Fine Grinding and Polishing Tools

PFERD

2007

204

Table of Contents

Products are arranged by type of operation (horizontal rows) and finishing step (vertical columns). As a result, some tools will appear more than once.

Type of Operation ➤

Step in Finishing Sequence ▼

Face-Down Grinding
Tools for use with backing pad

		Page		Page
Modification of workpiece geometry 	Fiber Discs	4-9	COMBIDISC® Abrasive Discs	13-17
	PSA Discs	10	COMBIDISC®-Mini Fiber Discs	14, 17
	COMBIDISC®-Mini-POLIFAN®	19	ABRACLEAN®	55
Multi-step fine grinding Surface roughness reduction 	Fiber Discs	4-9	COMBIDISC® Textile Discs	20
	PSA Discs	10		
	COMBIDISC® Abrasive Discs	13-17		
Fine grinding Ultra-fine grinding 	Fiber Discs	4-9	COMBIDISC® Non-Woven Discs	18
	PSA Discs	10	COMBIDISC® Textile Discs	20
	COMBIDISC® Abrasive Discs	13-17		
Cleaning 	COMBIDISC® Non-Woven Discs	18		
	COMBIDISC® POLICLEAN® Discs	21		
	POLICLEAN® Discs	58		
Creation of surface visual effects 	COMBIDISC® Non-Woven Discs	18	Marbeling Tools	25
	POLIVLIES® Grinding Discs	24		
	POLIVLIES® Hook & Loop Discs	23		
Polishing 	COMBIDISC® Felt Discs	20		

Fine Grinding and Polishing Tools

Table of Contents

Fiber Discs

Program Introduction

PFERD supplies an extensive line of fiber discs in a variety of grit sizes, abrasive grain, and dimensions.
Our comprehensive product range includes the right tool for any application, from coarse to fine grinding.

Advantages

- Long tool life
- Uniform surface finish
- Very high stock removal rate
- High flexibility
- Excellent grit adhesion

Application Examples

- Weld dressing
- Deburring of steel components
- Coarse grinding
- Fine grinding of stainless steel
- Removal of rolling and casting skin

Recommendation for Use

Fiber discs are used with backing pads on standard commercial angle grinders.

Ordering Note

Please order backing pad separately.

Safety Recommendations

 = Wear protective goggles!

 = Use ear protection!

 = Use with backing pad!

 = Not approved for wet grinding!

Recommendations for Use

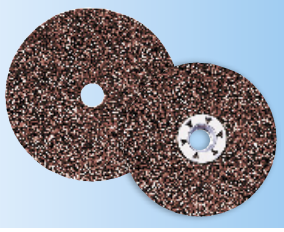
Material Groups			Alum. Oxide A	Alum. Oxide A-COOL	Zirconia Alum. Z	Zirconia Alum. Z-COOL	Ceramic CO-PMD	Ceramic CO	Ceramic CO-COOL
Steel and steel castings	Non-hardened non-tempered steels	Constructional steels Carbon steels Tool steels Non-alloyed steels Steel castings	●		❍		❍	❍	
	Heat treated / Quenched and tempered steels	Tool steels Quenched and tempered steels Alloyed steels Steel castings	❍		●		●	●	
Stainless steel	INOX			●	❍	●			●
Non-ferrous metals	Soft non-ferrous metals	Soft aluminum alloys	❍	●		❍			❍
		Brass Copper Zinc	●		❍		❍	❍	
	Hard non-ferrous metals	Very hard aluminum alloys	●		❍		❍	❍	
		Bronze Titanium			❍	●		❍	●
	High-temperature materials	Nickel-based alloys NiCo alloys			❍	●		❍	●
Steel castings	Cast iron	Grey cast iron Nodular cast iron	●		❍		❍	●	
Other	Plastics	Fiber-reinforced plastics Thermoplastics	●						
	Wood Paint / coatings	Wood Chipboard Paint / coatings	●						

● = Recommended ❍ = Suitable

Fiber Discs

Aluminum Oxide - Standard and Quick Change

Fiber Discs
Aluminum Oxide A



For general-purpose grinding, from coarse to fine, in diverse applications (industry, trades, DIY).

