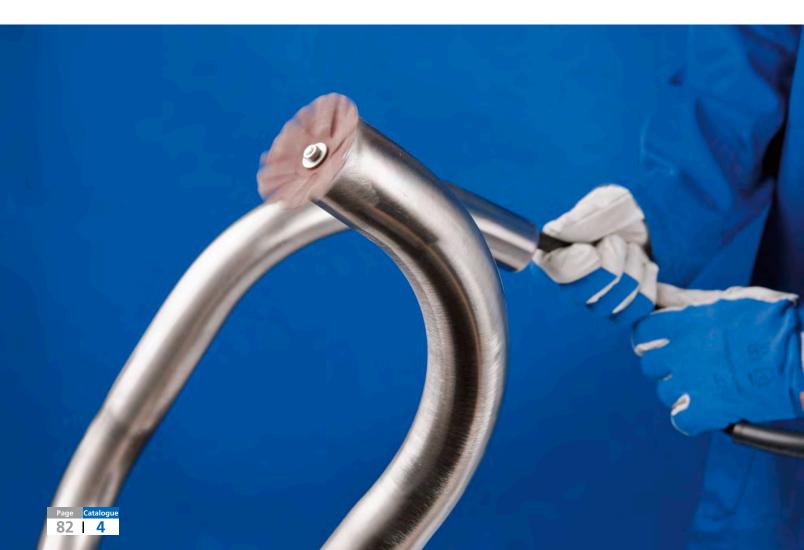
Arbors for POLISTAR-TUBE

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





General information

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

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.

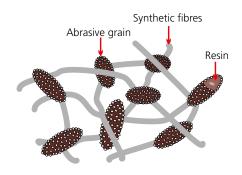
The non-woven fibre structure is impregnated or interspersed with resin and abrasive grain. The very loose connection between the individual fibres ensures a high level of flexibility and gives a strong spring-type effect to the non-woven material. It is flexible and supple, and leaves behind a very 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 (Al₂O₂) 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



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







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.







General information



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

Unitized PNER



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.

Convolute PNK



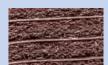
The non-woven abrasive is wound around a core and foamed up. The products can be optimized for a variety of applications by implementing different foam, fibre, grain and bond combinations. The spectrum of application ranges from fine deburring through to preparations for polishing.

Radial construction PNL



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.

Interleaved construction PNZ



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.

Corregated construction PNG



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.

Axiallayered construction PNR



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.

Cross buffs PNST



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.



Non-woven productsGeneral information – POLINOX® unitized wheels and discs

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:

rour unreferr types are available.								
Туре	Colour code	Properties						
Soft	w	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	MW	Medium-soft variant with increased edge strength and extended service life, for tough blending and polishing applications. Well suited to machining contours.						
Medium-hard	МН	Medium-hard variant with increased edge strength and extended service life, for tough deburring and cleaning applications.						
Hard	H	Hard variant with very high stock removal rate, good edge strength and long service life, for tough deburring and polishing applications.						



Comparison table

		FERD ed wheels		3M	Standard Abrasives	Norton	BIBIELLE
Туре	Colour code	Abrasive	Grain				
Coft	w	SiC	Fine	EXL 2S fine	532	UW1-2SF or Nex-2SF	BUH 2SF
Soft		А	Coarse	EXL 2A medium	521	UW1-2AM or Nex-2AM	BUH 2AM
Medium-soft	MW	SiC	Fine	EXL 4S fine or SST 3S fine	632	UW1-4SF	BUH 3SF
ivieulum-sort		А	Fine	EXL 4A fine or SST 3A fine	631	UW1-4AF	-
Medium- hard	МН	А	Fine	Cut & polish 5A fine or SST 5A fine	731	UW1-6AF or Nex-6AF	-
Hard	H	A Fine		Cut & polish 7A medium or 9A medium	821	UW1-8AM or Nex-8AM	BUH 6AM
Tialu		А	Coarse	Cut & polish 7A coarse or 9A coarse	811	UW1-8AC or Nex-8AC	BUH 8AC







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 heatconducting 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

			Periph	eral speed	[SFPM]					
Wheel dia.	3,000	4,000	5,000	6,000	6,300	7,000	9,900			
[Inches]	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			







Non-woven products POLINOX® unitized wheels

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:

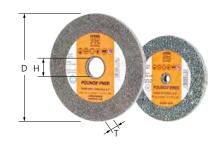
PNER

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 [Inches]	T [Inches]	H [Inches]	Abrasive	Grit size	Hardness	Spec.	EDP number	Opt. RPM	Max. RPM	Compatible arbors								
Unitized w	heels for str	aight grind	ers, flexible	shaft mach	ines, and be	ench grinder	'S											
2	1/8	1/4	А	fine	Н	MA8	48268	9,500	15,300	69029	10							
3	1/8	1/4	А	fine	Н	MA8	48288	6,400	10,200	69029	10							
			А	coarse	W	2AM	48247	6,400	10,200	69029	10							
			А	fine	MH	6AF	48248	6,400	10,200	69029	10							
			Α	coarse	Н	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							
			А	coarse	W	2AM	48291	6,400	10,200	69029	5							
			SiC	fine	MW	3SF	48292	6,400	10,200	69029	5							
			Α	fine	MW	3AF	48293	6,400	10,200	69029	5							
			А	fine	MH	6AF	48295	6,400	10,200	69029	5							
			А	coarse	Н	8AC	48299	6,400	10,200	69029	5							
	1/2	1/4	SiC	fine	W	2SF	48310	6,400	10,200	69029	5							
				А	coarse	W	2AM	48311	6,400	10,200	69029	5						
			SiC	fine	MW	3SF	48312	6,400	10,200	69029	5							
			Α	fine	MW	3AF	48313	6,400	10,200	69029	5							
			А	fine	MH	6AF	48315	6,400	10,200	69029	5							
			А	coarse	Н	8AC	48319	6,400	10,200	69029	5							
6	1	1	1	1	1	1	1	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	Н	8AC	48429	3,200	5,100	45714	1							
Unitized w	heels for va	riable-speed	d angle grin	ders, and fi	llet weld gri	inders												
5	1/4	7/8	SiC	fine	MW	3SF	48352	4,500	6,100	-	5							
			А	fine	MW	3AF	48353	4,500	6,100	-	5							
			А	fine	MH	6AF	48355	4,500	6,100	-	5							
			Α	fine	Н	8AM	48358	4,500	6,100	-	5							
			А	coarse	Н	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							
			А	fine	Н	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							
			А	fine	Н	8AM	48365	3,800	5,100	-	5							

Non-woven productsArbors 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]	[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









D [Inches]	T [Inches]	H [Inches]	Abrasive	Grit size	Hardness	Spec.	EDP number	Opt. RPM	Max. RPM		
Plain arbor h	Plain arbor hole										
4-1/2	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	1/2 7/8 S	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 hul	b										
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	/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	





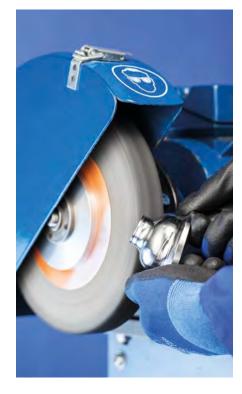
Non-woven productsGeneral information – POLINOX® convolute wheels

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:

	ive different types are available.								
Туре	Colour code	Properties							
Soft	w	Soft variant with very good abrasive performance on contours. Very good for blending surfaces.							
Medium-soft	MW	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	MH	Medium-hard variant with increased edge strength and extended service life, for tough deburring applications and other deburring, blending and cleaning work.							
Hard	H	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	EH	Extra-hard variant with very high edge strength for demanding deburring work.							





		FERD ute wheels		3M	Standard Abrasives	Norton	BIBIELLE	
Туре	Colour code	Abrasive	Grain					
Soft	W	А	Coarse	CP-WL 5AM	MF CV 5AM	MF CF 5AM	BCW-MF 5AM	
Medium-soft	MW	SiC	Fine	LDW 7SF	LDW 7SF	Series 2000 7SF	BCW-DB 7SF	
Medium-		SiC	Fine	EXL Deburring 8SF	Deburring 8SF	Series 1000 8SF	BCW-DB 8SF	
hard	МН	А	Coarse	EXL Deburring 8AM	GP Plus 8AM	Series 1000 8AM	BCW-DB 8AM	
Hard	H	SiC	Fine	Deburring 9SF	EXL Deburring 9SF	Series 1000 9SF	BCW-DB 9SF	
Extra-hard	EH	SiC	Fine	XP-WL 10SF	GP Plus 10SF	Series 4000 9SF	BCW-DB 9SF-R	



General information – POLINOX® convolute wheels



Advantages:

Increased profitability due to high abrasive performance and long service life. For achieving very good surface quality

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 heatconducting 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

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

		Peripheral speed [SFPM]										
Wheel dia.	3,000	4,000	5,000	6,000	8,000							
[Inches]		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							





Non-woven products POLINOX® convolute wheels

POLINOX® convolute wheels

Varied application options, for example:

Rounding of edges

Fine grinding of implants Weld dressing of intersections on turbine

Removal of processing traces on surgical instruments

Create matte surface finishes.

Abrasive:

Aluminum oxide A Silicon carbide SiC

PFERD designation:







D [Inches]	T [Inches]	H [Inches]	Abrasive	Grit size	Hardness	Spec.	EDP number	Opt. RPM	Max. RPM	
6	1/2	1	SiC	fine	MW	7SF	48200	2,500	5,100	1
			А	coarse	MH	8AM	48201	2,500	5,100	1
			SiC	fine	MH	8SF	48202	2,500	5,100	1
			SiC	fine	Н	9SF	48203	2,500	5,100	1
			SiC	fine	EH	10SF	48222	2,500	5,100	1
	1	1	Α	coarse	W	5AM	48199	2,500	5,100	1
			SiC	fine	MW	7SF	48204	2,500	5,100	1
			Α	coarse	MH	MA8	48205	2,500	5,100	1
			SiC	fine	MH	8SF	48206	2,500	5,100	1
			SiC	fine	Н	9SF	48207	2,500	5,100	1
			SiC	fine	EH	10SF	48223	2,500	5,100	1
8	1/2	3	SiC	fine	MW	7SF	48208	1,900	3,850	1
			Α	coarse	MH	MA8	48209	1,900	3,850	1
			SiC	fine	MH	8SF	48210	1,900	3,850	1
				SiC	fine	Н	9SF	48211	1,900	3,850
			SiC	fine	EH	10SF	48224	1,900	3,850	1
	1	3	А	coarse	W	5AM	48220	1,900	3,850	1
			SiC	fine	MW	7SF	48212	1,900	3,850	1
			А	coarse	MH	MA8	48213	1,900	3,850	1
			SiC	fine	MH	8SF	48214	1,900	3,850	1
			SiC	fine	Н	9SF	48215	1,900	3,850	1
			SiC	fine	EH	10SF	48225	1,900	3,850	1
	2	3	А	coarse	W	5AM	48221	1,900	3,850	1
			SiC	fine	MW	7SF	48216	1,900	3,850	1
			А	coarse	MH	MA8	48217	1,900	3,850	1
			SiC	fine	MH	8SF	48218	1,900	3,850	1
			SiC	fine	Н	9SF	48219	1,900	3,850	1
			SiC	fine	EH	10SF	48226	1,900	3,850	1

Non-woven productsReducing 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 [Inches]	H [Inches]	EDP 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





General information – POLINOX® flap wheels and cross buffs

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

Recommended rotational speed range

Example:

46223, Interleaved construction 4" mounted flap wheel

Peripheral speed: 3.000 SFPM Rotational speed: 2,900 RPM

Safety notes:

The maximum permitted peripheral speed is 6,300 SFPM.

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















PFERDVALUE®:

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



		Perip	heral speed [SF	PM]	
Wheel dia.	2,000	3,000	4,000	6,000	6,300
[Inches]		Rota	tional speeds [F	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

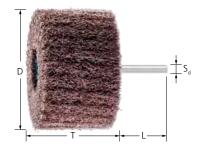






Non-woven productsPOLINOX® mounted flap wheels





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

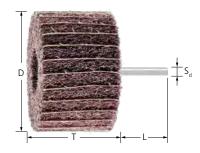
PFERDVALUE®:







D	T	S _d	L	Grit and EDP number			Opt.	Max.	\Longrightarrow
[Inches]	[Inches]	[Inches]	[Inches]	100	180	280	RPM	RPM	
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:

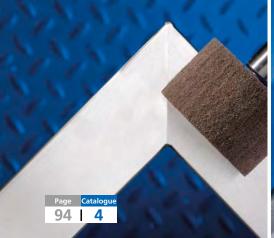
PNZ







D	Т	S _d	L	Grit and	EDP number	Opt.	Max.	\implies
[Inches]	[Inches]	[Inches]	[Inches]	100	180	RPM	RPM	
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









Non-woven products POLINOX® mounted flap wheels

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.

Abrasive:

Aluminum oxide A Silicon carbide SiC

Compatible power tools:

flexible shaft drive, straight grinder

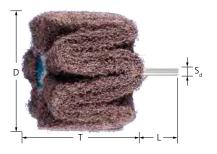
PFERD designation:

PNG

PFERDVALUE®:







D	Т	S _d	L	Grit and EDP number			Opt.	Max.	\Longrightarrow
[Inches]	[Inches]	[Inches]	[Inches]	100	180	280	RPM	RPM	$\Box \mathcal{V}$
Aluminum o	xide 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 carbi	de (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

Compatible power tools:

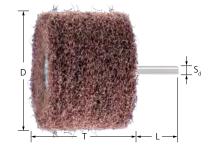
flexible shaft drive, straight grinder

PFERD designation:

PNR







D	Т	S _d	L	Grit and EDP number			Opt.	Max.	\longrightarrow
[Inches]	[Inches]	[Inches]	[Inches]	100	180	280	RPM	RPM	
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 productsPOLINOX® 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:

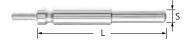
PFERDVALUE®:







D	No. of	Thread	Gri	t and EDP num	and EDP number		Opt.	Max.	\Longrightarrow
[Inches]	layers [pcs.]		80	100	280	arbor	RPM	RPM	
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 [Inches]	L [Inches]	Thread	Mounting length [Inches]	EDP number	Max. RPM	
1/4	3	8-32	1-1/4	44830	25,000	1









POLINOX® unmounted flap wheels and accessories

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

Compatible power tools:

flexible shaft drive, straight grinder, bench grinder

PFERD designation: **PNL**









Ordering notes:

Please order the matching arbor separately.

D	Т	Н	Gr	it and EDP numl	oer	Compatible	Opt.	Max.	\Longrightarrow
[Inches]	[Inches]	[Inches]	100	180	280	arbor	RPM	RPM	
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

Compatible power tools:

flexible shaft drive, straight grinder, bench grinder

Ordering notes:

Please order the matching arbor separately.

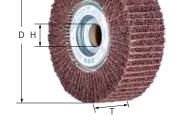
PFERD designation:

PFERDVALUE®:









D	Т	Н	Grit and EDP number		Compatible	Opt.	Max.	\Longrightarrow
[Inches]	[Inches]	[Inches]	100	180	arbor	RPM	RPM	
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 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.

Abrasive:

Aluminum oxide A

Compatible power tools:

flexible shaft drive, straight grinder, bench grinder

PFERD designation:

PNG

PFERDVALUE®:





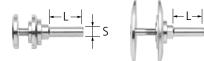
Ordering notes:

Please order the matching arbor separately.

D	Т	Н	Gr	it and EDP numl	ber	Compatible	Opt.	Max.	\Longrightarrow
[Inches]	[Inches]	[Inches]	100	180	280	arbor	RPM	RPM	
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

POLINOX® unmounted flap wheels and accessories



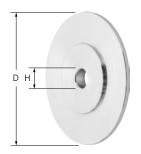


Drive arbors

Matching arbor for POLINOX® unmounted flap wheels.

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.

Aluminum oxide A

Compatible power tools:

angle grinder, cordless angle grinder

PFERD designation:

PNL









D	Т	Thread			ber	Opt.	Max.	$ \equiv $
[Inches]	[Inches]	[Inches]	100	180	280	RPM	RPM	
4	2	5/8-11	43188	43189	43190	3,000	6,000	5



POLINOX® unmounted flap wheels, threaded

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

Compatible power tools:

angle grinder, cordless angle grinder

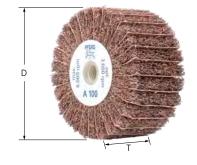
PFERD designation:

PNZ

PFERDVALUE®:







D	Т	Thread	Grit and	EDP number	Opt.	Max.	\Longrightarrow
[Inches]	[Inches]	[Inches]	100	180	RPM	RPM	
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

Compatible power tools:

angle grinder, cordless angle grinder

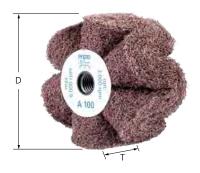
PFERD designation:

PNG





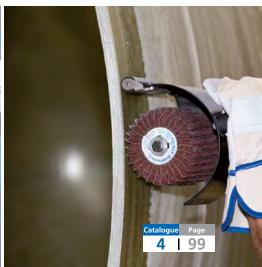




D	Т	Thread	Gr	it and EDP num	ber	Opt.	Max.	
[Inches]	[Inches]	[Inches]	100	180	280	RPM	RPM	
4	2	5/8-11	43024	43025	43026	3,000	6,000	5
5	2	5/8-11	43107	43108	43109	2,300	4,900	1









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.



POLINOX® finishing drums

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.









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







D	Т	T Bore/		Grit and EDP number				Max.	\Longrightarrow
[Inches]	[Inches]	Thread [Inches]	80	100	180	280	RPM	RPM	
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





POLINOX® finishing drums

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

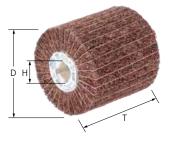
PFERD designation:

PNZ









D [Inches]	T [Inches]	Bore/ Thread [Inches]	60	irit and EDP numbe 80	er 120	Opt. RPM	Max. RPM	
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 wavily 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:

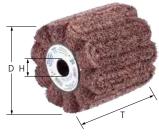
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P	F	E	R	D	V	41	_U	ΙE	B	









4.5		λ
T		
=	\Rightarrow	

D	Т	Bore	G	Opt.	Max.	\Longrightarrow		
[Inches]	[Inches]	[Inches]	100	180	280	RPM	RPM	
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





POLINOX® fibre-backing discs





Radial construction

Non-woven abrasive flaps with a fibreglass 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	Т	Н	Grit and EDP number			Opt.	Max.	\Longrightarrow
[Inches]	[Inches]	[Inches]	100	180	280	RPM	RPM	
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 fibreglass 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	Т	Н	Grit and EDP number		Opt.	Max.	\Longrightarrow
[Inches]	[Inches]	[Inches]	100	180	RPM	RPM	
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 [Feet]	T [Inches]	EDP 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: = coarse (yellow-brown) 100 C 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







D Unada a l	T	H	Grit, type and EDP number			Opt.	Max.	
[Inches]	[Inches]	[Inches]	100 C	180 M	240 F	RPM	RPM	
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:

= coarse (yellow-brown) 100 C = medium (red-brown) 180 M

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	T	Н	Grit,	type and EDP nu	mber	Opt.	Max.	\Longrightarrow
[Inches]	[Inches]	[Inches]	CO-COOL 60 / A 100 C	CO-COOL 80 / A 180 M	CO-COOL 120 / A 240 F	RPM	RPM	
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

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)

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.

Ordering notes:

Please order POLIVLIES® hook and loop disc holders separately.

PFERD designation:

PVKR

$D_{_1}$	Grit,	type and EDP nu	mber	Opt.	Max.	Compatible	\Longrightarrow
[Inches]	100 C	180 M	240 F	RPM	RPM	backing pad	
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 [Inches]	Thread [Inches]	EDP number	Max. RPM	
With centering pin				
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
Without centering pin				
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







General information – POLICLEAN® PLUS products

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

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

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.













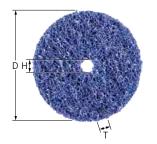
		Peripheral speed [SFPM]									
Wheel dia.	2,000	3,000	4,000	6,000	8,000						
[Inches]		Rotational speeds [RPM]									
3	2,500	3,800	5,100	7,600	10,200						
4	1,900	2,900	3,800	5,700	7,600						
4-1/2	1,700	2,500	3,400	5,100	6,800						
5	1,500	2,300	3,100	4,600	6,100						
6	1,300	1,900	2,500	3,800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





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 [Inches]	T [Inches]	H [Inches]	EDP number	Opt. RPM	Max. 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 hole size [Inches]	S [Inches]	L [Inches]	Compatible POLICLEAN® PLUS wheel	EDP number	No. of 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











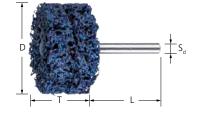
POLICLEAN® PLUS mounted wheels

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 [Inches]	T [Inches]	S _d [Inches]	L [Inches]	EDP number	Opt. RPM	Max. 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

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

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 [Inches]	T [Inches]	H [Inches]	EDP number	Opt. RPM	Max. RPM	
Plain arbor hole						
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
Threaded hub						
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:

= Grinding point outer diameter

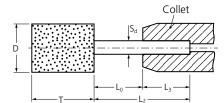
T = Grinding point width

S。 = Shank diameter

= Unsupported shank length

L = Shank length

= 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 ($L_{\rm o}$) of that wheel. Proper concentric accuracy and correct clamping of the power tool must also be ensured.