Available with standard arbor hole or 5/8-11 quick-change hub.

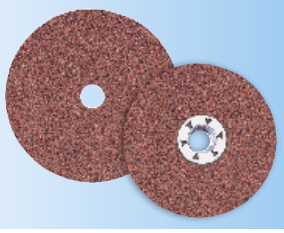
Abrasive
Aluminum Oxide A

Ordering Note
Please order backing pad separately.

PFERD Specification Number
FS A (Standard)
QC FS A (Quick Change)

Dimensions (O.D. x I.D.)	Grit and EDP Number								Max. RPM	
	16	24	36	50	60	80	100	120		
Standard (Plain arbor hole)										
4 x 5/8	-	62402	62403	62404	62405	62406	-	-	15,900	25
4-1/2 x 7/8	62451	62452	62453	62454	62455	62456	62457	62458	13,300	25
5 x 7/8	62501	62502	62503	62504	62505	62506	62507	62508	12,200	25
7 x 7/8	62701	62702	62703	62704	62705	62706	62707	62708	8,500	25
9 x 7/8	-	62902	62903	62904	62905	62906	62907	-	6,500	25
Quick Change										
4-1/2 x 5/8-11	62479	62472	62473	62474	62475	62476	62477	62478	13,300	25
5 x 5/8-11	62539	62532	62533	62534	62535	62536	62537	62538	12,200	25
7 x 5/8-11	-	62722	62723	62724	62725	62726	62727	62728	8,500	25

Fiber Discs
Aluminum Oxide A-COOL



For general-purpose grinding, from coarse to ultra-fine, on poorly heat-conducting materials. Active additives in the coating ensure substantially increased stock removal while preventing loading and heat build-up in the workpiece.

Available with standard arbor hole or 5/8-11 quick-change hub.

Abrasive
Aluminum Oxide A-COOL (top-sized)

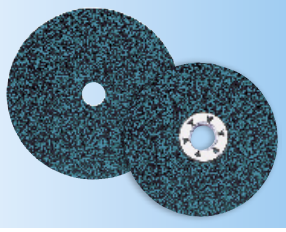
Ordering Note
Please order backing pad separately.

PFERD Specification Number
FS A-COOL (Standard)
QC FS A-COOL (Quick Change)

Dimensions (O.D. x I.D.)	Grit and EDP Number								Max. RPM	
	50	60	80	100	120	150	180	220		
Standard (Plain arbor hole)										
4-1/2 x 7/8	40048	40049	40050	40051	40052	40053	40054	40055	13,300	25
5 x 7/8	40057	40058	40059	40060	40061	40062	40063	40064	12,200	25
7 x 7/8	40075	40076	40077	40078	40079	40080	40081	40082	8,500	25
Quick Change										
4-1/2 x 5/8-11	40254	40255	40256	40257	40258	40259	40260	40261	13,300	25
5 x 5/8-11	40263	40264	40265	40266	40267	40268	40269	40270	12,200	25
7 x 5/8-11	40281	40282	40283	40284	40285	40286	40287	40288	8,500	25

Zirconia Alumina - Standard and Quick Change

Fiber Discs
Zirconia Alumina Z



Designed for coarse grinding and high stock removal, with an extended service life. Zirconia alumina is a high-performance abrasive which delivers best results on high-powered angle grinders at increased contact pressure.

Available with standard arbor hole or 5/8-11 quick-change hub.

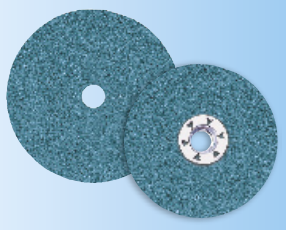
Abrasive
Zirconia Alumina Z

Ordering Note
Please order backing pad separately.

PFERD Specification Number
FS Z (Standard)
QC FS Z (Quick Change)

Dimensions (O.D. x I.D.)	Grit and EDP Number							Max. RPM	
	24	36	50	60	80	100	120		
Standard (Plain arbor hole)									
4-1/2 x 7/8	62462	62463	62464	62465	62466	62460	62461	13,300	25
5 x 7/8	62522	62523	62524	62525	62526	62573	62574	12,200	25
7 x 7/8	62712	62713	62714	62715	62716	62710	62711	8,500	25
Quick Change									
4-1/2 x 5/8-11	62482	62483	62484	62485	62486	62480	62481	13,300	25
5 x 5/8-11	62542	62543	62544	62545	62546	62540	62541	12,200	25
7 x 5/8-11	62732	62733	62734	62735	62736	62730	62731	8,500	25

Fiber Discs
Zirconia Alumina Z-COOL



For coarse but cool grinding at high stock removal rates. Zirconia alumina is a high-performance abrasive which delivers best results on powerful angle grinders at increased contact pressure. Active additives in the coating ensure substantially improved stock removal and a reduced thermal load on poorly heat conducting materials.

Available with standard arbor hole or 5/8-11 quick-change hub.

Abrasive
Zirconia Alumina Z-COOL (top-sized)

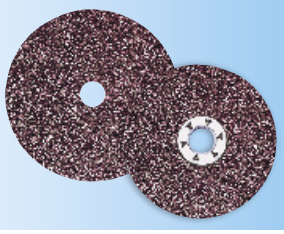
Ordering Note
Please order backing pad separately.

PFERD Specification Number
FS Z-COOL (Standard)
QC FS Z-COOL (Quick Change)

Dimensions (O.D. x I.D.)	Grit and EDP Number				Max. RPM	
	36	50	60	80		
Standard (Plain arbor hole)						
4-1/2 x 7/8	62468	62469	62470	62471	13,300	25
5 x 7/8	62528	62529	62530	62531	12,200	25
7 x 7/8	62718	62719	62720	62721	8,500	25
Quick Change						
4-1/2 x 5/8-11	62488	62489	62490	62491	13,300	25
5 x 5/8-11	62548	62549	62550	62551	12,200	25
7 x 5/8-11	62738	62739	62740	62741	8,500	25

Ceramic Oxide - Standard and Quick Change

Fiber Discs
Ceramic Oxide CO



For aggressive grinding achieving maximum stock removal rates. Nevertheless, these fiber discs attain a very long service life. Their ceramic grain is particularly well suited for working on hard materials and coatings. To be used preferably with high-powered angle grinders.

Available with standard arbor hole or 5/8-11 quick-change hub.

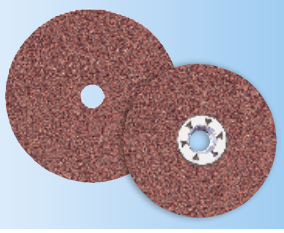
Abrasive
Ceramic Oxide CO

Ordering Note
Please order backing pad separately.

PFERD Specification Number
FS CO (Standard)
QC FS CO (Quick Change)

Dimensions (O.D. x I.D.)	Grit and EDP Number						Max. RPM	
	24	36	60	80	100	120		
Standard (Plain arbor hole)								
4-1/2 x 7/8	62410	62411	62412	62413	62414	62415	13,300	25
5 x 7/8	62510	62511	62512	62513	62514	62515	12,200	25
7 x 7/8	62743	62744	62745	62746	62747	62748	8,500	25
Quick Change								
4-1/2 x 5/8-11	62422	62423	62424	62425	62426	62427	13,300	25
5 x 5/8-11	62553	62554	62555	62556	62557	62558	12,200	25
7 x 5/8-11	62755	62756	62757	62758	62759	62760	8,500	25

Fiber Discs
Ceramic Oxide CO-COOL



For aggressive grinding achieving maximum stock removal on hard, poorly heat conducting materials. Active additives in the coating ensure a substantially improved abrasive performance while preventing loading and reducing heat build-up in the workpiece.