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			











Poliflex® finishing points Quick product selection guide

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.

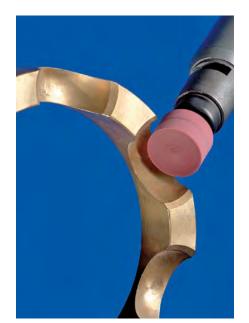
Choose your Poliflex® finishing point by: Material of component Type of application Desired surface finish Bond Reference catalogue page for more information

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

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".



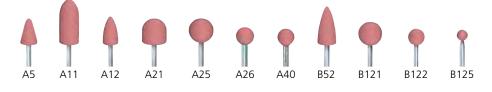












Series A and B

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

Dimensional specifications:

D = Mounted point outer diameter

= Mounted point width

S_d = Shank diameter

 L_2 = Shank length

PFERD designation:

GR

Shape	D [Inches]	T [Inches]	Grit	EDP number	Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
Shank diameter	1/8" x 1-1/4"	[S _d x L ₂]						
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
Shank diameter 1/4" x 1-1/2" [S _d x L ₂]								
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



Poliflex® finishing points Rubber bond

Series W

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

PFERD designation:



Shape	D [Inches]	T [Inches]	Grit	EDP number	Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
Shank diameter	1/8" x 1-1/4"	[S _d x L ₂]						
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
Shank diameter	1/4" x 1-1/2"	[S _d x L ₂]						
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

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

The clamping length of the shank must be at least 1/2"















A11























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

= Mounted point width

= Shank diameter

= Shank length

PFERD designation:

Shape	D [Inches]	T [Inches]	Grit	EDP number	Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
al III .					./_ 0.0	.,		
Shank diameter	1/8" x 1-1/4"	[S _d X L ₂]						
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
Shank diameter	1/4" x 1-1/2"	$[S_d \times L_2]$						
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



Poliflex® finishing points Leather bond

Series W

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

PFERD designation:



Shape	D [Inches]	T [Inches]	Grit	EDP number	Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
Shank diameter	1/8" x 1-1/4"	[S _d x L ₂]						
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
Shank diameter	1/4" x 1-1/2"	[S _d x L ₂]						
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











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	U	Н	Grit and E	DP number	Max.				
[Inches]	[Inches]	[Inches]	36	54	RPM				
Depressed centre (t	ype 27) – plain arbo	or hole							
4-1/2	1/4	7/8	61433	61434	13,300	10			
Depressed centre (t	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.



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			Peripheral s	peed [SFPM]		
product dia.	1,000	2,000	3,000	4,000	5,000	6,300
[Inches]			Rotational s	peeds [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

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 [Inches]	T [Inches]	EDP number	Opt. RPM	Max. RPM	
Shank diameter 1/8" x 1-	5/8" [S _d x L ₂]				
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
Shank diameter 1/4" x 1-	5/8" [S _d x L ₂]				
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 [Inches]	T [Inches]	EDP number	Opt. RPM	Max. RPM	
Shank diameter 1/8" x 1-!	5/8" [S _d x L ₂]				
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
Shank diameter 1/4" x 1-!	5/8" [S _d x L ₂]				
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 [Inches]	T [Inches]	EDP number	Opt. RPM	Max. RPM	
Shank diameter 1/4" x 1-	5/8" [S _d x L ₂]				
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



Felt points

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 [Inches]	T [Inches]	EDP number	Opt. RPM	Max. RPM	
Shank diameter 1/8" x 1-	5/8" [S _d x L ₂]				
5/16	1/2	48630	12,000–24,000	59,500	10
3/8	9/16	48631	10,000–20,000	47,500	10
Shank diameter 1/4" x 1-	5/8" [S _d x L ₂]				
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.

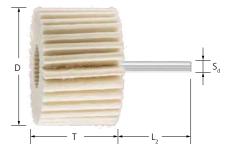
Recommendations for use:

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.

Compatible power tools:

flexible shaft drive, straight grinder



D	Т	Type and E	DP number	Opt.	Max.	\Longrightarrow		
[Inches]	[Inches]	W (soft)	H (hard)	RPM	RPM			
Shank diameter 1/4" x 1-1/2" [S _d x L ₂]								
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

Felt wheels are mainly used peripherally.

Compatible power tools:

flexible shaft drive, straight grinder

Ordering notes:

Please order the matching arbor separately.

D [Inches]	T [Inches]	H [Inches]	EDP number	Opt. RPM	Max. RPM	Recommended 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	T	Н	Type and EDP number Opt.		7 1		Max.	\square
[Inches]	[Inches]	[Inches]	W (soft)	H (hard)	RPM	RPM		
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 and drive arbors

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 [Inches]	H [Inches]		width :hes]	Type and EDP number			Opt. RPM	Max. RPM		mended oors		
		Sisal	Hard, soft and flannel	ST	ТН	TW	FL			Sisal	Hard, soft and 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 69027



EDP 84656



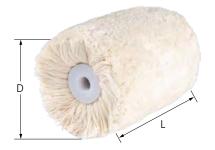
EDP 69032



Fits arbor hole size [Inches]	S [Inches]	L [Inches]	Clamping width [Inches]	EDP 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

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





Grinding and polishing pastes

Polishing paste bars and grinding pastes

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

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	EDP	Con	\Longrightarrow	
size	number	[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

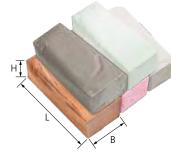
Polishing paste bars

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.

Туре	Use for	EDP	Con	tents	Colour	В	Н	L	\blacksquare
		number	[oz]	[grams]		[Inches]	[Inches]	[Inches]	
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 µm.



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 [µm]	EDP number	Contents				Colour of 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		







Grinding and polishing pastes Cleaning products



Workpiece materials:

components.

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.

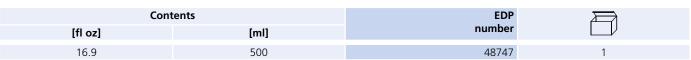
Advantages:

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.



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.



Con	tents	EDP	
[fl oz]	[ml]	number	
16.9	500	48748	1

LOCK quick-change system

General information

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.

Technology by BOSCH

Advantages:

Quick and comfortable disc changes. Discs are fixed securely since they audibly click into place.

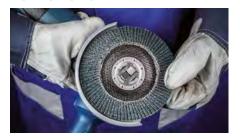
X-LOCK products can also be used on conventional angle grinders with 5/8-11

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 formfitting 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	Т	Н	Grit, type and EDP number		Opt.	Max.	\square	
[Inches]	[Inches]	[Inches]	100 C	180 M	240 F	RPM	RPM	
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











Cut-off wheels, flap discs and grinding wheels Table of contents



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Cutting First 125-32 75f STEEL STEEL	Cut-off wheels Circular saw wheels Portable gas saw wheels Die grinder wheels	10 21 22 24
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Cutting and grinding with X-LOCK qu	uick-change system	
LOCK	General information on X-LOCK Cut-off wheels POLIFAN® flap discs Grinding wheels	65 66 68 72



General information

PFERD quality

All PFERD products are developed, manufactured and tested in accordance with the strictest quality requirements. As a founding member of the "Organization for the Safety of Abrasives (oSa)", PFERD conforms to strict inspection requirements going beyond ANSI B7.1, EN 12413 and EN 13743.

PFERD quality management is certified according to ISO 9001.



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 to learn more or visit us at pferd.com.



PFERDTOOL-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**.



Training

At our state-of-the-art **PFERD**ACADEMY, attendees receive highly specialized and practical training from the world of grinding and cutting.

A progressive series of classes enables you to become a certified PFERD specialist.





Mounted points, cones and plugs, and bench grinding wheels for different materials and applications can be found in catalogue section 3.



Fine grinding and finishing products for the perfect surface finish (e.g. fibre discs, COMBICLICK®, POLIVLIES® flap discs, mounted flap wheels, etc.) can be found in catalogue section 4.



Cut-off wheels for stationary applications (e.g. chop saws, rail cutting machines, heavy duty cutting machines, large diameter cut-off wheels made to order) can be found in catalogue section 7.

POLIFAN® flap discs





Product selection

Cut off whools for

Cut-off wheels for

Angle grinders page 12
Gas saw page 22

Die grinders page 24

Grinding

Coated abrasives



CC-GRIND® grinding discs

page 41

Bonded abrasives



Grinding wheels

Cup wheels

page 47 page 62

Product lines and colour coding

Universal Line PSF



Choose the Universal Line PSF for processing of the most common materials. Products achieve good results with increased economic efficiency.

Performance Line SG

page 28



The wide range Performance Line SG offers high-performance solutions for every application and material. Products achieve optimum results with excellent economic efficiency.

Special Line SGP



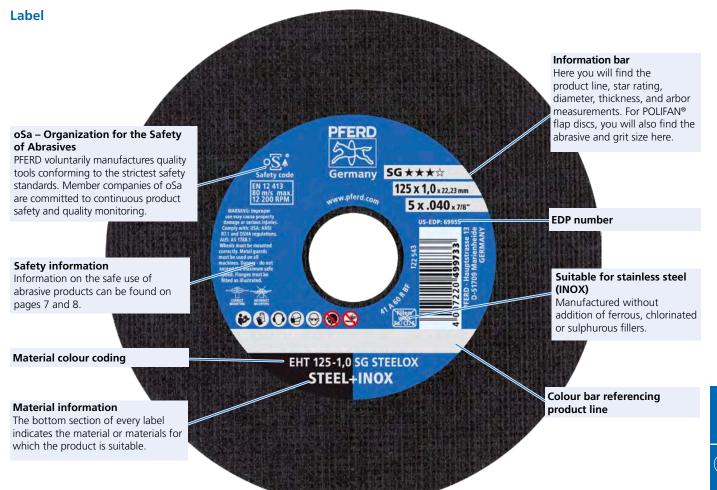
Special Line SGP includes products engineered for specific tasks and offers the user key advantages over conventional products. This quality line also includes products that, due to their particularly high performance, offer ultimate economic efficiency.

Material and colour coding

Steel,	Steels up to 1,200 MPa (174,000 psi) (<38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, alloyed steels			
cast steel	Hardened, heat-treated steels over 1,200 MPa (174,000 psi) (>38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel			
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels, e.g. AISI/ASTM 301 410 304 412 316 416 316Ti			
Aluminum	Non-hardened and hardened wrought allog	ys, cast aluminum alloys with low silicon content, cast aluminum alloys without silicon			
O4h	Non-ferrous metals, soft	Brass, copper, zinc			
Other non-ferrous metals	Non-ferrous metals, hard	Bronze, titanium			
metais	High-temperature-resistant materials	Inconel, Hastelloy			
Cast iron	Grey cast iron	Cast iron with flake graphite Cast iron with nodular graphite/nodular cast iron			
	Annealed cast iron	White cast iron/pot metal cast, black cast iron			
Stone	Asphalt, pumice, sandstone, concrete, reinforced concrete, concrete blocks, roofing tiles, granite, clinker, exposed aggregate concrete, tiles, ceramic tiles, slate				

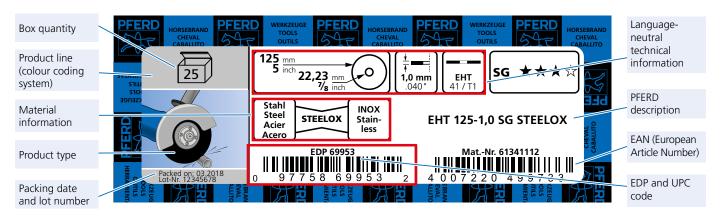


Wheel and box label information



Packaging label

PFERD supplies cut-off wheels, flap discs and grinding wheels in robust industrial packaging that protects the products against damage. All important technical and ordering information can be found on the new packaging label below.



Solutions for stainless steel (INOX) and aluminum



Working on stainless steel (INOX)

Stainless steel (INOX) has many strengths and advantages over steel, especially its resistance against corrosion. However, it also imposes special demands on abrasive products.

PFERD offers a wide range of specially developed products that will not contaminate the workpiece and create lower heat build-up than conventional products preventing discolouration and corrosion



8 tips for preventing corrosion

Use the right grinding product!



Only use grinding products without ferrous (Fe), chlorinated (CI) or sulphurous (S) fillers that are specifically

designed for stainless steel (INOX). This prevents residues that can result in corrosion. Products feature the symbol above and the addition of **INOX** or **STEELOX** (steel + INOX).

 To prevent corrosion, the heat build-up in the workpiece must be reduced. Use grinding products specially developed for use on stainless steel (INOX) and the largest possible grit size.

Observe during use!

- Work with less contact pressure and oscillating movement to prevent heat discolouration, particularly with thinwalled workpieces.
- Wheels that have previously been used on steel must not be used for work on stainless steel (INOX). Remaining steel particles can cause impurities and corresion.
- 5. Try to avoid sparks falling on the workpiece and be sure that no swarf is left on the surface.

Important: Proceed straight to finishing!

- Immediately proceed to finishing operations to achieve the target surface finish, so that the stainless steel (INOX) builds up its passivation layer. Suitable products can be found in catalogue section 4 "Fine grinding and finishing products".
- 7. If heat discolouration/oxidation occurs during grinding, additional options are available in catalogue section 4 "Fine grinding and finishing products" and catalogue section 8 "Power and maintenance brushes".
- 8. Clean each workpiece thoroughly after completion of all the mechanical work.

Working on aluminum

The term "aluminum" refers to a series of alloys in which the element aluminum is the main component. These range from soft to tough and hard aluminum alloys.

Conventional grinding products for steel often cannot be used for work on aluminum. Particularly with soft alloys, adhesion of materials and loading (clogging) of the grinding product can occur. PFERD has developed a series of special products for processing aluminum.

These products contain no fillers that can leave residues on the workpiece. The surfaces can be welded immediately after cutting or grinding.



Specialized products for use on aluminum



SG ALU grinding wheels



POLIFAN® flap discs **A-COOL SG ALU + INOX** (with a specially developed topsizing that prevents chips from adhering)



POLIFAN® flap discs

A SGP CURVE ALU for fillet weld grinding (the only flap disc with flaps on the circumference and a specially developed topsizing that prevents chips from adhering)

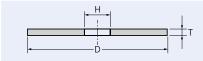


SG ALU grinding and cut-off wheels

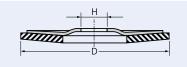


Technical information and safety notes

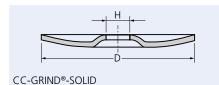
Product types and dimensions

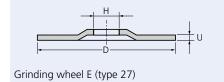


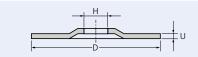
Cut-off wheel, flat type EHT (type 1/41)



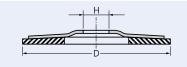
Flap disc, conical type PFC (type 29)



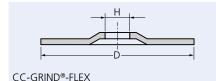


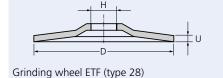


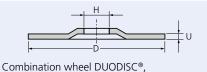
Cut-off wheel, depressed-centre type EH (type 27/42)



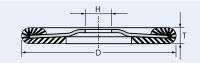
Flap disc, flat type PFF (type 27)



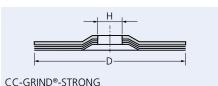


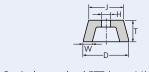


Combination wheel DUODISC®, depressed-centre type E (type 27)



Flap disc, radial type PFR (CURVE)





Conical cup wheel ETT (type 11)

Cutting and grinding safety



Abrasive wheel manufacturers, power tool manufacturers and users contribute equally to ensuring safety during cutting and grinding operations.

PFERD manufacturers all its products according to the current safety standards. During cutting and grinding, the user is responsible for correct use of the power tool as well as correct handling and use of the abrasives.

The information required for the safe use of grinding wheels, cut-off wheels, cup wheels, flap wheels, POLIFAN® flap discs and CC-GRIND® grinding discs from PFERD is summarized here. In addition to this, user information relating to the power tool used, as well as the applicable provisions on health and safety at work, should always be observed.

Explanation of the labeling of abrasive products

Always observe the instructions on the abrasive, the grinder and all accompanying user information. Abrasives made by PFERD conform to the highest quality and safety requirements and are marked according to the following key European and international safety standards:

- ANSI B7.1 or B7.7
- OSHA regulations
- EN 12413, EN 13236, or EN 13743

Use a grinder that is suitable for the respective application. A product that can not be clearly identified should never be used.

Observe any use restrictions, warnings and safety instructions on the abrasive and on the accompanying labels or packaging:



Not permitted for hand-held grinding!



= Not permitted for face grinding!



= Not permitted for wet grinding!



= Do not use if damaged!



= Follow the safety instructions!



= Wear eye protection!



= Wear hearing protection!



= Wear gloves!



= Wear a dust mask!



Observe the minimum contact angle!





Technical information and safety notes

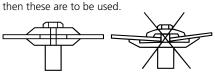
Storage of abrasive wheels

Abrasive wheels should be stored in such a way as to prevent any adverse effects caused by moisture, frost or large temperature variations and so as to avoid mechanical damage. Do not use resinoid-bonded abrasive wheels or abrasive products using coated abrasives that have been exposed to severe humidity, damp, or high temperatures.

Mounting of abrasive wheels

Only use grinders that are intended for use with the relevant product. Never use a grinder that is not in good condition.

Use only abrasive wheels whose outer diameter and centre-hole diameter and/or thread match the specifications of the grinder. Never use damaged abrasive wheels. Abrasive wheels must be visually inspected and checked for any possible damage before each use. Keep mounting components clean and in good mechanical condition. Replace them if they become damaged or worn. If the manufacturer of the grinder provides tools for fixation of the abrasive tools (e.g. a key),



Tighten the clamping mechanism finger tight.

In principle, only clamping flanges having a contact surface with the same outer diameter and which are identically shaped on the contact side are to be used. According to relevant US standard, for wheels of type 27 and 28 equal to or greater than 7" (180 mm) the locking nut shall seat within the depressed portion of the wheel. The flange adjacent to the wheel shall be equal to or greater than one-third of the wheel diameter and the outer part of the flange shall be free and clear from the wheel. For details see ANSI B7.1.

If required, use blotters between the abrasive wheel and clamping components.

Prevent the grinder from accidentally turning on, by disconnecting the power supply before mounting or changing the abrasive wheel. Never exceed the maximum operating speed of an abrasive wheel. Make sure that the speed of the grinder (rev/min, 1/min, RPM or min-1) does not exceed the maximum permissible speed given on the abrasive wheel, the accompanying label or packaging. Do not make any unauthorized changes to abrasive wheels.

If a diamond cut-off wheel is marked with a specified direction of rotation, this must be complied with.

Each time that a wheel is mounted, perform a trial run at operating speed with the guard properly installed, for at least 1 minute. During the trial run, hold the grinder in such a way that in the event of any failure of the abrasive wheel you are not struck by any fragments. Stationary cut-off wheels must only be used on appropriate stationary cut-off grinding machines. They are not permitted for hand-held or manually guided grinding. The maximum permitted power output must never be exceeded, in case there is a marking on the label. Clamping flanges for stationary cut-off wheels must meet today's requirements according to ANSI B7.1. Our PFERD sales department will be happy to advise you.

Use of abrasive wheels

Ensure that the correct abrasive product is selected. Never use a product if it cannot be properly identified.

Always be aware of the potential dangers during use of abrasive wheels.

Always use protective equipment and guards in compliance with the operating instructions for the grinder and make sure they are properly mounted and in good condition, before you switch on the grinder. Comply with the ANSI B7.1 regulations on safety guards depending on the mounted wheel:

- Type 1 wheels must be used with a guard covering at least 180° of the lateral wheel surface and face.

- Type 6 and 11 cup wheels must be used with a guard covering 180° of the wheel's lateral surface towards the operator and the wheel's face towards the driving flange. Additionally, the guard must have a height-adjustable skirt.
- Type 27, 28, and 29 wheels must be used with a guard covering 180° of the wheels lateral surface towards the operator and the wheel's face towards the driving flange. Additionally, the outer edge of the guard has to provide a lip curling inward at the whole 180° coverage in order to protect the user in case of wheel breakage.

The workpiece must be fixed without tension by appropriate clamping devices or by its own weight.

The grinder must always be turned on before the abrasive wheel comes into contact with the workpiece.

Always bring abrasive wheels carefully into contact with the workpiece

Always guide cut-off wheels in a straight line. No lateral load should be applied to the cut-off wheel and it should not be used for face

Only use diamond cut-off wheels on materials listed on the label. Grinders may only be put down once they have been turned off and have come to a complete stop.

Hazards due to product breakage, abrasive particles, sparks, dust, fumes, noise, vibration and bodily contact with the abrasive product at operation speed

Warning! The grinding process may generate dust and fumes. Inhalation of grinding dust can lead to severe lung damage. Sufficient extraction or other appropriate measures must be provided and appropriate personal protective equipment must be worn at all times. The use of appropriate personal protective equipment is required for all grinding operations to provide protection against mechanical impacts, abrasive particles, sparks, dust and fumes, noise and vibration. This includes eye protection, ear protection, respiratory protection and hand protection. Long-sleeved, flame-resistant clothing and appropriate safety footwear must be worn. Tie back long hair and do not wear loose clothing, ties or jewelry. These rules apply not only to the operator of the grinder but also to any other persons in the working

Predominantly, dust and fumes in a grinding process originate from the workpiece material. Review the Safety Data Sheet (SDS) of the workpiece material.