Available with standard arbor hole or 5/8-11 quick-change hub.

Abrasive
Ceramic Oxide CO-COOL (top-sized)

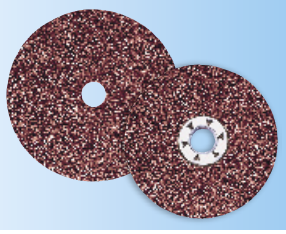
Ordering Note
Please order backing pad separately.

PFERD Specification Number
FS CO-COOL (Standard)
QC FS CO-COOL (Quick Change)

Dimensions (O.D. x I.D.)	Grit and EDP Number						Max. RPM	
	24	36	50	60	80	120		
Standard (Plain arbor hole)								
4-1/2 x 7/8	62416	62417	62418	62419	62420	62421	13,300	25
5 x 7/8	62516	62517	62518	62519	62520	62521	12,200	25
7 x 7/8	62749	62750	62751	62752	62753	62754	8,500	25
Quick Change								
4-1/2 x 5/8-11	62428	62429	62430	62431	62432	62433	13,300	25
5 x 5/8-11	62559	62560	62561	62562	62563	62564	12,200	25
7 x 5/8-11	62761	62762	62763	62764	62765	62766	8,500	25

Ceramic Oxide - Standard and Quick Change, Backing Pads

Fiber Discs
Ceramic Oxide CO-PMD



As an economical alternative to CO discs, PMD have a lower concentration of ceramic grain, yet still offer good grinding performance on steels and alloys.

Available with standard arbor hole or 5/8-11 quick-change hub.

Abrasive
Ceramic Oxide CO-PMD

Ordering Note
Please order backing pad separately.

PFERD Specification Number
FS CO-PMD (Standard)
QC FS CO-PMD (Quick Change)

Dimensions (O.D. x I.D.)	Grit and EDP Number					Max. RPM	
	24	36	50	60	80		
Standard (Plain arbor hole)							
4 x 5/8	62435	62436	62437	62438	62439	15,900	25
4-1/2 x 7/8	62441	62442	62443	62444	62445	13,300	25
5 x 7/8	62566	62567	62568	62569	62570	12,200	25
7 x 7/8	62767	62768	62769	62770	62771	8,500	25
Quick Change							
4-1/2 x 5/8-11	62493	62494	62495	62496	62497	13,300	25
5 x 5/8-11	62585	62586	62587	62588	62589	12,200	25
7 x 5/8-11	62773	62774	62775	62776	62777	8,500	25

Plastic Backing Pads
for Fiber Discs

Backing pads for use with PFERD zirconia and ceramic discs. Plastic air cooled pads present the tough ceramic grain to the workpiece with force for maximized disc performance, but minimal pad flexibility. Rib design allows for better cooling, which improves disc life.

Ordering Note
Retaining nuts and spanner wrench sold separately.

PFERD Specification Number
GTP

Diameter (Inches)	EDP Number	Max. RPM	
4	69430	15,000	1
4-1/2	69465	13,000	1
5	69530	11,900	1
7	69715	8,600	1

Backing Pads and Accessories

Rubber Backing Pads for Fiber Discs Smooth and Ribbed Surface

Backing pads for use with 7/8" and quick-change fiber discs. Available with a smooth surface (recommended for quick change discs) or ribbed surface rubber pads. Rib design allows for better cooling, which improves disc life. These pads are available in three densities. For general purpose grinding, the regular density is recommended.

PFERD Specification Number
GT (Ribbed Surface)
GTS (Smooth Surface)

Diameter (Inches)	Nut Size	Backing Density	EDP Number		Max. RPM	
			Ribbed Surface	Smooth Surface		
4	5/8-11	Regular (R)	69425	69040	12,000	1
4-1/2	5/8-11	Regular (R)	69455	69045	11,000	1
4-1/2	M14x2.0	Regular (R)	69456	69046	11,000	1
4-1/2	M10x1.25	Regular (R)	69457	69047	11,000	1
4-1/2	M14x1.50	Regular (R)	69458	69048	11,000	1
4-1/2	1/2-13	Regular (R)	69459	69049	11,000	1
5	5/8-11	Regular (R)	69525	69050	10,000	1
7	5/8-11	Flexible (F)	69704	69074	7,000	1
7	5/8-11	Regular (R)	69705	69075	7,000	1
7	5/8-11	Hard (H)	69706	69076	7,000	1
9	5/8-11	Regular (R)	69905	69095	6,500	1

Spare Nuts & Spanner Wrench

Replacement flanges and spanner wrenches for fiber disc backing pads.

PFERD Specification Number
FL-GT (Nut)

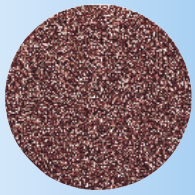
Description	Grinder Size	EDP Number	
5/8-11 Nut	(4-5)	69107	1
5/8-11 Nut	(7-9)	69108	1
M14x2.0 Nut	(4-1/2)	69109	1
M14x1.25 Nut	(4-1/2)	69110	1
M14x1.50 Nut	(4-1/2)	69111	1
1/2-13 Nut	(4-1/2)	69112	1
3/8-24 Nut	(4-1/2)	69113	1
Spanner Wrench	-	69115	1

PSA Discs

Aluminum Oxide, Zirconia Alumina, Holder

Heavy-duty "X" weight resin cloth with a special hot melt adhesive coating system produces a disc that will withstand even the most grueling applications. They adhere securely to the holder without risk of slipping or flying off. When removed from the tool, they leave no residue.

PSA Discs
Aluminum Oxide A



For general-purpose grinding, from coarse to very fine, in diverse applications.

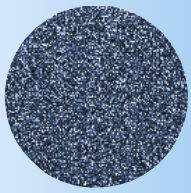
Abrasive
Aluminum Oxide A

Ordering Note
Please order holder separately.

PFERD Specification Number
PSA-A/O

Diameter (Inches)	Grit and EDP Number												
	36	40	50	60	80	100	120	150	180	220	240	320	
5	47361	47362	47363	47364	47365	47366	47367	47368	47369	47370	47371	47372	50
6	47374	47375	47376	47377	47378	47379	47380	47381	47382	47383	47384	47385	50

PSA Discs
Zirconia Alumina Z



Designed for coarse grinding and high stock removal, these tool nevertheless attain a long service life.

Abrasive
Zirconia Alumina Z

Ordering Note
Please order holder separately.

PFERD Specification Number
PSA-Z

Diameter (Inches)	Grit and EDP Number							
	36	40	50	60	80	100	120	
5	47560	47561	47562	47563	47564	47565	47566	50
6	47570	47571	47572	47573	47574	47575	47576	50

PSA Disc Holder

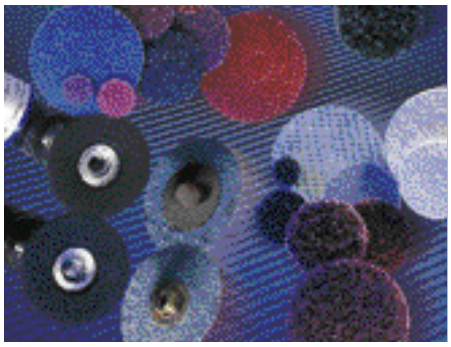
Backing pad for use with PFERD PSA-discs.
For threaded spindle (dual action machines).