Do not use abrasive wheels in the vicinity of flammable materials. Flammable and explosive substances must be removed from the working environment before starting work. This includes, for example, dust deposits, cardboard, packaging material, textiles, wood and wood chips, as well as flammable liquids and gases.

In the event of excessive vibrations stop the grinder and investigate these. Take immediate action if, when using an abrasive wheel, you begin to experience tingling, stinging or numbness in the hand or arms. Prevent accidental start-up of the grinder before mounting or changing an abrasive product. Isolate grinders from their power source where

Never remove guards from grinders where fitted and ensure they are in good condition and properly adjusted before starting the grinder. After switching off the grinder, ensure the product has come to rest before leaving the grinder unattended.

Disposal of abrasive wheels

Worn or defective abrasive wheels must be disposed of according to all local and/or national regulations.

Note that abrasive wheels may become contaminated by work on certain materials

Abrasive wheels for disposal should be destroyed in a clearly visible manner in order to prevent re-use.

Further information can be obtained from Voluntary Product information provided by the supplier.











Product group selection guide

Power tool	Application	Product line	Steel (STEEL)	Stainless steel (INOX)	Aluminum (ALU)	Cast iron (CAST)	Stone (STONE)
Angle grinder	Cutting	Universal Line PSF	PSF PSF STEEL STEELOX Page 12 Page 13	PSF STEELOX Page 13			
		Performance Line SG	SG SG STEEL STEELOX Page 15 Page 16	SG SG INOX STEELOX Page 17 Page 16	SG ALU Page 18		
		Special Line SGP	SGP SGP CERAMIC STEELOX STEEL Page 20 Page 19	SGP STEELOX Page 20			
	Cutting and grinding	Universal Line PSF	PSF DUO STEELOX Page 14	PSF DUO STEELOX Page 14			
Die grinder	Cutting	Performance Line SG	SG STEELOX Page 24	SG STEELOX Page 24	SG STEELOX Page 24	SG STEELOX Page 24	
Circular saw	Cutting	Performance Line SG	SG STEELOX Page 21	SG STEELOX Page 21			
Portable gas saw, cut-off grinder	Cutting	Performance Line SG	SG STEEL Page 22			SG CAST + STONE Page 23	SG SG CAST + STONE STONE Page 23 Page 23





Cut-off wheel width selection

Diameter 4-5"			PFERD VALUE®
	.030"	Maximum precision and cutting quality for sheet metal work	
Thin cut-off wheels	.040"	Universal width with a focus on speed, comfort and cutting quality	Vibration Filter Noise Filter Emission Filter Haptic Filter
	.045"	Universal width with a focus on service life and comfort	Energy Saving Time Saving
Cut-off wheels	> .045"	Heavy-duty use	-

Diameter 6-9"			PFERDVALUE®
Thin cut-off wheels	< 3/32"	Universal width with a focus on speed, comfort and cutting quality	Vibration filter Noise filter Emission filter Haptic Filter Time Saving
Cut off whools	3/32"	Universal width with a focus on service life and comfort	-
Cut-off wheels	> 3/32"	Heavy-duty use	-



Thin cut-off wheels

PFERD is a global leader in performance and safety of thin cut-off wheels. We maximize the performance and benefits for our users with

Thinner, faster cutting with minimal burr formation

Highest possible productivity Comfort and safety

Intensive research, development and targeted implementation in our state-of-the-art production facilities guarantee the highest quality and compliance with safety standards.

High quality standards, in conjunction with design principles that are focused on the ergonomics of operator health and safety, play a prominent role at PFERD.



Thin cut-off wheels for cordless angle grinders

.040" cut-off wheels are highly recommended for cordless angle grinders due to their narrow kerf, superior cutting characteristics and optimal handling. They deliver more cuts per battery charge, making them very economical.

Universal Line PSF





PSF STEEL

Fast-cutting cut-off wheel for steel with long service life.

Advantages:

Reduced cutting time. Increased economic efficiency due to long service life.

Workpiece materials:

steel

Applications:

cutting sheet metal, cutting hollow sections, cutting solid materials

Abrasive:

Aluminum oxide A

Technical information:

A 46 P

PFERDVALUE®:

Thin cut-off wheels:









	4
i	Energy Saving

•
Time Saving

D [Inches]	T/U [Inches]	H [Inches]	EDP number	Max. RPM	
Flat (type 1/41) – plain	arbor hole				
4	.040	5/8	69940	15,300	25
	.045	5/8	69944	15,300	25
4-1/2	.040	7/8	69945	13,300	25
	.045	7/8	69949	13,300	25
5	.040	7/8	69950	12,200	25
	.045	7/8	69954	12,200	25
6	.045	7/8	69964	10,200	25
Depressed centre (type	e 27/42) – plain arbor h	ole			
4-1/2	.045	7/8	69908	13,300	25
	3/32	7/8	69909	13,300	25
5	.045	7/8	69910	12,200	25
	3/32	7/8	69911	12,200	25
Depressed centre (type	e 27/42) – threaded arb	or hole			
4-1/2	.045	5/8-11	69912	13,300	10
	3/32	5/8-11	69913	13,300	10
5	.045	5/8-11	69914	12,200	10
	3/32	5/8-11	69915	12,200	10

Accessories





Flange set for cut-off wheels

Special accessory providing increased lateral stability and improved power transfer to abrasive cut-off wheels. Made of high-grade tool steel.

Recommendation for use:

Provides superior lateral stability and precise wheel control, especially with 7" and 9" diameter thin cut-off wheels (≤ .080" thickness).



D [Inches]	Machine spindle thread [Inches]	EDP number	
3	5/8-11	69038	1



Universal Line PSF

PSF STEELOX

Fast-cutting cut-off wheel for steel and stainless steel (INOX) with long service life.

Advantages

Single solution for steel and stainless steel (INOX). Reduced cutting time.

Increased economic efficiency due to long service life.

Ideal for use with cordless angle grinders.

Workpiece materials:

steel, stainless steel (INOX)

Applications:

cutting sheet metal, cutting hollow sections, cutting solid materials

Abrasive:

Aluminum oxide A

Technical information:

A 46 P

PFERDVALUE®:











catting sona materials		Energy saving Time Saving				
D [Inches]	T/U [Inches]	H [Inches]	EDP number	Max. RPM		
Flat (type 1/41) – plain	arbor hole					
4-1/2	.040	7/8	63540	13,300	25	
	.045	7/8	63550	13,300	25	
5	.040	7/8	63541	12,200	25	
	.045	7/8	63551	12,200	25	
6	.045	7/8	63559	10,200	25	
7	.045	7/8	63553	8,500	25	
	3/32	7/8	63566	8,500	25	
9	.065	7/8	63554	6,600	25	
	3/32	7/8	63567	6,600	25	
Depressed centre (type	e <mark>27/42) – pl</mark> ain arbor h	ole				
4-1/2	.045	7/8	63717	13,300	25	
	3/32	7/8	63718	13,300	25	
5	.045	7/8	63719	12,200	25	
	3/32	7/8	63720	12,200	25	
Depressed centre (type 27/42) – threaded arbor hole						
4-1/2	.045	5/8-11	63721	13,300	10	
	3/32	5/8-11	63722	13,300	10	
5	.045	5/8-11	63723	12,200	10	
	3/32	5/8-11	63724	12,200	10	



Universal Line PSF



DUODISC®

The DUODISC® combination wheel is the safest solution for cutting and grinding with just one wheel. It meets the strictest requirements stated in global safety standards for cutting and grinding wheels.

Advantages:

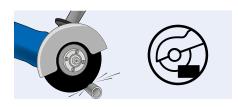
Safe solution for cutting and surface grinding with just one wheel.

Time savings due to reduced wheel changes when alternating between cutting and surface grinding.

Single solution for steel and stainless steel (INOX).

.065" thickness is ideal for cordless angle grinders.

Excellent solution for mill scale.











PSF DUODISC® STEELOX combination wheel

Combination wheel for steel and stainless steel (INOX) with fast cutting action and long service life.

Workpiece materials:

steel, stainless steel (INOX)

Applications:

cutting, deburring, surface grinding, fillet weld grinding, notching, weld dressing

Abrasive:

Aluminum oxide A

Technical information:

A 46 P





D [Inches]	T [Inches]	H [Inches]	EDP number	Max. RPM			
Depressed centre (type	Depressed centre (type 27) – plain arbor hole						
4-1/2	.065	7/8	63320	13,300	10		
	1/8	7/8	63333	13,300	10		
5	.065	7/8	63321	12,200	10		
	1/8	7/8	63334	12,200	10		
6	1/8	7/8	63335	10,200	10		
7	1/8	7/8	63336	8,500	10		
Depressed centre (type	Depressed centre (type 27/42) – threaded arbor hole						
4-1/2	.065	5/8-11	63326	13,300	10		
	1/8	5/8-11	63339	13,300	10		
5	.065	5/8-11	63327	12,200	10		
	1/8	5/8-11	63340	12,200	10		
6	1/8	5/8-11	63341	10,200	10		
7	1/8	5/8-11	63342	8,500	10		







SG STEEL

Fast-cutting cut-off wheel for steel with very long service life.

Advantages:

Reduced cutting time. Maximum economic efficiency due to very long service life.

Workpiece materials:

steel

Applications:

cutting sheet metal, cutting hollow sections, cutting solid materials

Abrasive:

High-performance aluminum oxide A

Technical information:

A 46 S

PFERDVALUE®:











D [Inches]	T/U [Inches]	H [Inches]	EDP number	Max. RPM	
lat (type 1/41) – plain arbor h	nole				
4	3/32	5/8	63502	15,300	25
4-1/2	.040	7/8	69947	13,300	25
	.045	7/8	69934	13,300	25
	3/32	7/8	63503	13,300	25
5	.040	7/8	69952	12,200	25
	.045	7/8	69955	12,200	25
	3/32	7/8	63505	12,200	25
6	.045	7/8	69965	10,200	25
7	.045	7/8	69975	8,500	25
	1/8	7/8	63508	8,500	25
9	1/8	7/8	63510	6,600	25
Depressed centre (type 27/42)	– plain arbor hole				
4	3/32	5/8	63102	15,300	25
4-1/2	.045	7/8	63162	13,300	25
	3/32	7/8	63103	13,300	25
	1/8	7/8	63104	13,300	25
5	.045	7/8	63163	12,200	25
	3/32	7/8	63105	12,200	25
	1/8	7/8	63106	12,200	25
6	.045	7/8	63164	10,200	25
	1/8	7/8	63107	10,200	25
7	.045	7/8	63165	8,500	25
	1/8	7/8	63109	8,500	25
9	1/8	7/8	63111	6,600	25
Depressed centre (type 27/42)	- threaded arbor hole				
4-1/2	.045	5/8-11	63182	13,300	10
1 1/2	3/32	5/8-11	63114	13,300	10
	1/8	5/8-11	63115	13,300	10
5	.045	5/8-11	63183	12,200	10
	3/32	5/8-11	63116	12,200	10
	1/8	5/8-11	63117	12,200	10
6	.045	5/8-11	63184	10,200	10
	1/8	5/8-11	63119	10,200	10
7	1/8	5/8-11	63112	8,500	10
9	1/8	5/8-11	63113	6,600	10

Performance Line SG





SG STEELOX

Fast-cutting cut-off wheel for steel and stainless steel (INOX) with very long service life.

Advantages:

Single solution for steel and stainless steel (INOX).

Reduced cutting time.

Maximum economic efficiency due to very long service life.

Workpiece materials:

steel, stainless steel (INOX)

Applications:

cutting sheet metal, cutting hollow sections, cutting solid materials

High-performance aluminum oxide A

Technical information:

A 46 R

PFERDVALUE®:











		cutting solid materials		Energy Saving Time Saving	
D [Inches]	T/U [Inches]	H [Inches]	EDP number	Max. RPM	
Flat (type 1/41) – plain	arbor hole				
4	.040	5/8	69943	15,300	25
	.045	5/8	63613	15,300	25
4-1/2	.040	7/8	69948	13,300	25
	.045	7/8	63607	13,300	25
5	.040	7/8	69953	12,200	25
	.045	7/8	63608	12,200	25
6	.045	7/8	63614	10,200	25
7	.045	7/8	63616	8,500	25
	3/32	7/8	63609	8,500	25
9	3/32	7/8	63611	6,600	25
Depressed centre (type					
4-1/2	.045	7/8	63167	13,300	25
	3/32	7/8	63202	13,300	25
	1/8	7/8	63204	13,300	25
5	.045	7/8	63168	12,200	25
	3/32	7/8	63205	12,200	25
	1/8	7/8	63206	12,200	25
6	.045	7/8	63169	10,200	25
	3/32	7/8	63208	10,200	25
7	.045	7/8	63170	8,500	25
	3/32	7/8	63207	8,500	25
9	3/32	7/8	63209	6,600	25
Depressed centre (type	27/42) – threaded arbo	or hole			
4-1/2	.045	5/8-11	63187	13,300	10
	3/32	5/8-11	63212	13,300	10
	1/8	5/8-11	63213	13,300	10
5	.045	5/8-11	63188	12,200	10
	3/32	5/8-11	63214	12,200	10
	1/8	5/8-11	63215	12,200	10
6	.045	5/8-11	63189	10,200	10
	3/32	5/8-11	63216	10,200	10
7	3/32	5/8-11	63210	8,500	10
9	3/32	5/8-11	63211	6,600	10



Performance Line SG

SG INOX

Fast-cutting cut-off wheel for stainless steel (INOX) with very long service life.

Advantages:

Reduced cutting time.

Maximum economic efficiency due to very long service life.

Workpiece materials:

stainless steel (INOX)

Applications:

cutting sheet metal, cutting hollow sections, cutting solid materials

Abrasive:

High-performance aluminum oxide A

Technical information:

A 46 R

PFERDVALUE®:











D [Inches]	T/U [Inches]	H [Inches]	EDP number	Max. RPM	
Flat (type 1/41) - plain	arbor hole				
4-1/2	.030	7/8	63641	13,300	25
	.040	7/8	63642	13,300	25
	.045	7/8	63643	13,300	25
5	.030	7/8	63645	12,200	25
	.040	7/8	63646	12,200	25
	.045	7/8	63647	12,200	25
6	.045	7/8	63649	10,200	25
7	.045	7/8	63650	8,500	25
	3/32	7/8	63651	8,500	25
9	.065	7/8	63653	6,600	25
	3/32	7/8	63654	6,600	25
Depressed centre (type	e 27/42) – plain arbor h	ole			
4-1/2	.045	7/8	63713	13,300	25
	3/32	7/8	63644	13,300	25
5	.045	7/8	63714	12,200	25
	3/32	7/8	63648	12,200	25
7	3/32	7/8	63652	8,500	25
9	3/32	7/8	63655	6,600	25
Depressed centre (type	e 27/42) – threaded arb	or hole			
4-1/2	.045	5/8-11	63711	13,300	10
	3/32	5/8-11	63707	13,300	10
5	.045	5/8-11	63712	12,200	10
	3/32	5/8-11	63708	12,200	10
7	3/32	5/8-11	63709	8,500	10
9	3/32	5/8-11	63710	6,600	10



Performance Line SG





SG ALU

Fast-cutting cut-off wheel for aluminum and other non-ferrous metals with very long service life.

Advantages

Operates without the cutting wheel loading even on soft aluminum alloys due to the special abrasive mixture and bond formula. Reduced cutting time.

Maximum economic efficiency due to very long service life.

Contains no fillers that could leave residues on the workpiece. The surface can be welded immediately.

Workpiece materials:

aluminum, other non-ferrous metals

Applications:

cutting sheet metal, cutting hollow sections, cutting solid materials

Abrasive:

High-performance aluminum oxide A and silicon carbide C

Technical information:

C 30 N

PFERDVALUE®:











cutting solid materials							
D [Inches]	T/U [Inches]	H [Inches]	EDP number	Max. RPM			
Flat (type 1/41) – plain arbor hole							
4-1/2	.040	7/8	63589	13,300	25		
	.045	7/8	63595	13,300	25		
	3/32	7/8	63602	13,300	25		
5	.040	7/8	63590	12,200	25		
	.045	7/8	63596	12,200	25		
	3/32	7/8	63603	12,200	25		
6	.045	7/8	63597	10,200	25		
7	.045	7/8	63598	8,500	25		
	1/8	7/8	63605	8,500	25		
9	1/8	7/8	63606	6,600	25		
Depressed centre (type 27/42) – plain arbor hole							
4-1/2	.045	7/8	63177	13,300	25		
	3/32	7/8	63131	13,300	25		
5	.045	7/8	63178	12,200	25		
	3/32	7/8	63133	12,200	25		
6	.045	7/8	63179	10,200	25		
7	.045	7/8	63180	8,500	25		
	1/8	7/8	63135	8,500	25		
9	1/8	7/8	63136	6,600	25		
Depressed centre (type 27/42) – threaded arbor hole							
4-1/2	.045	5/8-11	63197	13,300	10		
	3/32	5/8-11	63137	13,300	10		
5	.045	5/8-11	63198	12,200	10		
	3/32	5/8-11	63139	12,200	10		
6	.045	5/8-11	63199	10,200	10		
7	1/8	5/8-11	63141	8,500	10		
9	1/8	5/8-11	63142	6,600	10		



Cut-off wheels Special Line SGP

CERAMIC

Fast-cutting cut-off wheel with ceramic oxide grain for steel with outstanding service life. Optimized for use on steel workpieces with larger cross sections.

Advantages:

Super fast-cutting even on large cross sections due to high-performance ceramic oxide grain in a special bond formula. Maximum economic efficiency due to very long service life.



CERAMIC SGP STEEL

Workpiece materials:

steel

Applications:

cutting large cross-sections, cutting solid materials

Abrasive:

Ceramic oxide CO

Technical information:

CO 46 Q

PFERDVALUE®:













D [Inches]	T/U [Inches]	H [Inches]	EDP number	Max. RPM			
Flat (type 1/41) – plain arbor hole							
4-1/2	.040	7/8	63657	13,300	25		
	.045	7/8	63658	13,300	25		
	.080	7/8	63659	13,300	25		
5	.040	7/8	63660	12,200	25		
	.045	7/8	63661	12,200	25		
	.080	7/8	63662	12,200	25		
6	.045	7/8	63663	10,200	25		
7	.045	7/8	63664	8,500	25		
	3/32	7/8	63665	8,500	25		
9	.065	7/8	63666	6,600	25		
	3/32	7/8	63668	6,600	25		
Depressed centre (type 27/42) – plain arbor hole							
4-1/2	.045	7/8	63639	13,300	25		
5	.045	7/8	63640	12,200	25		
Depressed centre (type 27/42) – threaded arbor hole							
4-1/2	.045	5/8-11	63669	13,300	10		
5	.045	5/8-11	63670	12,200	10		

Special Line SGP





SGP STEELOX

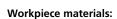
Fast-cutting cut-off wheel for steel and stainless steel (INOX) with an excellent service life. Specially optimized for use on thin metal sheets and hollow sections.



Advantages:

Excellent service life on thin sheet metal and hollow sections due to hard, wear-resistant bond formula.

Single solution for steel and stainless steel (INOX). Reduced cutting time.



steel, stainless steel (INOX)

Applications:

cutting thin sheet metal and hollow sections

Abrasive:

High-performance aluminum oxide A

Technical information:

A 46 S

PFERDVALUE®:











				Energy Saving Time Saving				
D [Inches]	T/U [Inches]	H [Inches]	EDP number	Max. RPM				
Flat (type 1/41) – plain arbor hole								
4-1/2	.030	7/8	69817	13,300	25			
	.040	7/8	69845	13,300	25			
	.045	7/8	69846	13,300	25			
	3/32	7/8	63635	13,300	25			
5	.030	7/8	69818	12,200	25			
	.040	7/8	69855	12,200	25			
	.045	7/8	69857	12,200	25			
	3/32	7/8	63636	12,200	25			
6	.045	7/8	69865	10,200	25			
7	.045	7/8	69872	8,500	25			
	3/32	7/8	63533	8,500	25			
	1/8	7/8	63637	8,500	25			
9	.065	7/8	63633	6,600	25			
	3/32	7/8	63638	6,600	25			
Depressed centre (type	Depressed centre (type 27/42) – plain arbor hole							
4-1/2	.045	7/8	63172	13,300	25			
	3/32	7/8	63231	13,300	25			
5	.045	7/8	63173	12,200	25			
	3/32	7/8	63233	12,200	25			
6	.045	7/8	63174	10,200	25			
7	.045	7/8	63175	8,500	25			
	3/32	7/8	63235	8,500	25			
9	3/32	7/8	63236	6,600	25			
Depressed centre (type 27/42) – threaded arbor hole								
4-1/2	.045	5/8-11	63192	13,300	10			
	3/32	5/8-11	63237	13,300	10			
5	.045	5/8-11	63193	12,200	10			
	3/32	5/8-11	63239	12,200	10			
6	.045	5/8-11	63194	10,200	10			
7	3/32	5/8-11	63241	8,500	10			
9	3/32	5/8-11	63242	6,600	10			



Cut-off wheels for circular metal cutting saws Performance Line SG

SG STEELOX

Fast-cutting universal cut-off wheel for use on circular saws with a very long service life. Available in diamond and round arbor hole styles. Diamond version includes 5/8" and 1/2" adapters.

Advantages:

Single solution for steel and stainless steel

Reduced cutting time.

Maximum economic efficiency due to very long service life.

Workpiece materials:

steel, stainless steel (INOX)

Applications:

cutting

Abrasive:

Aluminum oxide A

Technical information:

A 24 S



D [Inches]	T [Inches]	H [Inches]	EDP number	Max. RPM							
Flat (type 1/41) – plair	Flat (type 1/41) – plain arbor hole diamond bore										
7	1/8	Diamond, 5/8 - 1/2	63842	8,500	25						
8	1/8	Diamond, 5/8 - 1/2	63843	7,600	25						
Flat (type 1/41) – plair	arbor hole 5/8 round l	oore									
7	.045	5/8	63667	8,500	25						
8	1/8	5/8	63853	7,600	25						



Cut-off wheels for portable gas saws

Performance Line SG





PFERD portable wheels offer market-leading performance. Manufactured with a combination of heavy reinforcement and a high concentration of premium abrasive grain, they are the preferred brand of professional contractors, demolition personnel, rescue personnel and municipalities. They withstand extremely tough operating environments with high consistency and reliability. Designed for operator safety and comfort.

These wheels generate unparalleled productivity resulting in overall cost-savings.



SG STEEL

Fast-cutting cut-off wheel for use with portable gas saws featuring a very long service life.

Advantages

Reduced cutting time.

Maximum economic efficiency due to very long service life.

Workpiece materials:

steel, cast iron

Applications:

cutting

Abrasive:

Premium aluminum oxide A

Technical information:

A 24 S

D [Inches]	T [Inches]	Н	EDP number	Max. RPM	
Flat (type 1/41) – plair	n arbor hole]		
12	1/8	20 mm	64010	6,400	20
	1/8	1"	64015	6,400	20
14	3/16	20 mm	64016	5,500	10
	3/16	1"	64018	5,500	10
16	3/16	20mm	64020	4,800	10
	3/16	1"	64019	4,800	10





Cut-off wheels for portable gas saws

Performance Line SG

SG STONE

Fast-cutting cut-off wheel for use with portable gas saws featuring a very long service life.



Advantages:

Reduced cutting time. Maximum economic efficiency due to very long service life.

Workpiece materials:

cast iron, reinforced concrete, ductile cast iron

Applications:

cutting

Abrasive:

Silicon carbide C

Technical information:

C 24 R



D [Inches]	T [Inches]	Н	EDP number	Max. RPM	
Flat (type 1/41) – plain	arbor hole				
12	1/8	20 mm	64230	6,400	20
14	3/16	20 mm	64236	5,500	10
	3/16	1"	64238	5,500	10
16	3/16	1"	64239	4,800	10

SG CAST + STONE

Fast-cutting cut-off wheel for use with portable gas saws featuring a very long service life.

Advantages:

Reduced cutting time. Maximum economic efficiency due to very long service life.

Workpiece materials:

stone, cast iron, aluminum, other non-ferrous materials, concrete, asphalt

Applications:

cutting

Abrasive:

Special aluminum oxide A and silicon carbide C

Technical information:

AC 24 Q



D [Inches]	T [Inches]	Н	EDP number	Max. RPM	
Flat (type 1/41) – plain	arbor hole		ı		
12	1/8	20 mm	64118	6,400	20
	1/8	1"	64120	6,400	20
14	3/16	20 mm	64123	5,500	10
	3/16	1"	64124	5,500	10
16	3/16	20mm	64117	4,800	10

Cut-off wheels for die grinders

Performance Line SG





SG STEELOX

Fast-cutting universal cut-off wheel for use on die grinders with a very long service life.

Ideal for hard-to-reach areas.

Universal cut-off wheel for all metals.

Reduced cutting time.

Maximum economic efficiency due to very long tool life.

Workpiece materials:

steel, stainless steel (INOX), nickel-based alloys, cast iron, aluminum, other non-ferrous metals

Applications:

cutting sheet metal, cutting hollow sections, cutting solid materials

Abrasive:

High-performance aluminum oxide A

Technical information:

A 60 P

Ordering notes:

Please order the matching arbor separately.

Safety notes:

Observe the maximum rotational speed for the cut-off wheel and arbor stated on the enclosed instruction sheets - the lower of the two sets the limit.

PFERDVALUE®:

Thin cut-off wheels:















D [Inches]	T [Inches]	H [Inches]	EDP number	Max. RPM	
Flat (type 1/41) – plain	arbor hole				
2	.040	1/4	69201	30,000	50
		3/8	69203	30,000	50
	.045	1/4	69207	30,000	50
		3/8	69211	30,000	50
	1/8	3/8	69217	30,000	50
3	.040	1/4	69301	25,000	50
		3/8	69303	25,000	50
	.045	1/4	69305	25,000	50
		3/8	69309	25,000	50
	1/8	3/8	69317	25,000	50
4	.040	1/4	69401	19,000	25
		3/8	69403	19,000	25
	.045	1/4	69405	19,000	25
		3/8	69411	19,000	25
	1/8	3/8	69420	19,000	25









PFERD 535

Arbors for small cut-off wheels

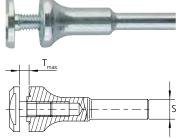
Accessory for mounting small cut-off wheels on straight grinders. Rugged product with maximum shank fracture resistance.

Safety notes:

For use on PFERD small cut-off wheels ranging from 2 "up to 4" in diameter. Observe the maximum rotational speed for the cut-off wheel and arbor – the lower speed takes precedence (see table to the right).

Slide in the mandrel as far as possible into the collet of your power tool, i.e. the conical part of the mandrel beginning just after the collet.

Cut-off wheel diameter [Inches]	Max. RPM
2	30,000
3	20,000
4	15,000



Max. wheel dia. [Inches]	Fits arbor hole size [Inches]	EDP number	Shank dia. (S) [Inches]	Clamping width (T) [Inches]	Flange dia. [Inches]	Overall Length [Inches]	
3	1/4	69026	1/4	0 - 5/16	3/4	2-1/8	1
	3/8	69027	1/4	0 - 5/16	3/4	2-1/8	1
	1/4, 3/8	69028	1/4	0 - 5/16	3/4	2-1/8	1
4	1/4	69033	1/4	0 - 5/16	1	2-1/8	1
	3/8	69034	1/4	0 - 5/16	1	2-1/8	1
	1/4, 3/8	69035	1/4	0 - 5/16	1	2-1/8	1













Product group selection guide

Application	Product line		Steel (STEEL)			Stainless stee (INOX)	ıl	Aluminum (ALU)
Surface grinding Work on weld seams Blending	Universal Line PSF	Z PSF STEELOX Page 29	Z PSF EXTRA STEELOX Page 30	Z PSF TRIM STEELOX Page 31	Z PSF STEELOX Page 29	Z PSF EXTRA STEELOX Page 30	Z PSF TRIM STEELOX Page 31	
	Performance Line SG	A SG STEELOX Page 32	X	Z SG POWER STEELOX Page 34	A-COO SG INOX + Page 3.	ALU	CO-FREEZE SG INOX Page 36	A-COOL SG INOX + ALU Page 33
	Special Line SGP	Z	SGP STRONG ST Page 37	TEEL				
Chamfering Deburring	Universal Line PSF	Z PSF STEELOX Page 29	Z PSF EXTRA STEELOX Page 30	Z PSF TRIM STEELOX Page 31	Z PSF STEELOX Page 29	Z PSF EXTRA STEELOX Page 30	Z PSF TRIM STEELOX Page 31	
	Performance Line SG		Z SG POWER STEELOX Page 34		Z SG POW STEELO Page 3-	X 9	CO-COOL SG STEELOX Page 35	A-COOL SG INOX + ALU Page 33
	Special Line SGP	Z	SGP STRONG ST Page 37	TEEL				
Work on fillet welds	Special Line SGP	ZS	GGP CURVE STEI Page 38	ELOX	CO	SGP CURVE STE Page 39	ELOX	A SGP CURVE ALU Page 39

Abrasive: A = aluminum oxide, Z = zirconia alumina, CO = ceramic oxide

Coatings: COOL = Special topsizing, FREEZE = Special topsizing for ultra-cool grinding

Grit size selection

Giic	Size selection									
	Grit size									
	36/40	50/60	120							
r C	Work on weld seams									
atic	Cham	nfering								
Application		Debur	Deburring							
₹		Prepar	e surface for finishi	ing						

Note: With POLIFAN® flap discs, grit that is one grade coarser can be selected in order to achieve the same surface finish as with fibre discs.

Shape selection							
Shape	Application						
Flat type PFF (type 27)	Larger grinding area for surface grinding. An optimal contact angle of 0–15° offers maximum flap disc usage.						
Conical type PFC (type 29)	Narrower grinding area for work on weld seams, chamfering and deburring. An optimal contact angle of 10–25° offers maximum flap disc usage.						
Radial type PFR (CURVE)	Unique design for work on fillet welds. After the circumference has worn down, it can still be used as a conventional flap disc.						

POLIFAN® flap discsHighlights from the PFERD range





POLIFAN®-POWER

For demanding requirements, the high-performance POLIFAN® Z-SG-POWER flap disc is the first choice for the machining of steel. This versatile POLIFAN® flap disc offers an optimal combination of outstanding service life and extremely high stock removal rates.

Advantages:

Reduced labour time and maximum economic efficiency due to the aggressive stock removal rate.

Maintains maximum aggressiveness throughout the entire service life. Fewer wheel changes due to the excellent service life.

For more information see page 34.



POLIFAN®-STRONG

Users who rely on top performance choose the POLIFAN®-STRONG flap disc. It surpasses conventional flap discs and redefines the highest levels of efficiency. With its patented and unique design, it achieves an unsurpassed stock removal rate. It also has an astonishingly long service life over conventional flap discs.

Advantages:

Fast grinding through constant grinding aggressiveness down to the last abrasive grain.

Ultimate economic efficiency due to the extremely fast stock removal rate.

Extremely long service life due to its patented flap design.

For more information see page 37.



POLIFAN®-CURVE

The patented flap disc POLIFAN®-CURVE has been specially developed for work on fillet welds. It is the only flap disc in the world featuring a radial configuration of flaps allowing for grinding with all surfaces of the disc.

Advantages:

High stock removal rate ensures reduced labour time and significant increase in productivity. Outstanding service life when working on fillet welds.

Precise and optimum grinding of the fillet weld geometry.

Excellent surface finish allows for easier visual inspections of the fillet weld.

For more information see page 38.









Universal Line PSF

Z PSF STEELOX

Zirconia alumina flap disc with aggressive stock removal rate and long service life.

Advantages

Reduced labour time and increased economic efficiency due to the aggressive stock removal rate.

Long service life.

Good option for low-powered angle grinders (< 9 amps).

Workpiece materials:

steel, stainless steel (INOX)

Applications:

surface grinding, weld dressing, blending, chamfering, deburring

Abrasive:

Zirconia alumina Z











D			Grit and El	Max.			
[Inches]	[Inches]	40	60	80	120	RPM	
Flat (type 27, PFF) –	plain arbor hol	e www.	Allina	SI .			
4-1/2	7/8	62014	62015	62016		13,300	10
5	7/8	63011	63012	63013	-	12,200	10
6	7/8	63051	63052	-	-	10,200	10
7	7/8	62024	62025	62026	-	8,500	10
Conical (type 29, PF	C) – plain arbor	hole 🚾		2			
4-1/2	7/8	62052	62053	62054	62055	13,300	10
5	7/8	63031	63032	63033	63034	12,200	10
6	7/8	63071	63072	-	•	10,200	10
7	7/8	62062	62063	62064	62065	8,500	10
Flat (type 27, PFF) –	threaded arbo	r hole		S			
4-1/2	5/8-11	62033	62034	62035	-	13,300	10
5	5/8-11	63015	63016	63017	-	12,200	10
6	5/8-11	63056	63057	-	-	10,200	10
7	5/8-11	62043	62044	62045	-	8,500	10
Conical (type 29, PF	C) – threaded a	rbor hole		3			
4-1/2	5/8-11	62071	62072	62073	62074	13,300	10
5	5/8-11	63035	63036	63037	63038	12,200	10
6	5/8-11	63076	63077	-	-	10,200	10
7	5/8-11	62081	62082	62083	62084	8,500	10



Universal Line PSF





Z PSF EXTRA STEELOX

Zirconia alumina flap disc with aggressive stock removal rate and long service life.

Advantages

Reduced labour time and increased economic efficiency due to the aggressive stock removal rate.

Very long service life due to the high-density flap arrangement.

Good option for low-powered angle grinders (< 9 amps).

Workpiece materials:

steel, stainless steel (INOX)

Applications:

surface grinding, weld dressing, blending, chamfering, deburring

Abrasive:

Zirconia alumina Z













D	. Н			Grit and EDP number			Max.	
[Inches]	[Inches]	36	40	60	80	120	RPM	
Flat (type 27, PF	FF) – plain arbo	r hole	Toman (Allino				
4-1/2	7/8	60457	60458	60460	60461	60462	13,300	10
5	7/8	60464	60465	60467	60468	60469	12,200	10
7	7/8	60478	60479	60481	-	-	8,500	10
Conical (type 29	9, PFC) – plain a	arbor hole	THIN	dimini				
4-1/2	7/8	60625	60626	60628	60629	60630	13,300	10
5	7/8	60632	60633	60635	60636	60637	12,200	10
6	7/8	60639	60640	60642	60643	60644	10,200	10
7	7/8	60646	60647	60649	-	-	8,500	10
Flat (type 27, PF	FF) – threaded a	arbor hole	vannin.					
4-1/2	5/8-11	60485	60486	60488	60489	60490	13,300	10
5	5/8-11	60492	60493	60495	60496	60497	12,200	10
7	5/8-11	60506	60507	60509	-	-	8,500	10
Conical (type 29	9, PFC) – thread	led arbor hole	THE STATE OF THE S	dimini				
4-1/2	5/8-11	60653	60654	60656	60657	60658	13,300	10
5	5/8-11	60660	60661	60663	60664	60665	12,200	10
6	5/8-11	60667	60668	60670	60671	60672	10,200	10
7	5/8-11	60674	60675	60677	-	-	8,500	10





POLIFAN® flap discs Universal Line PSF

Z PSF TRIM STEELOX

Zirconia alumina flap disc with trimmable plastic backer. Aggressive stock removal rate and long

Advantages:

Reduced labour time and increased economic efficiency due to the aggressive stock removal rate.

Long service life.

Plastic backer can be trimmed to expose unused coated material once the outside edge has worn down.

Good option for low-powered angle grinders (< 9 amps).

Workpiece materials:

steel, stainless steel (INOX)

Applications:

surface grinding, weld dressing, blending, chamfering, deburring

Zirconia alumina Z











D	H	(Grit and EDP numbe	Max.		
[Inches]	[Inches]	40	60	80	RPM	
Flat (type 27, PFF) –	plain arbor hole		Allin	ts.		
4-1/2	7/8	68098	68099	68100	13,300	10
5	7/8	68104	68105	68106	12,200	10
Flat (type 27, PFF) –	threaded arbor hol	e	Annua Annua	<u> </u>		
4-1/2	5/8-11	68158	68159	68160	13,300	10
5	5/8-11	68164	68165	68166	12,200	10





POLIFAN® flap discs Performance Line SG





A SG STEELOX

Aluminum oxide flap disc with high stock removal rate and very long service life.

Reduced labour time and increased economic efficiency due to the high stock removal rate. Fewer tool changes due to the very long tool

Workpiece materials:

steel, stainless steel (INOX)

Applications:

surface grinding, weld dressing, blending

Abrasive:

Aluminum oxide A











D	Н		Grit and El	OP number		Max.	
[Inches]	[Inches]	40	60	80	120	RPM	
Flat (type 27, PFF)	– plain arbor ho	ole 📨	Allina	2			
4	5/8	62140	62142	62144	62146	15,300	10
4-1/2	7/8	62150	62152	62154	62156	13,300	10
5	7/8	62158	62160	62162	62164	12,200	10
7	7/8	62168	62170	62172	62174	8,500	10
Conical (type 29, P	PFC) – plain arbo	r hole		3			
4-1/2	7/8	62202	62203	62204	62205	13,300	10
5	7/8	62213	62214	62215	62216	12,200	10
7	7/8	62208	62209	62210	62211	8,500	10
Flat (type 27, PFF)	throaded arbo	ur holo —		_			
4-1/2	5/8-11	62250	62252	62254	62256	13,300	10
5		62258	62260	62262	62264	·	
	5/8-11					12,200	10
7	5/8-11	62268	62270	62272	62274	8,500	10
Conical (type 29, P	PFC) – threaded a	arbor hole 🚾		3			
4-1/2	5/8-11	62302	62303	62304	62305	13,300	10
5	5/8-11	62313	62314	62315	62316	12,200	10
7	5/8-11	62308	62309	62310	62311	8,500	10



Performance Line SG

A-COOL SG INOX + ALU

Top-sized aluminum oxide flap disc with particularly cool grinding on materials with poor thermal conduction such as stainless steel (INOX) and aluminum.

Advantages:

Less heat generation compared to conventional flap discs.

Special top-sized abrasive material prevents loading on soft metals such as aluminum.

Workpiece materials:

stainless steel (INOX), aluminum, other non-ferrous metals

Applications:

surface grinding, weld dressing, blending, chamfering, deburring

Abrasive:

Aluminum oxide A with cooling topsizing (COOL)

Recommendations for use:

Use only grit sizes 40 and 60 for aluminum.













D	Н	(Grit and EDP numbe	r	Max.		
[Inches]	[Inches]	40	60	80	RPM		
Flat (type 27, PFF) –	plain arbor hole	THE STATE OF THE S					
4-1/2	7/8	62361	62362	62363	13,300	10	
5	7/8	62365	62366	62367	12,200	10	
7	7/8	62369	62370	62371	8,500	10	
Conical (type 29, PFC	C) – plain arbor hole	THE STATE OF THE S	THE STATE OF THE S				
4-1/2	7/8	62231	62232	62233	13,300	10	
5	7/8	62235	62236	62237	12,200	10	
Flat (type 27, PFF) –	threaded arbor hole	- Tanna					
4-1/2	5/8-11	62373	62374	62375	13,300	10	
5	5/8-11	62377	62378	62379	12,200	10	
7	5/8-11	62381	62382	62383	8,500	10	
Conical (type 29, PFC) – threaded arbor hole							
4-1/2	5/8-11	62241	62242	62243	13,300	10	
5	5/8-11	62244	62245	62246	12,200	10	





Performance Line SG





Z SG POWER STEELOX

The POLIFAN® Z SG POWER flap disc features an aggressive stock removal rate and excellent service life to achieve the highest level of efficiency. It is the best conventional flap disc for steel.

Advantages:

Reduced labour time and maximum economic efficiency due to the aggressive stock removal rate.

Maintains maximum aggressiveness throughout the entire service life. Fewer wheel changes due to the excellent service life.

Workpiece materials:

steel, stainless steel (INOX)

Applications:

weld dressing, blending, chamfering, deburring

Abrasive:

Zirconia alumina Z

Recommendations for use:

Also suitable for surface grinding on steel.













			Weld dies	sing, biending, ci	namemig, debt	g			
D	H			Grit and EDP number					
[Inches]	[Inches]	24	36	40	60	80	120	RPM	
Flat (type 27,	PFF) – plain aı	rbor hole	To the state of th	All Indiana					
4	5/8	-	-	62138	62139	-	-	15,300	10
4-1/2	7/8	-	62173	62176	62178	-	-	13,300	10
5	7/8	-	62181	62182	62184	-	-	12,200	10
7	7/8	-	62187	62188	62190	-	-	8,500	10
Conical (type	29, PFC) – plai	in arbor hole	THIN	dilling					
4-1/2	7/8	62221	62191	62222	62223	62220	62259	13,300	10
5	7/8	-	62192	62225	62226	62261	62263	12,200	10
6	7/8	-	-	62186	62189	-	-	10,200	10
7	7/8	-	62193	62228	62229	-	-	8,500	10
Elat (tupo 27	PFF) – threade	ad arbor bala							
		ed arbor noie	62272	62276	62270			12 200	10
4-1/2	5/8-11	-	62273	62276	62278	-	-	13,300	10
5	5/8-11	-	62281	62282	62284	-	-	12,200	10
7	5/8-11	-	62287	62288	62290	-	-	8,500	10
Conical (type	29, PFC) – thre	eaded arbor h	ole www.						
4-1/2	5/8-11	62321	62194	62322	62323	62324	62275	13,300	10
5	5/8-11	-	62195	62325	62326	62291	62293	12,200	10
6	5/8-11	-	-	62286	62289	-	-	10,200	10
7	5/8-11	-	62196	62328	62329	-	-	8,500	10







POLIFAN® flap discs Performance Line SG

CO-COOL SG STEELOX

Cool grinding POLIFAN® flap disc for materials that are difficult to grind such as high-alloy and rustresistant steel, nickel-based alloys or titanium alloys.

Advantages:

The self-sharpening action of the ceramic oxide grain guarantees optimal results, even on materials that are difficult to grind. Reduced heat build-up in the workpiece compared with other flap discs.