PFERD Specification Number
SKH

Diameter (Inches)	Thread	EDP Number	Max. RPM	
5	5/16-24	47266	10,000	1
6	5/16-24	47268	10,000	1

COMBIDISC® Grinding Tools

Program Introduction

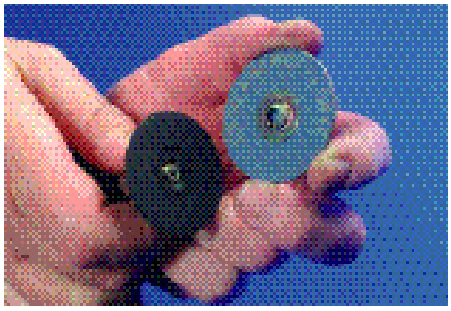


COMBIDISC® tools cover the full range of surface finishing applications.
From coarse grinding through surface texturing

to face-down mirror polishing, these products address the most demanding and sophisticated machining tasks.

PFERD offers two alternative mounting systems:

1. Type CD



Mounts via female thread (metal) on the tool side. Matches the following commercially available systems: PSG, Power Lock Type II "turn-on", SocAtt, Turn-On

2. Type CDR

Mounts via male thread (plastic) on the tool side. Matches the following commercially available systems: Roloc™, Lockit, Speed Lok TR, Power Lock Type III, Fastlock System B, Roll-On

Advantages

- Easy to use
- Rapid tool change
- No adhesion problems
- Firmly secured disc
- Disc does not become detached under influence of heat
- Vibration-free operation due to perfectly centralized tool
- Tools come in various diameters, grit types and sizes

Application Examples

- Tool and mold-making
- Patternmaking
- Mechanical engineering
- Automotive applications
- Aerospace industry
- Jet engine construction and maintenance
- Construction of tanks, pressure vessels and process equipment (e.g., for the foodstuff processing and chemical industry)

Safety Recommendations


= Wear protective goggles!


= Use ear protection!


= Wear protective gloves!

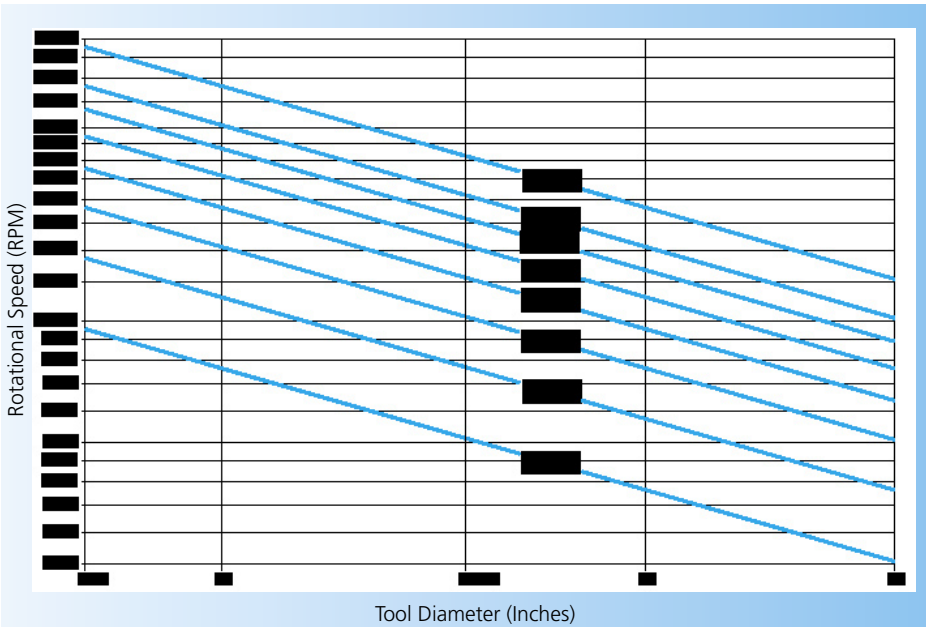

= Observe safety recommendations!