Workpiece materials:

steel, mill scale, stainless steel (INOX), nickelbased alloys, hard aluminum alloys

Applications:

surface grinding, weld dressing, chamfering, deburring

Abrasive:

Ceramic oxide CO with cooling topsizing (COOL)











D	Н	Grit and El	DP number	Max.	
[Inches]	[Inches]	40	60	RPM	
Flat (type 27, PFF) – pl	ain arbor hole	All III	2		
4-1/2	7/8	62597	62599	13,300	10
5	7/8	62603	62605	12,200	10
7	7/8	62615	-	8,500	10
Conical (type 29, PFC)	– plain arbor hole		2		
4-1/2	7/8	62651	62653	13,300	10
5	7/8	62657	62659	12,200	10
7	7/8	62669	-	8,500	10
Flat (type 27, PFF) – th	readed arbor hole	Anna	2		
4-1/2	5/8-11	62621	62623	13,300	10
5	5/8-11	62627	62629	12,200	10
7	5/8-11	62639	-	8,500	10
Conical (type 29, PFC)	– threaded arbor hole		3		
4-1/2	5/8-11	62675	62677	13,300	10
5	5/8-11	62681	62683	12,200	10
7	5/8-11	62693	-	8,500	10







Performance Line SG





CO-FREEZE SG INOX

POLIFAN® flap disc designed for stainless steel (INOX) with ultra-cool grinding. Due to the ceramic oxide CO with cooling topsizing (FREEZE), there is no heat discolouration – no reworking is required.

Advantages:

- The FREEZE topsizing significantly reduces heat build-up in the workpiece compared with standard flap discs.
- Reduced labour time and increased economic efficiency due to the aggressive stock removal rate.
- Maximum aggressiveness over the entire service life.
- Fewer wheel changes due to the excellent service life.
- Sparks are minimized. Damage to stainless steel workpieces from sparks is almost entirely eliminated.

Workpiece materials:

stainless steel (INOX), nickel-based alloys

Applications:

surface grinding, weld dressing

Abrasive:

Ceramic oxide CO with extreme cooling topsizing (FREEZE)

Recommendations for use:

During use, the flaps exhibit an unusual wear pattern after just a few seconds. Highly effective fillers form a shiny cooling film on the flaps (this should not be mistaken for "glazing"). This provides the basis for ultracool grinding.

PFERDVALUE®:









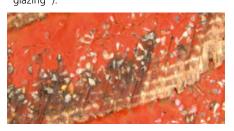




		_				
D	. Н	(Grit and EDP numbe	r	Max.	hightharpoonup
[Inches]	[Inches]	36	50	80	RPM	
Flat (type 27, PFF) –	plain arbor hole	annin .	All IIII			
4-1/2	7/8	60804	60805	60806	13,300	10
5	7/8	60807	60808	60809	12,200	10
Conical (type 29, PF	C) – plain arbor hol					
4-1/2	7/8	60810	60811	60812	13,300	10
5	7/8	60813	60814	60815	12,200	10
7	7/8	60816	60817	-	8,500	10
Flat (type 27, PFF) –	threaded arbor hol	e vanus	All the second			
4-1/2	5/8-11	61082	61083	61084	13,300	10
5	5/8-11	61085	61086	61087	12,200	10
			L _			
Conical (type 29, PF	C) – threaded arbor	hole www.				
4-1/2	5/8-11	61088	61089	61090	13,300	10
5	5/8-11	61091	61092	61093	12,200	10
7	5/8-11	61094	61095	-	8,500	10

CO-FREEZE SG INOX flap disc

FREEZE wear pattern: a shiny cooling film on the flaps (this should not be mistaken for "glazing").



Optimum results: no discolouration due to low thermal load.



Flap disc with conventional abrasive material

Heat discolouration/oxidation due to high heat build-up. Secondary grinding operation is required to prevent the risk of corrosion.





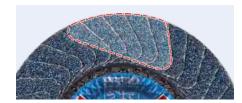
Special Line SGP

POLIFAN®-STRONG STEEL

Users who rely on top performance choose the innovative POLIFAN®-STRONG flap disc. It surpasses conventional flap discs and redefines the highest levels of efficiency. Due to its patented and unique design, it achieves an unsurpassed stock removal rate. It also has an astonishingly long service life over conventional flap discs.

Advantages:

Fast grinding through constant grinding aggressiveness down to the last abrasive grain. Ultimate economic efficiency due to extremely fast stock removal rate. Extremely long service life due to patented flap design.





Long, compact arranged flaps

Z SGP STRONG STEEL

Workpiece materials:

steel

Applications:

weld dressing, chamfering, deburring

Abrasive:

Zirconia alumina Z

Recommendations for use:

Grit size 36 is ideal for high stock removal, e.g. during work on weld seams. Grit size 50 is ideal for work on edges, e.g. chamfering or achieving a finer surface finish.











D	Н	Grit and El	DP number	Max.	
[Inches]	[Inches]	36	50	RPM	
Conical (type 29, PFC)	– plain arbor hole		2		
4-1/2	7/8	62945	62947	13,300	10
5	7/8	62955	62957	12,200	10
7	7/8	62975	62977	8,500	10
Conical (type 29, PFC)	- threaded arbor hole		S.		
4-1/2	5/8-11	62950	62952	13,300	10
5	5/8-11	62960	62962	12,200	10
7	5/8-11	62980	62982	8,500	10







Special Line SGP



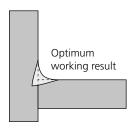


POLIFAN®-CURVE

The patented POLIFAN $^{\circ}$ -CURVE flap disc has been specially developed for work on fillet welds. It is the only flap disc in the world that has flaps on both the grinding side and on the rear side, as well as on the radius.

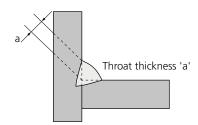
Advantages:

- Reduced labour time and ultimate economic efficiency due to the extremely aggressive stock removal rate.
- Outstanding tool life when working on fillet welds.
- Precise and optimum grinding of the fillet weld geometry.



Recommendations for use:

- Size M (medium): For fillet weld radii > 3/16" or throat thickness $\le 1/4"$ with 90° joint, width at the radius: 7/16" or 9/16" with diameter 6".
- Size L (large): For fillet weld radii > 5/16" or throat thickness > 1/4" with 90° joint, width at the radius: 9/16" or 5/8" with diameter 6" or 7".





Z SGP CURVE STEELOX

High-performance flap disc for maximum stock removal on steel and stainless steel (INOX).

Workpiece materials:

steel, stainless steel (INOX)

Applications:

fillet weld edge grinding, weld dressing, chamfering, deburring

Abrasive:

Zirconia alumina Z











D	Н	Size and	EDP number	Grit Max.				
[Inches]	[Inches]	Size medium	Size large		RPM			
Radial type PFR (CURVE) – plain arbor hole								
4-1/2	7/8	67192	67339	40	13,300	10		
5	7/8	67196	67343	40	12,200	10		
6	7/8	67200	67347	40	10,200	10		
7	7/8	-	67351	40	8,500	10		
Radial type PFR (CU	JRVE) – threaded ar	bor hole						
4-1/2	5/8-11	67212	67359	40	13,300	10		
5	5/8-11	67216	67363	40	12,200	10		
6	5/8-11	67220	67367	40	10,200	10		
7	5/8-11	-	67371	40	8,500	10		



Special Line SGP

CO SGP CURVE STEELOX

High-performance flap disc that achieves a superior surface finish on steel and stainless steel (INOX).

Workpiece materials:

steel, stainless steel (INOX)

Applications:

fillet weld edge grinding, weld dressing, chamfering, deburring

Abrasive:

Ceramic oxide CO with cooling topsizing (COOL)

PFERDVALUE®









D D	H	Size and E	DP number	Grit Max. RPM	Max.	
[Inches]	[Inches]	Size medium	Size large		KPIVI	
Radial type PFR (CURVE)) – plain arbor h	ole William				
4-1/2	7/8	67234	67381	60	13,300	10
5	7/8	67197	67344	60	12,200	10
Radial type PFR (CURVE)) – threaded arb	or hole				
4-1/2	5/8-11	67258	67405	60	13,300	10
5	5/8-11	67217	67364	60	12,200	10

A SGP CURVE ALU

High-performance flap disc that achieves a superior surface finish on aluminum.

Workpiece materials:

aluminum, other non-ferrous metals

Applications:

fillet weld edge grinding, weld dressing, chamfering, deburring

Abrasive:

Aluminum oxide A with cooling topsizing (COOL)





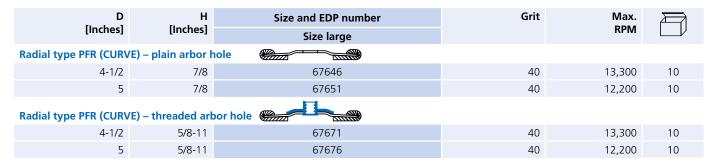






















Highlights from the PFERD range

CC-GRIND®-SOLID

With the CC-GRIND®-SOLID, PFERD offers a modern, high-performance and ergonomic alternative to conventional grinding wheels.

Advantages:

Maximum productivity due to highly aggressive abrasive.

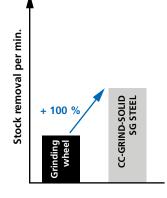
Significantly more ergonomic than a conventional grinding wheel: noise and vibrations are reduced by 50%, dust by 80%.

Layered structure of the integrated fibreglass backing support guarantees use that is just as durable and safe as with a conventional grinding wheel.

Superior surface finish compared to conventional

grinding wheels.

For more information see page 43.







CC-GRIND®-FLEX

The CC-GRIND®-FLEX is the semi-flexible addition to the CC-GRIND® family. It was specially developed for work on weld seams. Butt welds can be smoothed completely flat. This gets rid of any dents and bumps that are visible, particularly after painting or varnishing.

Advantages:

Maximum productivity due to highly aggressive abrasive.

Significantly more ergonomic than a conventional grinding wheel: noise and vibrations are reduced by 50%, dust by 80%.

Layered structure of the integrated fibreglass backing support guarantees use that is just as durable and safe as with a conventional grinding wheel.

Complete smoothing of butt welds – without dents or bumps.

Superior surface finish compared to conventional grinding wheels.

For more information see page 44.



CC-GRIND®-STRONG

The CC-GRIND®-STRONG bridges the gap between conventional grinding wheels and the modern alternative CC-GRIND®-SOLID. It combines the fast, ergonomic grinding of a CC-GRIND®-SOLID with a resin bonded abrasive as a backer. The bonded portion of the disc not only serves as a supporting backer, but is also used during grinding.

Advantages:

Three times the service life compared to CC-GRIND®-SOLID SG STEEL due to the unique combination of stacked coated discs with a bonded abrasive support.

Maximum productivity due to highly aggressive abrasive.

Significantly more ergonomic than a conventional grinding wheel: noise and vibrations are reduced by 50%, dust by 70%.

Superior surface finish compared to conventional grinding wheels.

For more information see page 45.





CC-GRIND® grinding discs Quick product selection guide



Product group selection guide

Application	Product line		Steel (STEEL)		Stainless steel (INOX)
		CC-GRIND®-SOLID	CC-GRIND®-FLEX	CC-GRIND®-STRONG	CC-GRIND®-SOLID
Surface grinding Levelling Work on weld seams Chamfering Deburring	Performance Line SG	CC-GRIND®-SOLID SG STEEL Page 43		CC-GRIND®-STRONG SG STEEL Page 45	CC-GRIND®-SOLID SG INOX Page 43
Levelling butt welds	Performance Line SG		CC-GRIND®-FLEX SG STEEL Page 44		J



CC-GRIND® mounting flange set

The CC-GRIND® mounting flange set optimally aligns the CC-GRIND®-SOLID and -FLEX in the angle grinder protective guard. This allows a very flat contact angle with maximum efficiency.

The black backing pad is placed on the original mounting flange of the angle grinder. The silver flange nut replaces the original flange nut.

D [Inches]	H [Inches]	EDP number	
4-1/2, 5	5/8-11	69116	1
6, 7	5/8-11	69117	1





Performance Line SG

CC-GRIND®-SOLID SG STEEL

Workpiece materials:

steel

Applications:

surface grinding, weld dressing, chamfering, deburring

Recommendations for use:

For optimum results, use with a flat contact angle and the SFS CC-GRIND® flange set. Only use the face of the disc, not suitable for peripheral grinding (on edge).

Ordering notes:

Please order flange set SFS separately.

PFERDVALUE®:











D [Inches]	H [Inches]	EDP number	Compatible mounting flange set	Max. RPM	
SOLID – plain arbor hole					
4-1/2	7/8	61200	EDP 69116 (5/8-11)	13,300	10
5	7/8	61201	EDP 69116 (5/8-11)	12,200	10
6	7/8	61202	EDP 69117 (5/8-11)	10,200	10
7	7/8	61203	EDP 69117 (5/8-11)	8,500	10
SOLID – threaded arbor hole					
4-1/2	5/8-11	61220	-	13,300	10
5	5/8-11	61221	-	12,200	10
6	5/8-11	61222	-	10,200	10
7	5/8-11	61223	-	8,500	10

CC-GRIND®-SOLID SG INOX

Workpiece materials:

stainless steel (INOX)

Applications:

weld dressing, chamfering, deburring

Recommendations for use:

For optimum results, use with a flat contact angle and the SFS CC-GRIND® flange set. Only use the face of the disc, not suitable for peripheral grinding (on edge).

Ordering notes:

Please order flange set SFS separately.

















D [Inches]	H [Inches]	EDP number	Compatible mounting flange set	Max. RPM	
SOLID – plain arbor hole					
4-1/2	7/8	61215	EDP 69116 (5/8-11)	13,300	10
5	7/8	61216	EDP 69116 (5/8-11)	12,200	10
7	7/8	61218	EDP 69117 (5/8-11)	8,500	10
SOLID – threaded arbor hole					
4-1/2	5/8-11	61235	_	13,300	10
5	5/8-11	61236	-	12,200	10
7	5/8-11	61238	_	8 500	10

Performance Line SG





CC-GRIND®-FLEX SG STEEL

Workpiece materials:

steel

Applications:

weld dressing, surface grinding

Recommendations for use:

For optimum results, use with a flat contact angle and the SFS CC-GRIND® flange set. Only use the face of the disc, not suitable for peripheral grinding (on edge).

Ordering notes:

Please order flange set SFS separately.

PFERDVALUE®:











D		Grit	size	Max.	
[Inches]	[Inches]	FINE	COARSE	RPM	
FLEX – plain arbor hole					
4-1/2	7/8	61186	61188	13,300	10
5	7/8	61190	61192	12,200	10
5	7/8	61190	61192	12,200	10



CC-GRIND® mounting flange set

The CC-GRIND® mounting flange set optimally aligns the CC-GRIND®-SOLID and -FLEX in the angle grinder protective guard. This allows a very flat contact angle with maximum efficiency.

The black backing pad is placed on the original mounting flange of the angle grinder. The silver flange nut replaces the original flange nut.

D [Inches]	H [Inches]	EDP number	
4-1/2, 5	5/8-11	69116	1
6, 7	5/8-11	69117	1



CC-GRIND®-STRONG

The CC-GRIND®-STRONG is the stepping stone between the classic grinding wheel (the backing pad also grinds) and the modern alternative CC-GRIND®-SOLID (fast, ergonomic grinding).

Advantages:

Three times the service life compared to CC-GRIND®-SOLID SG STEEL due to the unique combination of stacked coated discs with a bonded abrasive support. Maximum productivity due to highly aggressive abrasive. Significantly more ergonomic than a conventional grinding wheel: noise and vibrations are reduced by 50%, dust by 70%. Superior surface finish compared to conventional grinding wheels.





CC-GRIND®-STRONG SG STEEL

Workpiece materials:

steel, mill scale

Applications:

weld dressing, chamfering, deburring

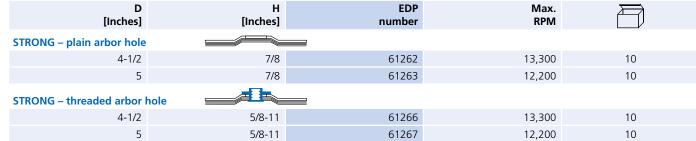


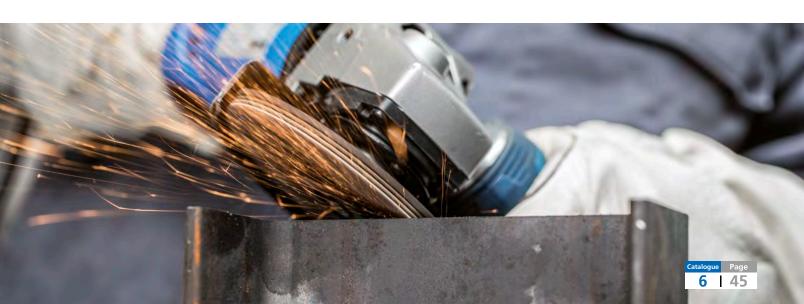












Grinding wheels







Advantages:

Due to the combination of a coated abrasive layer and a rough grinding wheel with a high stock removal rate, the CERAMIC SG COMFORT offers significantly reduced labour time and maximum economic efficiency.

Fewer wheel changes due to the very long service life.

Can be used for peripheral grinding (on edge).

Significantly lower noise emissions and vibration when compared to conventional grinding wheels.

For more information please see page 58.





WHISPER

Due to its patented multi-layer design, the WHISPER grinding wheel generates significantly less vibration and noise than conventional grinding wheels. The noise exposure is decreased by up to 12 dBA, a reduction of more than 90%. The flexible construction enables soft, comfortable grinding with outstanding surface finish.

Advantages:

Universally suitable for steel and stainless steel (INOX).

Significantly lower noise emissions and vibration than with conventional grinding wheels. Comfortable grinding.

Excellent solution for mill scale.

For more information please see page 59.







CERAMIC

High-performance grinding wheel with ceramic oxide grain for cool grinding with excellent productivity.

Advantages:

Outstanding aggressiveness and service life due to the self-sharpening effect of the highperformance abrasive ceramic oxide grain.

Labour cost savings due to much higher material removal rate compared to conventional grinding wheels.

Reduced operator strain – maximum performance with minimal contact pressure.

For more information please see page 61.



Grinding wheelsQuick product selection guide





Product group selection guide

Application	Product line		eel EEL)	Stainle: (INC		Aluminum (ALU)	Cast iron (CAST)	Stone material (STONE)
Surface grinding Work on weld seams Chamfering Deburring Fillet weld grinding	Universal Line PSF	PSF STEEL Page 50	PSF STEELOX Page 51	PSF ST Page				
Root seam processing Grouting	Performance Line SG	SG STEEL Page 52 ZIRKON SG CAST + STEEL Page 56	SG NOTCHING STEELOX Page 54 CERAMIC SG COMFORT STEEL Page 58	SG INOX Page 53	SG NOTCHING STEELOX Page 54	SG ALU Page 55	ZIRKON SG CAST + STEEL Page 56	SG CAST + STONE Page 57
	Special Line SGP	SGP STEELOX SGP	KON CERAMIC STEEL SGP STEELOX Page 61	WHISPER SGP STEELOX Page 59	CERAMIC SGP STEELOX Page 61			



CC-GRIND® grinding discs can be found on page 41.



The DUODISC® combination wheels for cutting and deburring can be found on page 14.



Cup wheels can be found on page 62.





Grinding wheelsPipeline grinding wheels at a glance

PFERD 1/8" thick pipeline grinding wheels are designed for grinding and cutting of pipeline root pass, weld and flame cut grinding. The wheels listed below are unique to the pipeline market. Specializing in the pipeline industry, PFERD also produces a wide variety of other abrasive wheels including 1/4" thick grinding wheels, cut-off wheels and flap discs.





Picture	D		7/8" plain arbor hole	5/8-11" arbor hole	Page
	[Inches]	[Inches]	EDP no	umber	number
PSF STEELOX	for steel and stainless s	teel (INOX)			
	4-1/2	1/8	63410	63414	51
	5	1/8	63411	63415	
	6	1/8	63398	63418	
LISTAL PATRICE.	7	1/8	63412	63416	
	9	1/8	63413	63417	
SG STEEL for	rsteel				
PER	4-1/2	1/8	63400	63405	52
	5	1/8	63406	63407	
	6	1/8	63399	63408	
THE LINE LINE	7	1/8	63401	63403	
	9	1/8	63402	63404	
SG INOX for	stainless steel (INOX)				
The same of the sa	4-1/2	1/8	61104	61113	53
SG NOTCHING STEEL	OX for steel and	stainless steel (INOX)			
	4-1/2	1/8	63421	63427	54
	5	1/8	63422	63428	
	6	1/8	63423	63429	
no line de la companya de la company	7	1/8	63424	63430	
	9	1/8	63425	63431	
SG ALU for a	aluminum				
TO THE REAL PROPERTY OF THE PARTY OF THE PAR	4-1/2	1/8	61311	61312	55
ZIRKON SG CAST + ST	TEEL for steel an	nd cast iron			
THE PARTY OF THE P	4-1/2	1/8	63251	63255	56
	5	1/8	63252	63256	
	6	1/8	63250	63259	
CANADATA	7	1/8	63253	63257	
	9	1/8	63254	63258	
CERAMIC SGP STEELO	X for steel and	stainless steel (INOX)			
	4-1/2	1/8	60088	60093	61
	5	1/8	60089	60094	
	6	1/8	60090	60095	
CHAIR SEA	7	1/8	60091	60096	
	9	1/8	60092	60097	

Grinding wheels





PSF STEEL

General purpose grinding wheel with high stock removal rate and long service life for steel.

Advantages:

Reduced labour time and increased economic efficiency due to the high stock removal rate. Long service life.

Also suitable for low-powered angle grinders (< 9 amps). Achieves high stock removal rates even at low contact pressure.

Workpiece materials:

steel, cast iron

Applications:

weld dressing, chamfering, deburring, surface grinding, fillet weld edge grinding

Abrasive:

Aluminum oxide A

Technical information:

A 24 R

D [Inches]	U [Inches]	H [Inches]	EDP number	Max. RPM	
Depressed centre (type	e 27) – plain arbor hole				
4-1/2	1/4	7/8	60006	13,300	10
5	1/4	7/8	60007	12,200	10
7	1/4	7/8	60009	8,500	10
Depressed centre (type	e 27) – threaded arbor h	nole			
4-1/2	1/4	5/8-11	60014	13,300	10
5	1/4	5/8-11	60015	12,200	10
7	1/4	5/8-11	60017	8,500	10





Grinding wheelsUniversal Line PSF

PSF STEELOX

General purpose grinding wheel with high stock removal rate and good service life for steel and stainless steel (INOX).

Advantages:

Universally suitable for steel and stainless steel (INOX).

Reduced labour time and increased economic efficiency due to the high stock removal rate. Good service life.

Also suitable for low-powered angle grinders (< 9 amps). Achieves high stock removal rates even at low contact pressure.

Workpiece materials:

steel, stainless steel (INOX)

Applications:

weld dressing, chamfering, deburring, surface grinding, fillet weld edge grinding

Ahrasiya

Aluminum oxide A

Technical information:

A 24 L

Recommendations for use:



steer, stanness steer (iivo)		ig.			
D [Inches]	U [Inches]	H [Inches]	EDP number	Max. RPM	
Depressed centre (type	e 27) – plain arbor hole				
4	1/4	5/8	61000	15,300	10
4-1/2	1/8	7/8	63410	13,300	10
	1/4	7/8	61002	13,300	10
5	1/8	7/8	63411	12,200	10
	1/4	7/8	61003	12,200	10
6	1/8	7/8	63398	10,200	10
	1/4	7/8	61011	10,200	10
7	1/8	7/8	63412	8,500	10
	1/4	7/8	61004	8,500	10
9	1/8	7/8	63413	6,600	10
	1/4	7/8	61005	6,600	10
Depressed centre (type	e 27) – threaded arbor h	oole			
4-1/2	1/8	5/8-11	63414	13,300	10
	1/4	5/8-11	61001	13,300	10
5	1/8	5/8-11	63415	12,200	10
	1/4	5/8-11	61008	12,200	10
6	1/8	5/8-11	63418	10,200	10
	1/4	5/8-11	61012	10,200	10
7	1/8	5/8-11	63416	8,500	10
	1/4	5/8-11	61006	8,500	10
9	1/8	5/8-11	63417	6,600	10
	1/4	5/8-11	61007	6,600	10

Grinding wheels

Performance Line SG





SG STEEL

Grinding wheel for steel with high stock removal and very long service life.

Advantages

Reduced labour time and maximum economic efficiency due to the high stock removal rate.

Fewer wheel changes due to the very long service life.

Workpiece materials:

steel

Applications:

weld dressing, chamfering, deburring, surface grinding, fillet weld edge grinding

Abrasive

Premium aluminum oxide A

Technical information:

A 24 R

Recommendations for use:

D [Inches]	U [Inches]	H [Inches]	EDP number	Max. RPM			
Depressed centre (type 27) – plain arbor hole							
4	1/4	5/8	61024	15,300	10		
4-1/2	1/8	7/8	63400	13,300	10		
	1/4	7/8	61026	13,300	10		
5	1/8	7/8	63406	12,200	10		
	1/4	7/8	61028	12,200	10		
6	1/8	7/8	63399	10,200	10		
	1/4	7/8	61030	10,200	10		
7	1/8	7/8	63401	8,500	10		
	1/4	7/8	61032	8,500	10		
9	1/8	7/8	63402	6,600	10		
	1/4	7/8	61035	6,600	10		
Depressed centre (type	e 27) – threaded arbor h	nole					
4-1/2	1/8	5/8-11	63405	13,300	10		
	1/4	5/8-11	61038	13,300	10		
5	1/8	5/8-11	63407	12,200	10		
	1/4	5/8-11	61040	12,200	10		
6	1/8	5/8-11	63408	10,200	10		
	1/4	5/8-11	61042	10,200	10		
7	1/8	5/8-11	63403	8,500	10		
	1/4	5/8-11	61044	8,500	10		
9	1/8	5/8-11	63404	6,600	10		
	1/4	5/8-11	61047	6,600	10		
Saucer (type 28) – plaii	n arbor hole						
7	1/4	7/8	61701	8,500	10		
9	1/4	7/8	61702	6,600	10		
Saucer (type 28) – threaded arbor hole							
7	1/4	5/8-11	61703	8,500	10		
9	1/4	5/8-11	61704	6,600	10		



Grinding wheelsPerformance Line SG

SG INOX

Grinding wheel for stainless steel (INOX) with high stock removal rate and very long service life.

Advantages

Soft, cool grinding on stainless steel (INOX). Reduced labour time and maximum economic efficiency due to the high stock removal rate.

Fewer wheel changes due to the very long service life.

Workpiece materials:

stainless steel (INOX)

Applications:

weld dressing, chamfering, deburring, surface grinding, fillet weld edge grinding

Abrasive

Premium aluminum oxide A

Technical information:

A 24 N

Recommendations for use:



grinding, filet weld eage grinding							
D [Inches]	U [Inches]	H [Inches]	EDP number	Max. RPM			
Depressed centre (type	e 27) – plain arbor hole						
4	1/4	5/8	61103	15,300	10		
4-1/2	1/8	7/8	61104	13,300	10		
	1/4	7/8	61105	13,300	10		
5	1/4	7/8	61106	12,200	10		
6	1/4	7/8	61107	10,200	10		
7	1/4	7/8	61108	8,500	10		
9	1/4	7/8	61109	6,600	10		
Depressed centre (type	e 27) – threaded arbor l	nole					
4-1/2	1/8	5/8-11	61113	13,300	10		
	1/4	5/8-11	61114	13,300	10		
5	1/4	5/8-11	61111	12,200	10		
6	1/4	5/8-11	61116	10,200	10		
7	1/4	5/8-11	61110	8,500	10		
9	1/4	5/8-11	61112	6,600	10		



Grinding wheels

Performance Line SG





SG NOTCHING STEELOX

Specialized notching wheel for steel and stainless steel (INOX) with very long service life.

Advantages

- Universally suitable for steel and stainless steel (INOX).
- Fewer wheel changes due to the very long service life.
- High edge stability.
- Ideal for working on stainless steel (INOX) TIG-welds.

Workpiece materials:

steel, stainless steel (INOX)

Applications:

notching, root pass grinding, cutting

Ahrasive

Premium aluminum oxide A

Technical information:

A 46 R

Recommendations for use:

Must be used only on the edge and perpendicular to the workpiece.

1/8" thick notching wheels are ideal for edge grinding and cutting of pipeline root pass, and notching for weld repairs.

D [Inches]	U [Inches]	H [Inches]	EDP number	Max. RPM	
Depressed centre (type	e 27) – plain arbor hole				
4-1/2	1/8	7/8	63421	13,300	10
5	1/8	7/8	63422	12,200	10
6	1/8	7/8	63423	10,200	10
7	1/8	7/8	63424	8,500	10
9	1/8	7/8	63425	6,600	10
Depressed centre (type	e 27) – threaded arbor h	nole			
4-1/2	1/8	5/8-11	63427	13,300	10
5	1/8	5/8-11	63428	12,200	10
6	1/8	5/8-11	63429	10,200	10
7	1/8	5/8-11	63430	8,500	10
9	1/8	5/8-11	63431	6,600	10





PFERD 5

Performance Line SG

SG ALU

Grinding wheel for aluminum and other non-ferrous metals with high stock removal rate and very long service life.

Advantages:

Operates without the grinding wheel loading even on soft aluminum alloys.

Reduced labour time and maximum economic efficiency due to the high stock removal rate.

Fewer wheel changes due to the very long service life.

Contains no fillers that could leave residues on the workpiece. The surface can be welded without secondary operations.

Workpiece materials:

aluminum, other non-ferrous metals

Applications:

weld dressing, chamfering, deburring, surface grinding, fillet weld edge grinding

Abrasive

Premium aluminum oxide A and silicon carbide C

Technical information:

C 24 N

Recommendations for use:



D [Inches]	U [Inches]	H [Inches]	EDP number	Max. RPM	
Depressed centre (type	e 27) – plain arbor hole				
4-1/2	1/8	7/8	61311	13,300	10
	1/4	7/8	61301	13,300	10
5	1/4	7/8	61302	12,200	10
6	1/4	7/8	61309	10,200	10
7	1/4	7/8	61304	8,500	10
9	1/4	7/8	61305	6,600	10
Depressed centre (type	e 27) – threaded arbor h	nole			
4-1/2	1/8	5/8-11	61312	13,300	10
	1/4	5/8-11	61303	13,300	10
5	1/4	5/8-11	61308	12,200	10
6	1/4	5/8-11	61310	10,200	10
7	1/4	5/8-11	61306	8,500	10
9	1/4	5/8-11	61307	6,600	10



Grinding wheels

Performance Line SG





ZIRKON SG CAST + STEEL

Zirconia alumina grinding wheel for cast iron and steel with excellent material removal rate and very long service life.

Advantages:

Reduced labour time and increased economic efficiency due to the high stock removal rate. Fewer wheel changes due to the very long service life.

Workpiece materials:

grey/nodular cast iron, steel

Applications:

weld dressing, chamfering, deburring, surface grinding, fillet weld edge grinding

Abrasive:

Zirconia alumina Z and special aluminum oxide A

Technical information:

7A 30 9

Recommendations for use:

3g						
D [Inches]	U [Inches]	H [Inches]	EDP number	Max. RPM		
Depressed centre (type 27	7) – plain arbor hole					
4-1/2	1/8	7/8	63251	13,300	10	
	1/4	7/8	61602	13,300	10	
5	1/8	7/8	63252	12,200	10	
	1/4	7/8	61604	12,200	10	
6	1/8	7/8	63250	10,200	10	
	1/4	7/8	61613	10,200	10	
7	1/8	7/8	63253	8,500	10	
	1/4	7/8	61605	8,500	10	
9	1/8	7/8	63254	6,600	10	
	1/4	7/8	61606	6,600	10	
Depressed centre (type 27	7) – threaded arbor ho	ole				
4-1/2	1/8	5/8-11	63255	13,300	10	
	1/4	5/8-11	61603	13,300	10	
5	1/8	5/8-11	63256	12,200	10	
	1/4	5/8-11	61614	12,200	10	
6	1/8	5/8-11	63259	10,200	10	
	1/4	5/8-11	61616	10,200	10	
7	1/8	5/8-11	63257	8,500	10	
	1/4	5/8-11	61607	8,500	10	
9	1/8	5/8-11	63258	6,600	10	
	1/4	5/8-11	61608	6,600	10	





Grinding wheelsPerformance Line SG

SG CAST + STONE

Grinding wheel for cast iron and casting scale and hard aluminum alloys with high material removal rate and very long service life.

Advantages:

Reduced labour time and increased economic efficiency due to the high stock removal rate. Fewer wheel changes due to the very long service life.

Workpiece materials:

cast iron, casting scale, concrete, hard aluminum alloys

Applications:

chamfering, deburring, surface grinding

Premium aluminum oxide A and silicon carbide C

Technical information:

AC 24 Q



D [Inches]	U [Inches]	H [Inches]	EDP number	Max. RPM	
Depressed centre (type	e 27) – plain arbor hole				
4-1/2	1/4	7/8	61501	13,300	10
5	1/4	7/8	61502	12,200	10
7	1/4	7/8	61504	8,500	10
9	1/4	7/8	61505	6,600	10
Depressed centre (type	e 27) – threaded arbor h	nole			
4-1/2	1/4	5/8-11	61508	13,300	10
5	1/4	5/8-11	61509	12,200	10
7	1/4	5/8-11	61506	8,500	10
9	1/4	5/8-11	61507	6,600	10
Saucer (type 28) – plair	n arbor hole				
7	1/4	7/8	61705	8,500	10
9	1/4	7/8	61706	6,600	10
Saucer (type 28) – thre	aded arbor hole				
7	1/4	5/8-11	61707	8,500	10
9	1/4	5/8-11	61708	8,500	10



Grinding wheels

Performance Line SG



CERAMIC COMFORT

The CERAMIC SG COMFORT is a hybrid grinding wheel for steel. It combines a top layer of coated abrasive and a rough grinding wheel.

Advantages:

Due to the combination of a coated abrasive layer and a rough grinding wheel with a high stock removal rate, the CERAMIC SG COMFORT offers significantly reduced labour time and maximum economic efficiency. Fewer wheel changes due to the very long service life.

Can be used for peripheral grinding (on edge).

Significantly lower noise emissions and vibration when compared to conventional grinding wheels.





CERAMIC SG COMFORT STEEL

Workpiece materials:

steel

Applications:

weld dressing, chamfering, deburring, surface grinding

Abrasive:

Ceramic oxide grain CO and special aluminum oxide A









D [Inches]	U [Inches]	H [Inches]	EDP number	Max. RPM	
Depressed centre (type	e 27) – plain arbor hole				
4-1/2	5/16	7/8	60150	13,300	10
5	5/16	7/8	60151	12,200	10
Depressed centre (type	e 27) – threaded arbor h	nole			
4-1/2	5/16	5/8-11	60155	13,300	10
5	5/16	5/8-11	60156	12,200	10



Grinding wheels Special Line SGP

WHISPER

Due to its patented multi-layer design, the WHISPER grinding wheel generates significantly less vibration and noise than conventional grinding wheels. The noise exposure is decreased by up to 12 dBA, a reduction of more than 90%. The flexible construction enables soft, comfortable grinding with outstanding surface finish.

Advantages:

Universally suitable for steel and stainless steel (INOX).

Significantly lower noise emissions and vibration than with conventional grinding wheels.

Comfortable grinding. Excellent solution for mill scale.



SGP WHISPER STEELOX

Workpiece materials:

steel, mill scale, stainless steel (INOX)

Applications:

weld dressing, surface grinding, fillet weld edge grinding

Abrasive:

Special aluminum oxide A

Technical information:

A 46 H

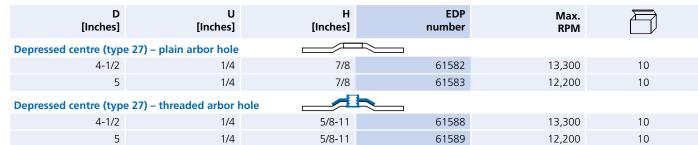














Grinding wheels

Special Line SGP





ZIRKON SGP STEEL

Zirconia alumina grinding wheel with a very high material removal rate and an excellent service life.

Advantages

Reduced labour time and maximum economic efficiency due to the very high material removal rate.

Fewer wheel changes due to the excellent service life.

Workpiece materials:

steel

Applications:

weld dressing, chamfering, deburring, surface grinding, fillet weld edge grinding

Abrasive

Zirconia alumina Z and special aluminum oxide A

Technical information:

ZA 24 R





D [Inches]	U [Inches]	H [Inches]	EDP number	Max. RPM	
Depressed centre (type 2	27) – plain arbor hole				
4-1/2	1/4	7/8	61553	13,300	10
5	1/4	7/8	61554	12,200	10
6	1/4	7/8	61555	10,200	10
7	1/4	7/8	61556	8,500	10
9	1/4	7/8	61557	6,600	10
Depressed centre (type 2	27) – threaded arbor h	ole			
4-1/2	1/4	5/8-11	61560	13,300	10
5	1/4	5/8-11	61561	12,200	10
6	1/4	5/8-11	61562	10,200	10
7	1/4	5/8-11	61563	8,500	10
9	1/4	5/8-11	61564	6,600	10





Grinding wheels Special Line SGP

CERAMIC

High-performance grinding wheel with ceramic oxide grain for cool grinding with excellent productivity.

Advantages:

Outstanding aggressiveness and service life due to the self-sharpening effect of the highperformance abrasive ceramic oxide grain.

Labour cost savings due to much higher material removal rate compared to conventional grinding wheels. Reduced operator strain - maximum performance with minimal contact pressure.



CERAMIC SGP STEELOX

Workpiece materials:

steel, stainless steel (INOX)

Applications:

weld dressing, chamfering, deburring, surface grinding, fillet weld edge grinding

Abrasive:

Ceramic oxide grain CO

Technical information:

CO 24 Q

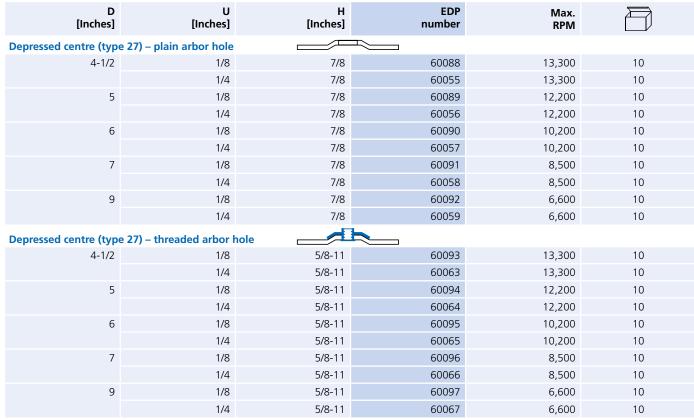
Recommendations for use:

1/8" thick grinding wheels are ideal for edge/root pass grinding.









Cup wheels

Performance Line SG



Product group selection guide

Application	Steel	Cast iron	Stone
	(STEEL)	(CAST)	(STONE)
Surface grinding Chamfering Deburring Work on weld seams	SG STEEL SG CAST + STEEL	SG CAST + STEEL	SG STONE





SG STEEL

Cup wheel with high grinding performance and long service life.

Advantages:

High grinding performance. Long service life.

Workpiece materials:

steel

Applications:

weld dressing, chamfering, deburring, surface grinding

Abrasive:

Aluminum oxide A

Technical	inform	ation
-----------	--------	-------

A 16

Recommendations for use:

Place at a slight incline to work on weld

Safety notes:

The permissible maximum operating speed is 9,800 SFPM.

D [Inches]	J [Inches]	EDP number	T [Inches]	H [Inches]	W [Inches]	Max. RPM	
Conical cup whee	el ETT (shape 11)						
4	3-1/2	61801	2	5/8-11	1	9,360	2
5	3-3/4	61802	2	5/8-11	1-1/2	7,510	2
6	4-3/4	61803	2	5/8-11	1-1/2	6,280	2





SG CAST + STEEL

Cup wheel with high grinding performance and long service life.

Advantages

High grinding performance. Long service life.

Workpiece materials:

cast iron, steel

Applications:

weld dressing, chamfering, deburring, surface grinding

Abrasive:

Zirconia alumina Z

Technical information:

ZA 16 Q

Recommendations for use:

Place at a slight incline to work on weld seams.

Safety notes:

The permissible maximum operating speed is 9,800 SFPM.

D [Inches]	J [Inches]	EDP number	T [Inches]	H [Inches]	W [Inches]	Max. RPM	
Conical cup whee	el ETT (shape 11)						
4	3-1/2	61817	2	5/8-11	1	9,360	2
5	3-3/4	61818	2	5/8-11	1-1/2	7,510	2
6	4-3/4	61819	2	5/8-11	1-1/2	6,280	2



Cup wheelsPerformance Line SG

SG STONE

Cup wheel with high grinding performance and long service life.

Advantages:High grinding performance.
Long service life.

Workpiece materials: grey/nodular cast iron (GG/GJL, GGG/GJS), casting scale, concrete, stone

Applications:

chamfering, deburring, surface grinding

Silicon carbide C

Technical information:

C 16 Q

Safety notes:The permissible maximum operating speed is 9,800 SFPM.





D [Inches]	J [Inches]	EDP number	T [Inches]	H [Inches]	W [Inches]	Max. RPM	
Conical cup wheel	ETT (shape 11)						
4	3-1/2	61805	2	5/8-11	1	9,360	2
5	3-3/4	61806	2	5/8-11	1-1/2	7,510	2
6	4-3/4	61807	2	5/8-11	1-1/2	6,280	2



XLOCK cut-off wheels, flap discs and grinding wheels





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

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 formfitting manner.



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



Release the disc by using the lever.







Cut-off wheels with XLOCK quick-change system Universal Line PSF





PSF STEELOX

Fast-cutting cut-off wheel for steel and stainless steel (INOX) with long service life.

Advantages:

Quick and comfortable disc changes. Single solution for steel and stainless steel (INOX). Reduced cutting time.

Increased economic efficiency due to long tool life.

Ideal for use with cordless angle grinders.

Workpiece materials:

steel, stainless steel (INOX)

Applications:

cutting sheet metal, cutting hollow sections, cutting solid materials

Abrasive:

Aluminum oxide A

Technical information:

A 46 P

PFERDVALUE®:

Thin cut-off wheels:











editing solid materials								
D [Inches]	T/U [Inches]	H [Inches]	EDP number	Max. RPM				
Flat (type 1/41)		X-L	OCK					
4-1/2	.040	X-LOCK (7/8)	63735	13,300	25			
	.045	X-LOCK (7/8)	63736	13,300	25			
5	.040	X-LOCK (7/8)	63737	12,200	25			
	.045	X-LOCK (7/8)	63738	12,200	25			
Depressed centre (type	e 27/42)	X-L	ОСК					
4-1/2	.045	X-LOCK (7/8)	63743	13,300	25			
	3/32	X-LOCK (7/8)	63739	13,300	25			
5	.045	X-LOCK (7/8)	63744	12,200	25			
	3/32	X-LOCK (7/8)	63740	12,200	25			





SG STEELOX

Fast-cutting cut-off wheel for steel and stainless steel (INOX) with very long service life.

Quick and comfortable disc changes. Single solution for steel and stainless steel (INOX).

Reduced cutting time.

Maximum economic efficiency due to very long service life.

Workpiece materials:

steel, stainless steel (INOX)

Applications:

cutting sheet metal, cutting hollow sections, cutting solid materials

High-performance aluminum oxide A

Technical information:

A 46 R

PFERDVALUE®:

Thin cut-off wheels:











catting some materials					
D [Inches]	T/U [Inches]	H [Inches]	EDP number	Max. RPM	
Flat (type 1/41)		X-L(ОСК		
4-1/2	.040	X-LOCK (7/8)	63751	13,300	25
	.045	X-LOCK (7/8)	63752	13,300	25
5	.040	X-LOCK (7/8)	63753	12,200	25
	.045	X-LOCK (7/8)	63754	12,200	25
Depressed centre (type	e 27/42)	X-L	ОСК		
4-1/2	.045	X-LOCK (7/8)	63745	13,300	25
	3/32	X-LOCK (7/8)	63755	13,300	25
5	.045	X-LOCK (7/8)	63746	12,200	25
	3/32	X-LOCK (7/8)	63756	12,200	25





POLIFAN® flap discs with XLOCK quick-change system Universal Line PSF

PFERD



Z PSF STEELOX

Zirconia alumina flap disc with aggressive stock removal rate and long service life.

Advantages

Quick and comfortable disc changes. Reduced labour time and increased economic efficiency due to the aggressive stock removal rate.

Long service life.

Good option for low-powered angle grinders (< 9 amps).

Workpiece materials:

steel, stainless steel (INOX)

Applications:

surface grinding, weld dressing, blending, chamfering, deburring

Abrasive:

Zirconia alumina Z

PFERDVALUE®:









D	H		Grit and EDP numbe	r	Max.	
[Inches]	[Inches]	40	60	80	RPM	
Conical (type 29, PFC)	77		X-LOCK			
4-1/2	X-LOCK (7/8)	60761	60762	60763	13,300	10
5	X-I OCK (7/8)	60764	60765	60766	12 200	10



Z PSF EXTRA STEELOX

Zirconia alumina flap disc with aggressive stock removal rate and long service life.

Advantages:

Quick and comfortable disc changes. Reduced labour time and increased economic efficiency due to the aggressive stock removal rate.

Very long service life due to the high-density flap arrangement.

Good option for low-powered angle grinders (< 9 amps).

Workpiece materials:

steel, stainless steel (INOX)

Applications:

surface grinding, weld dressing, blending, chamfering, deburring

Abrasive:

Zirconia alumina Z















D	H		Grit and EDP numbe	Max.		
[Inches]] [Inches]	40	60	80	RPM	
Flat (type 27, PFF)	ゼ	All	X-LOCK			
4-1/2	X-LOCK (7/8)	60741	60742	60743	13,300	10
5	X-LOCK (7/8)	60744	60745	60746	12,200	10



Performance Line SG

Z SG POWER STEELOX

The POLIFAN® Z SG POWER flap disc features an aggressive stock removal rate and excellent service life to achieve the highest level of efficiency. It is the best conventional flap disc for steel.

Advantages:

Quick and comfortable disc changes. Reduced labour time and maximum economic efficiency due to the aggressive stock removal rate.

Maintains maximum aggressiveness throughout the entire service life. Fewer wheel changes due to the excellent service life.

Workpiece materials:

steel, stainless steel (INOX)

Applications:

weld dressing, blending, chamfering, deburring

Abrasive:

Zirconia alumina Z

Recommendations for use:

Also suitable for surface grinding on steel.













D	H		Max.			
[Inches]	[Inches]	40	60	RPM		
Conical (type 29, PFC)		THE THE PARTY OF T	X-LOCK			
4-1/2	X-LOCK (7/8)	60775	60776	60777	13,300	10
5	X-LOCK (7/8)	60778	60779	60780	12,200	10







POLIFAN® flap discs with **XLOCK** quick-change system

Special Line SGP



POLIFAN®-STRONG STEEL

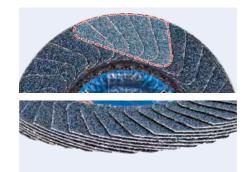
Users who rely on top performance choose the innovative POLIFAN®-STRONG flap disc. It surpasses conventional flap discs and redefines the highest levels of efficiency. Due to its patented and unique design, it achieves an unsurpassed stock removal rate. It also has an astonishingly long service life over conventional flap discs.

Advantages:

Quick and comfortable disc changes.

Fast grinding through constant grinding aggressiveness down to the last abrasive grain. Ultimate economic efficiency due to extremely fast stock removal rate.

Extremely long service life due to patented flap design.



Long, compact arranged flaps



Z SGP STRONG STEEL

Workpiece materials:

steel

Applications:

weld dressing, chamfering, deburring

Abrasive:

Zirconia alumina Z

Recommendations for use:

Grit size 36 is ideal for high stock removal, e.g. during work on weld seams.

Grit size 50 is ideal for work on edges, e.g. chamfering or achieving a finer surface finish.









D	H	Grit and E	DP number	Max.	
[Inches]	[Inches]	36	50	RPM	
Conical (type 29, PFC)		X dumin	-LOCK		
4-1/2	X-LOCK (7/8)	60787	60788	13,300	10
5	X-LOCK (7/8)	60789	60790	12,200	10



Special Line SGP

POLIFAN®-CURVE

The patented flap disc POLIFAN®-CURVE has been specially developed for work on fillet welds. It is the only flap disc in the world that has flaps on both the grinding side and on the rear side, as well as on the radius.

Advantages:

Quick and comfortable disc changes. Reduced labour time and ultimate economic efficiency due to the extremely aggressive stock removal rate.

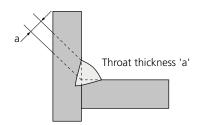
Outstanding tool life when working on fillet

Precise and optimum grinding of the fillet weld geometry.

Recommendations for use:

Size M (medium): For fillet weld radii > 3/16" or throat thickness ≤ 1/4" with 90° joint, width at the radius: 7/16".

Size L (large): For fillet weld radii > 5/16" or throat thickness > 1/4" with 90° joint, width at the radius: 9/16".



Z SGP CURVE STEELOX

High-performance flap disc for maximum stock removal on steel and stainless steel (INOX).

[Inches]

Workpiece materials:

steel, stainless steel (INOX)

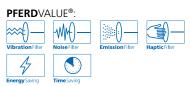
Applications:

fillet weld edge grinding, weld dressing, chamfering, deburring

[Inches]

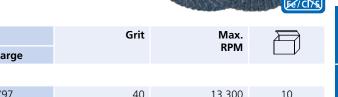
Abrasive:

Zirconia alumina Z



Size and EDP number

















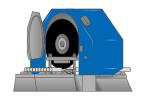
Cut-off wheels for stationary applicationsTable of contents



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Technical information ar	nd safety notes		4
Wheel and packaging la	bel information		6
Packaging, transport and	7		
Quick product selection	8		
Cut-off wheels fo	r stationary applica	tions	
		CHOPSAW	
The second secon		12–16" dia.	9
		CHOPSAW HD 12–16" dia.	42
The same of the sa		12-10 dia.	12
		RAIL	4.5
		12–16" dia.	13
		HEAVY DUTY	
The state of the s		10–26" dia.	14
000		Reducing rings	15

Large diameter cut-off wheels made to order





250-2,000 mm dia. (10-80" dia.)

16



Cut-off wheels for stationary applications General information

PFERD quality

Stationary cut-off wheels 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.



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 to learn more or visit us at pferd.com.





Technical information and safety notes



PFERD is a founding member of oSa

PFERD voluntarily manufactures quality products conforming to the strictest safety standards. Member companies of oSa (the Organization for Safety of Abrasives) are committed to continuous product safety and quality monitoring. PFERD products carry the oSa



Safety standard

Abrasives made by PFERD conform to the highest quality and safety requirements and are marked according to the following key European and international safety standards:

ANSI B7.1 OSHA regulations EN 12413

Maximum operating speed

The maximum permissible operating speed [m/s] can be found on the product labels and in the product tables of this catalogue. The maximum permissible rotational speed specification applies to the nominal diameter of the unused wheels. For safety reasons, these must never be exceeded.



Safety notes



Wear eye protection!



Wear hearing protection!



Wear a dust mask!



Wear gloves!



= Please read the safety notes!

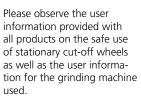


Do not use if damaged!



Not permitted for hand-held or manually guided grinding!

User information





Proper clamping of cut-off wheels

The correct clamping of the cut-off wheel is a prerequisite for optimum performance and is essential to ensure user safety. The adjacent illustration shows the right way to do it:

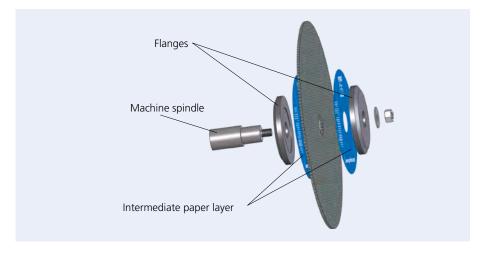
Machine spindle with high concentricity. Equally sized flanges.

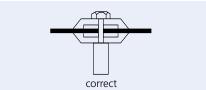
Intermediate paper layers (blotters), if required for secure clamping and safe use. Our recommendations:

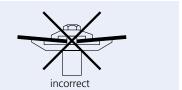
After every second wheel change, change the intermediate paper layers (blotters). As from a wheel diameter > 16 inches, always use intermediate paper layers (blotters).

Safety notes:

The safe use of PFERD products depends largely on proper clamping systems. Both flanges between which a grinding product is mounted must have the same outer diameter and same support area (according to EN 13218, ANSI B7.1, AS 1788.1).









Technical information and safety notes

Storage of stationary cut-off wheels

Stationary cut-off wheels should be stored in such a way as to prevent any adverse effects caused by moisture, frost or large temperature variations and so as to avoid mechanical damage. Do not use resinoid-bonded abrasive wheels or abrasive products using coated abrasives that have been exposed to severe humidity, damp, or high temperatures.

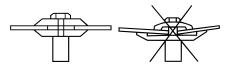
Mounting of stationary cut-off wheels

Only use stationary machines that are intended for use with the relevant product.

Never use a stationary machine that is not in good condition. Use only stationary cut-off wheels whose outer diameter and centrehole diameter and/or thread match the specifications of the stationary machine.

Never use damaged stationary cut-off wheels. Stationary cut-off wheels must be visually inspected and checked for any possible damage before each use.

Keep mounting components clean and in good mechanical condition. Replace them if they become damaged or worn. If the manufacturer of the stationary machine provides tools for fixation of the stationary cut-off wheels (e.g. a key), then these are to be used.



In principle, only clamping flanges having a contact surface with the same outer diameter and which are identically shaped on the contact side are to be used.

If required, use blotters between the stationary cut-off wheel and clamping components.

To prevent the stationary machine from accidentally turning on, disconnect the power supply before mounting or changing the stationary cut-off wheel.

Never exceed the maximum operating speed of a stationary cut-off wheel. Make sure that the speed of the stationary machine (rev/min, 1/min, RPM or min⁻¹) does not exceed the maximum permissible speed given on the stationary cut-off wheel, the accompanying label or packaging.

Do not make any unauthorized changes to stationary cut-off wheels. Each time that a wheel is mounted, perform a trial run at operating speed with the guard properly installed, for at least 1 minute. During the trial run, move away from the stationary machine in such a way that in the event of any failure of the stationary cut-off wheel you are not struck by any fragments.

Stationary cut-off wheels must only be used on appropriate stationary cut-off grinding machines. They are not permitted for hand-held or manually guided grinding. The maximum permitted power output must never be exceeded. Be sure, that machine power is not too high for the stationary cut-off wheel.

Clamping flanges for stationary cut-off wheels must meet today's requirements according to ANSI B7.1. Our PFERD sales department will be happy to advise you.

Use of stationary cut-off wheels

Ensure that the correct stationary cut-off wheel is selected. Never use a product if it cannot be properly identified.

Always be aware of the potential dangers during use of stationary cutoff wheels.

Always use protective equipment and guards in compliance with the operating instructions for the stationary machine and make sure they are properly mounted and in good condition, before you switch on the stationary machine.

Comply with the ANSI B7.1 regulations on safety guards depending on the mounted wheel:

- Type 1 wheels must be used with a guard covering at least 180° of the lateral wheel surface and face.

The workpiece must be fixed without tension by appropriate clamping devices.

The stationary machine must always be turned on before the abrasive wheel comes into contact with the workpiece.

Always bring stationary cut-off wheels carefully into contact with the workpiece surface.

Always guide stationary cut-off wheels in a straight line. No lateral load should be applied to the stationary cut-off wheel and it should not be used for face grinding. Use only on stationary cut-off machines. Stationary cut-off wheels are not allowed to be used on handheld gas saw machines.

Stationary machines like a CHOPSAW machine may only be transported once they have been turned off and have come to a complete stop.

Hazards due to product breakage, abrasive particles, sparks, dust, fumes, noise, vibration and bodily contact with the abrasive product at operation speed

Warning! The cutting process may generate dust and fumes. Inhalation of cutting dust can lead to severe lung damage. Sufficient extraction or other appropriate measures must be provided and appropriate personal protective equipment must be worn at all times. The use of appropriate personal protective equipment is required for all cutting operations to provide protection against mechanical impacts, abrasive particles, sparks, dust and fumes, noise and vibration. This includes eye protection, ear protection, respiratory protection, and hand protection. Long-sleeved, flame-resistant clothing and appropriate safety footwear must be worn. Tie back long hair and do not wear loose clothing, ties or jewelry. These rules apply not only to the operator of the stationary machine but also to any other persons in the working environment.

Predominantly, dust and fumes in a cutting process originate from the workpiece material. Review the Safety Data Sheet (SDS) of the workpiece material.

Do not use stationary cut-off wheels in the vicinity of flammable materials.

Flammable and explosive substances must be removed from the working environment before starting work. This includes, for example, dust deposits, cardboard, packaging material, textiles, wood and wood chips, as well as flammable liquids and gases.

In the event of excessive vibrations stop the stationary machine and investigate.

Prevent accidental start-up of the stationary machine before mounting or changing an stationary cut-off wheel, isolate the stationary machine from the power source.

Never remove guards from stationary machines and ensure they are in good condition and properly adjusted before starting the stationary machine.

After switching off the stationary machine, ensure the product has come to a complete stop before leaving the stationary machine unattended.

Disposal of stationary cut-off wheels

Worn or defective stationary cut-off wheels must be disposed of according to all local and/or national regulations.

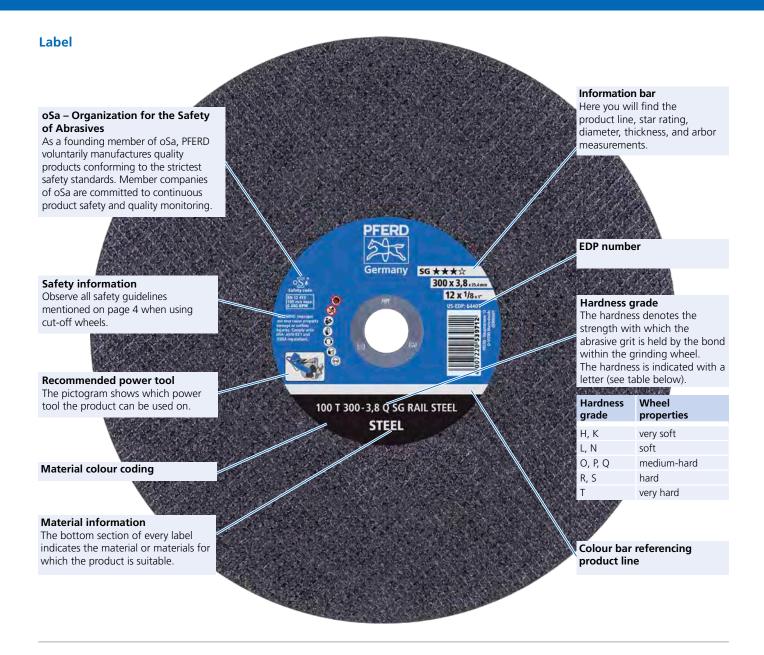
Note that stationary cut-off wheels may become contaminated by work on certain materials.

Stationary cut-off wheels for disposal should be destroyed in a clearly visible manner in order to prevent re-use.

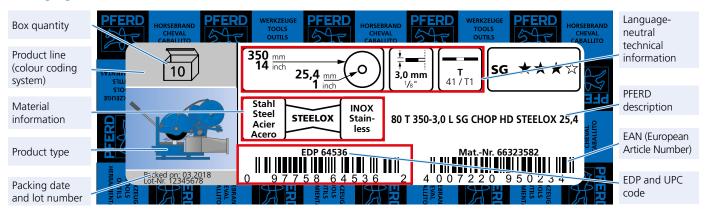
Further information can be obtained from Voluntary Product information provided by the supplier.



Wheel and packaging label information



Packaging label





Packaging, transport and storage

Packaging

The packaging of stationary cut-off wheels provides the wheels with optimum protection against dirt and damage. Three packaging types are available which is determined by the quantity, type and size of the wheel ordered.







Box Crate Pallet

Transport and storage

To avoid damage to cut-off wheels through improper transport or adverse environmental influences during storage, e.g. UV radiation, temperature or humidity, please observe the following:

Transport and store cut-off wheels in their original packaging lying on a flat surface, e.g. on a shelf or vertically in racks.

Avoid bending the wheels.

Ensure that the cut-off wheels are stored in dry, temperature controlled areas. Use supplies in the order received.

Recommendation:

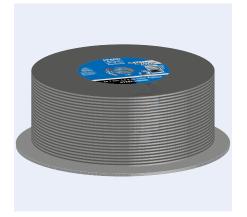
Room temperature: 65-72°F Relative humidity: 45-65%

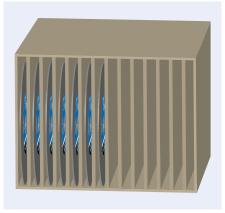
No direct sunlight

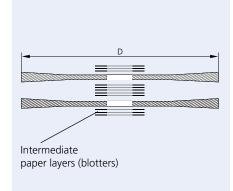












Advice on the storage of conical wheels (CT)

Conical cut-off wheels must be stacked with intermediate paper layers (blotters), so that the tapered area is supported and bending of the cut-off wheels is avoided.

PFERD supplies conical cut-off wheels with intermediate paper layers (blotters) included.

Quick product selection guide



Product lines and colour coding

Universal Line PSF



Choose the Universal Line PSF for processing of the most common materials. Products achieve good results with increased economic efficiency.

Performance Line SG



The wide range Performance Line SG offers high-performance solutions for every application and material. Products achieve optimum results with excellent economic efficiency.

Special Line SGP



Special Line SGP includes products engineered for specific tasks and offers the user key advantages over conventional products. This quality line also includes products that, due to their particularly high performance, offer ultimate economic efficiency.

Product group selection

Power tool	Application	Product line		iteel TEEL)		Stainless steel (INOX)	Cast material (CAST)
CHOPSAW < 5 horsepower	Cutting of solid material, sections and pipes	Universal Line PSF	PSF CHOP STEEL Hardness K Page 9	Hard	P STEELOX ness K ge 9	PSF CHOP STEELOX Hardness K Page 9	
		Performance Line SG	STEEL S Hardness K H	GG CHOP STEELOX ardness K Page 10	SG STUD STEEL Hardness K Page 11	SG CHOP STEELOX Hardness K Page 10	
CHOPSAW HD	Cutting of solid material, sections and pipes	Performance Line SG	Har	OP HD STEEL dness L ige 12			
RAIL	Cutting of rails	Performance Line SG	Hard	AIL STEEL dness Q ge 13			
HEAVY DUTY	Cutting of solid material, sections and pipes	Special Line SGP	SGP HD STEEL Hardness N, Q + S Page 14	CAST Hard	I SGP HD + STEEL ness R ge 15		ZIRKON SGP HD CAST + STEEL Hardness R Page 15
Products made to order up to 2,000 mm	to meet the r	equirements of	stationary cut-off wheels in your special application. Pl hnical sales specialists will	n premium PFER ease review pag	RD quality up to ges 16-20 of thi	2,000 mm (80") diam is section regarding ou	neter, tailor-made

(80") dia.

to order. Our experienced technical sales specialists will be pleased to assist you.



Please contact **Idco@pferdusa.com** for more information.

With a middle reinforcement layer for aggressive cutting with minimized burr formation



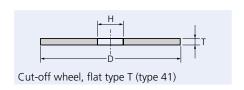
With two outer reinforcement layers for high lateral stability



Universal Line PSF, CHOPSAW

Product type and dimensions

All cut-off wheels in this section use flat type T (shape 41). The diagram to the right shows the product dimension information for diameter (D), height (T), and bore size (H) of each cut-off wheel.



PSF CHOP STEEL

General purpose K hardness wheel with a middle reinforcement layer. Aggressive free cutting with minimal burr formation.

Advantages:

High productivity due to good service life. Reduced cutting time.

Minimal burr formation due to low side friction.

General purpose cutting work.

Workpiece materials:

steel

Applications:

cutting of solid material, sections and pipes

Abrasive:

Aluminum oxide A

Technical information:

A 36 K

Compatible with:

CHOPSAW up to 5 horsepower



Safety notes:

Use only on stationary machines with an output of up to 5 horsepower or less.

		output of up to 3 hor	sepower or less.		
D	T	H	EDP	Max.	abla
[Inches]	[Inches]	[Inches]	number	RPM	
Maximum operating s	peed 80 m/s, flat type 7	「(shape 41)			
12	3/32	1	64491	5,100	20
14	3/32	1	64492	4,400	10
16	1/8	1	64493	3,800	10

PSF CHOP STEELOX

General purpose K hardness wheel with a middle reinforcement layer. Aggressive free cutting of steel and stainless steel (INOX) with minimal burr formation.

Advantages:

High productivity due to good service life. Reduced cutting time.

Minimal burr formation due to low side friction.

General purpose cutting work.

Workpiece materials:

steel, stainless steel (INOX)

Applications:

cutting of solid material, sections and pipes

Abrasive:

Aluminum oxide A

Technical information:

A 36 K

Compatible with:

CHOPSAW up to 5 horsepower



Safety notes

Use only on stationary machines with an output of up to 5 horsepower or less.

D [Inches]	T [Inches]	H [Inches]	EDP number	Max. RPM	
Maximum operating sp	peed 80 m/s, flat type T	(shape 41)			
12	3/32	1	64497	5,100	20
14	3/32	1	64498	4,400	10
16	1/8	1	64499	3,800	10



STEEL

Performance Line SG, CHOPSAW





SG CHOP STEEL

K hardness wheel with a middle reinforcement layer. Aggressive free cutting with minimal burr formation

Advantages:

Excellent productivity due to very long service life.

Reduced cutting time.

Minimal burr formation due to low side friction.

Ideal for demanding cutting work.

Workpiece materials:

steel

Applications:

cutting of solid material, sections and pipes

Abrasive:

Aluminum oxide A

Technical information:

A 36 K

Compatible with:

CHOPSAW up to 5 horsepower or less.



Safety notes:

Use only on stationary machines with an output of up to 5 horsepower or less.

D [Inches]	T [Inches]	H [Inches]	EDP number	Max. RPM	
Maximum operating sp	eed 80 m/s, flat type T	(shape 41)			
12	3/32	1	64501	5,100	20
14	3/32	1	64502	4,400	10
16	1/8	1	64503	3,800	10



SG CHOP STEELOX

K hardness wheel with a middle reinforcement layer. Aggressive free cutting of steel and stainless steel (INOX) with minimal burr formation.

Advantages:

Excellent productivity due to very long service life.

Reduced cutting time.

Minimal burr formation due to low side friction.

Ideal for demanding cutting work.

Workpiece materials:

steel, stainless steel (INOX)

Applications:

cutting of solid material, sections and pipes

Abrasive:

Aluminum oxide A

Technical information:

Δ 36 Ι

Compatible with:

CHOPSAW up to 5 horsepower or less.



Safety notes:

Use only on stationary machines with an output of up to 5 horsepower or less.

D [Inches]	T [Inches]	H [Inches]	EDP number	Max. RPM	
Maximum operating spe	eed 80 m/s, flat type T	(shape 41)			
12	3/32	1	64510	5,100	20
14	3/32	1	64508	4,400	10
16	3/32	1	64509	3,800	10



Performance Line SG, CHOPSAW

SG STUD STEEL

K hardness wheel with two outer reinforcement layers. For cutting work that requires high stability.

Advantages:

Maximum economic efficiency due to long service life.

High lateral stability due to outer reinforcement layers.

Ideal for cutting stacks and bundles of building studs.

Workpiece materials:

steel

Applications:

cuts metal studs, thin rebar, sheet stock and light gauge metal

Abrasive:

Aluminum oxide A

Technical information:

A 36 K

Compatible with:

CHOPSAW up to 5 horsepower or less.



Safety notes:

Use only on stationary machines with an output of up to 5 horsepower or less.



D [Inches]	T [Inches]	H [Inches]	EDP number	Max. RPM	
Maximum operating spee	d 80 m/s, flat type T (sha	pe 41)			
12	3/32	1	64504	5,100	20
14	3/32	1	64505	4,400	10
16	1/8	1	64506	3,800	10



Performance Line SG, CHOPSAW HD





SG CHOP HD STEEL

Heavy Duty L hardness wheel with two outer reinforcement layers. For cutting work that requires high stability.

Advantages:

High lateral stability due to outer reinforcement layers.

Excellent productivity due to very long service life.

Ideal for demanding cutting work.

Workpiece materials:

steel

Applications:

cutting of solid material, sections and pipes

Abrasive

Aluminum oxide A

Technical information:

A 30 L

Compatible with:

CHOPSAW HD



D [Inches]	T [Inches]	H [Inches]	EDP number	Max. RPM	
Maximum operating spo	eed 80 m/s, flat type T	(shape 41)			
12	7/64	1	64530	5,100	20
14	7/64	1	64531	4,400	10
16	1/8	1	64532	3,800	10





Cut-off wheels for stationary applicationsPerformance Line SG, RAIL

SG RAIL STEEL

Q hardness wheel for fast and economic cutting of rails.

Fast and safe cutting due to aggressive abrasive grain.

Excellent productivity due to optimal service life.

Workpiece materials:

steel

Applications:

cutting of rails

Abrasive:

Aluminum oxide A

Technical information:

A 24 Q

Compatible with:

RAIL cutting machine





D [Inches]	T [Inches]	H [Inches/mm]	EDP number	Max. RPM	
Maximum operating s	peed 100 m/s, flat type	T (shape 41)			
12	1/8	1	64401	6,400	20
		20 mm	64395	6,400	20
14	1/8	1	64402	5,500	10
		20 mm	64396	5,500	10
16	1/8	1	64403	4,800	10
		20 mm	64397	4,800	10



Special Line SGP, HEAVY DUTY





SGP HD STEEL

Wheel for the highest cutting work demands. Suitable for requirements of white cut and minimal burn formation

Advantages:

Maximum value due to extended service life. Increased productivity due to excellent cutting characteristics.

Workpiece materials:

steel

Applications:

cutting of solid material, sections and pipes

Abrasive:

Aluminum oxide A

Technical information:

A 24/36 N/Q/S

Compatible with:

HEAVY DUTY cutting machine



D	T	Н	Hardne	Hardness grade and EDP number		Max.	\Longrightarrow		
[Inches]	[Inches]	[Inches]	N (soft)	Q (medium-hard)	S (hard)	RPM			
Maximum op	Maximum operating speed 80 m/s, flat type T (shape 41)								
10	3/32	5/8	-	-	66113	6,100	20		
		1	-	-	66114	6,100	20		
12	1/8	1	-	66115	-	5,100	20		
14	1/8	1	-	66116	-	4,400	10		
16	1/8	1	-	66117	-	3,800	10		
20	3/16	1	66005	-	-	3,100	5		
		1	-	66123	-	3,100	5		
26	1/4	1	66132	-	-	2,300	5		
Maximum op	erating spee	d 100 m/s, fla	nt type T (shape 41)						
10	1/8	5/8	-	66009	-	7,600	20		
12	1/8	1	-	66011	-	6,400	20		
14	1/8	1	-	66012	-	5,500	10		
16	3/16	1	-	-	66013	4,800	10		
18	3/16	1	66016	-	-	4,200	5		
20	1/4	1	66019	-	-	3,800	5		
24	1/4	1	66022	-	-	3,200	5		





Special Line SGP, HEAVY DUTY

ZIRKON SGP HD CAST + STEEL

R hardness wheel for the highest cutting work demands. Suitable for requirements of white cut and minimal burr formation.

Advantages:

Maximum value due to extended service life. Increased productivity due to excellent cutting characteristics.

Workpiece materials:

cast iron, steel

Applications:

cutting of solid material, sections and pipes

Zirconia alumina/aluminum oxide ZA

Technical information:

ZA 24 R

Compatible with:

HEAVY DUTY cutting machine





D [Inches]	T [Inches]	H [Inches]	EDP number	Max. RPM	
Maximum operating s	peed 100 m/s, flat type	T (shape 41)			
20	3/16	1	66045	3,800	5
24	1/4	2-3/8	66050	3,200	5

Accessories

Reducing rings

Reducing rings enable secure adjustment of the standard centre hole to a reduced centre hole dimension.

Advantages:

Allows for correct mounting of the wheel on various drive systems.

With stop collar, to prevent the ring from pushing through the centre hole of the cut-off wheel.

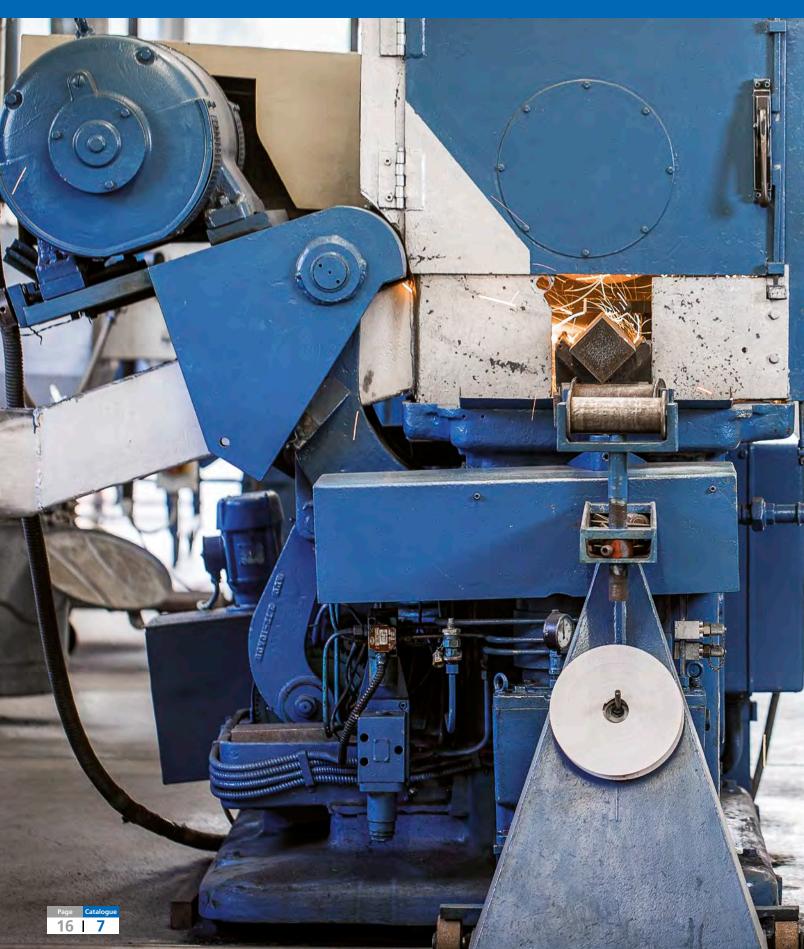
Safety notes:

Ensure that the flanges on the drive system are backed off in order to mount the wheel



Outer dia. [Inches]	Inside dia. [Inches/mm]	Width [Inches]	EDP number	
2-3/8	1	1/4	69020	1
	1-1/4	1/4	69021	1
	1-1/2	1/4	69022	1
	1-3/4	1/4	69023	1
1-1/2	1-1/4	3/16	69001	1
1-1/4	1	3/16	69007	1
1-1/8	1	1/8	69008	1
1	7/8	1/8	69003	1
	20 mm	1/8	69004	1
	5/8	1/8	69005	1
7/8	5/8	5/64	69006	1







General information

Products made to order

For application solutions beyond our standard catalogue offering, PFERD is capable of producing premium-quality stationary cut-off wheels up to 2,000 mm (80") diameter, in a variety of specifications, bonds, and abrasive grains to meet the requirements of any large-scale cutting task.

To learn more about PFERD made to order solutions, contact us for more information at **Idco@pferdusa.com**.



Advantages of large diameter cut-off wheels

Suitable for all steels and castings, non-ferrous metal alloys, special alloys such as nickel and titanium-based alloys, as well as materials on which sawing and flame cutting are difficult or impossible.

No post-processing is required due to smooth cutting surfaces and blank cuts in cold cutting-off. Short cutting times regardless of material quality.

Significantly lower burr formation with hot cutting-off than with hot sawing.

Lower noise levels than with hot sawing, for example:

Hot cutting-off: 85 to 95 dBA Hot sawing: 85 to 110 dBA

Consistent cutting quality over the entire life of the cut-off wheel due to its continuous self-sharpening qualities.

Effective cutting of already cooled, rolled or forged parts in hot cut lines.

Applications

Cut-off grinding is one of the most powerful and cost-effective cutting processes and is used in the following areas:

Rolling mills

Foundries

Machine engineering

Steel construction

Maintenance of rails

Forging plants and their finishing processes

Metallurgical laboratories







Differentiation of cut-off grinding

A differentiation is made between cold, warm and hot cutting-off, depending on the material temperature of the workpiece.

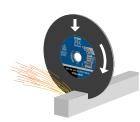
Operating conditions	Cold cut-off	Warm cut-off	Hot cut-off
Operating parameters			
Material temperature T	up to 212°F	212 to 1,112°F	1,112 to above 1,832°F
Peripheral speed V _s *	80 to 100 m/s	80 to 100 m/s	80 to 100 m/s
Specific cutting performance Z	4 to 15 cm ² /s	8 to 20 cm ² /s	15 to 35 cm ² /s

^{*} Please adhere to the maximum operating speed of the cut-off wheel.

Cut-off processes

According to the material and the application, cut-off processes differ depending on the positioning and relative motion of the cut-off wheel and workpiece.

Chop stroke cut



Application area:

For cutting individual workpieces as well as small or slim material layers. Very common cut-off process.

Cutting process:

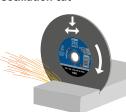
Cut-off wheel cuts the workpiece in a radial movement over a joint mid-point.

Advantages:

Low vibration.
Short cutting times.

Less load on cut-off wheels for smaller material dimensions.

Oscillation cut



Application area:

For cutting sprues and risers in foundries.

Demanding tasks in wet cut-off grinding.

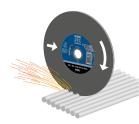
Cutting process:

Cut-off wheel moves into the workpiece to be cut with additional forward and backward movements in the horizontal cut.

Advantages:

Lower drive output required. Low workpiece temperature. Optimum removal of chips.

Horizontal cut



Application area:

For cutting multiple adjacent workpieces, as well as slabs, plates and sheets

Especially for the approach side of the rolling mill after the cooling bed.

Cutting process:

Cut-off wheel cuts the entire layer width of different cross sections in one cycle.

Advantages:

Short cutting times.
Very high throughput capacity.

Index cut



Application area:

For cutting very large round solid material and blocks.

Especially in steel works and foundries.

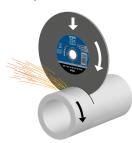
Cutting process:

The workpiece is cut with several partial cuts. After each partial cut, the workpiece is rotated (2–4 partial cuts, 180–90° rotation, depending on the material dimensions).

Advantages:

Working on very large material cross sections is possible with smaller wheel diameters.

Rotary cut



Application area:

For cutting very large pipes as well as round solid materials.

Cutting process:

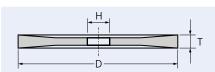
The workpiece is continuously rotated during the cutting process.

Advantages:

Use of small wheel diameters is possible. Lower drive output required. Low workpiece temperature.

Design requirements

Dimensions and designs to meet customer requirements



CT - Conical type

Application area:

Particularly suitable for use in the steel industry.

Advantages:

Less lateral friction. Particularly advantageous for deep cuts

and traverse cutting.

Suitable for use in steel and plant construction, in the steel industry and in foundries.

Centre hole dia.

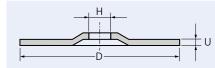
Advantages:

Outer dia.

T - Flat type

Application area:

Suitable for universal use.



PT - Depressed-centre type

Application area:

Particularly suitable for use in foundries.

Advantages:

Clamping flange does not protrude beyond the cut-off wheel.

Flush cutting of risers from castings is possible.

In general, no post-processing required.

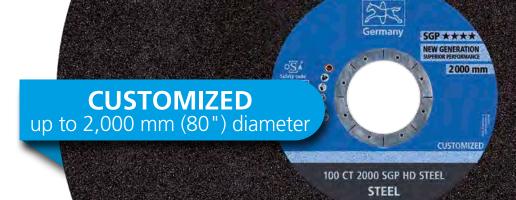
Outer dia. D [mm/in.]	Centre hole dia. H [mm]
2,000 (80")	80/100/127/152.4/200.3/ 203/230/250/280
1,840 (73")	80/100/127/152.4/200.3/ 203/230/250/280
1,600 (63")	80/100/127/152.4/200.3/ 203/230/250/280
1,500 (60")	80/100/127/152.4/200.3/ 203/230/250/280
1,380 (55")	80/100/127/152.4/200.3/ 203/230/250/280
1,250 (50")	80/100/127/152.4/200.3/ 203/230/250/280
1,000 (40")	80/100/127/152.4/200.3/ 203/230/250/280
800 (32")	80/100/127/152.4/200.3/ 203/230/250/280

Other types and centre hole diameters are available on request. Please contact us for further information.

D [mm/in.]	H [mm]
800 (32")	80/100/127/152.4/200.3/ 203/230/250/280
700 (28")	80/100/127/152.4/200.3/ 203/230/250/280
660 (26")	40/60/76.2/80/100
600 (24")	25.4/40/60/76.2/80/100
500 (20")	25.4/40/60/76.2/80/100
450 (18")	25.4/32/40/60/80
400 (16")	25.4/32/40/60/80
350 (14")	25.4/32/40
300 (12")	25.4/32/40
250 (10")	25.4/30/32
The second second second	

Outer dia D [mm]	. Centre hole dia. H [mm]
800 (32"	80/100/127/152.4/200.3/ 203/230/250/280
700 (28"	80/100/127/152.4/200.3/ 203/230/250/280
600 (24"	25.4/40/60/76.2/80/100
500 (20"	25.4/40/60/76.2/80/100
400 (16") 25.4/32/40/60/80

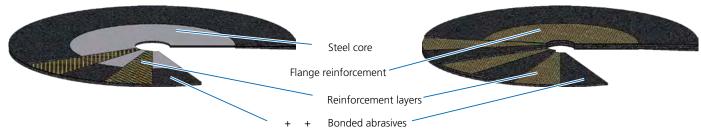




Subject to technical modifications.

Large diameter cut-off wheels made to order METALCORE cut-off wheel





METALCORE type

The PFERD developed and patented steel-core cut-off wheel is characterized by its solid steel body constructed in layers which do not contain any abrasive material.

The special wheel structure has the following advantages:

1. Reduced cutting costs due to the use of smaller clamping flanges:

Larger usable abrasive contact area.

Allows for cutting of larger cross sections due to the increased depth

Easier wheel changes due to smaller diameter of consumed wheel.

2. Longer service life due to:

More stable cut with less vibration.

3. Reduced cut-off wheel width for chop stroke cut due to increased lateral stability:

Shorter cutting times and higher material throughput rate with low-power cutting machines.

Less loss of cut material.

Reduced chips.

4. Steel-cores can be recycled as scrap.

Conventional type

For stationary cut-off grinding, resinoid-bonded, fibre-reinforced cut-off wheels are used, which are composed of four components:

Bond, which holds the abrasive grit in the cut-off wheel

Reinforcement layers/flange reinforcement, which ensure that the cut-off wheel is secure and stable

Active grinding fillers



Solid steel body constructed in layers

Maximum utilization of abrasive surface

Grinding wheels with **XLOCK** quick-change system Universal Line PSF





PSF STEEL

General purpose grinding wheel with high stock removal rate and long service life for steel.

Quick and comfortable disc changes.

Reduced labour time and increased economic efficiency due to the high stock removal rate.

Also suitable for low-powered angle grinders (< 9 amps). Achieves high stock removal rates even at low contact pressure.

Workpiece materials:

steel, cast iron

Applications:

weld dressing, chamfering, deburring, surface grinding, fillet weld edge grinding

Abrasive:

Aluminum oxide A

Technical information:

A 24 R

D [Inches]	U [Inches]	H [Inches]	EDP number	Max. RPM	
Depressed centre (type	27)	X-L	ОСК		
4-1/2	1/4	X-LOCK (7/8)	60171	13,300	10
5	1/4	X-LOCK (7/8)	60172	12,200	10



SG STEEL

Grinding wheel for steel with high stock removal and very long service life.

Advantages:

Quick and comfortable disc changes. Reduced labour time and maximum economic efficiency due to the high stock removal rate.

Fewer disc changes due to the very long service life.

Workpiece materials:

Applications:

weld dressing, chamfering, deburring, surface grinding, fillet weld edge grinding

Premium aluminum oxide A

Technical information:

A 24 R

Recommendations for use:

1/8" thick grinding wheels are ideal for edge/root pass grinding.

D [Inches]	U [Inches]	H [Inches]	EDP number	Max. RPM	
Depressed centre (type 2)	7)	X-L	ОСК		
4-1/2	1/8	X-LOCK (7/8)	60181	13,300	10
	1/4	X-LOCK (7/8)	60182	13,300	10
5	1/8	X-LOCK (7/8)	60183	12,200	10
	1/4	X-LOCK (7/8)	60184	12,200	10