Recommendations for Use

Operation ▼	Recommended Peripheral Speed [SFPM] 1000 2000 3000 4000 5000 6000 6900 7800	Recommended Tools ▼
Grinding of steel and steel castings		Abrasive discs A, A-FLEX, A-PLUS, A-FORTE
Grinding of stainless steel (INOX)		Abrasive discs A-INOX-FORTE
Coarse grinding of steel and steel castings		Mini-POLIFAN®
Grinding of high-temperature materials (NiCo alloys)		Abrasive discs SiC, Z and CO
Grinding of hard non-ferrous metals, titanium, bronze, very hard aluminum		Abrasive discs SiC, A-INOX-FORTE, TX discs
Grinding of soft non-ferrous metals, brass, copper, aluminum alloys		Abrasive discs A, A-FLEX, A-PLUS, A-FORTE, A-INOX-FORTE, TX discs
Cleaning, texturing		Non-woven and POLICLEAN® discs
Polishing		Felt discs

COMBIDISC® Speed Chart, Backing Pads

Peripheral Speed of COMBIDISC® Tools



In the diagram, peripheral speeds are represented by blue diagonal lines. Each vertical line represents a tool diameter. From its point of intersection with the diagonal line for a given peripheral speed, proceed horizontally to the left margin where you will find the corresponding rotational speed (RPM) of the COMBIDISC® tool and machine spindle.

Example

CD50 A60 INOX-FORTE, 2" Dia.
EDP 42219
Operation: Grinding of stainless steel materials
Peripheral speed: 4,000 - 5,000 SFPM
Rotational speed: 7,600 - 9,600 RPM

COMBIDISC® Backing Pads

Type CD/CDR - Soft

Type CD/CDR - Medium

Type CD/CDR - Hard

Backing pads are available in three grades for each COMBIDISC® type. The photographs to the left illustrate the approximate flexibility of the three grades.

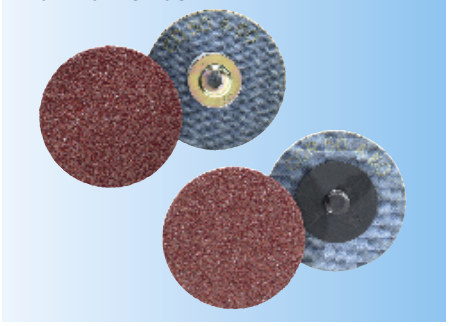
PFERD Specification Number
SBH/SBHR

Diameter (Inches)	Shank Diameter (Inches)	Type CD EDP Number	Type CDR EDP Number	Max. 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					
3/4	1/4	42103	42451	40,000	1
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
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® Grinding Tools

COMBIDISC® Abrasive Discs

COMBIDISC® Abrasive Discs Aluminum Oxide A



COMBIDISC® abrasive discs with aluminum oxide A grain are suitable for use on metals and other materials.
For general-purpose grinding from coase to very fine, in diverse applications (industry, trades, DIY).

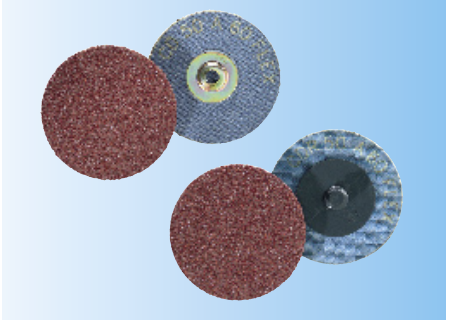
Abrasive
Aluminum Oxide A

Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CD A
CDR A

Diameter (Inches)	Grit and EDP Number								Recom. Speed RPM	
	36	50	60	80	100	120	180	320		
Type CD										
3/4	-	-	42124	42125	-	42127	42129	42131	20,000 - 35,000	100
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	42162	42163	42165	42167	8,000 - 13,000	100
3	42169	42171	42172	42173	42174	42175	42177	42179	5,000 - 9,000	50
Type CDR										
3/4	-	-	42469	42470	-	42472	42474	42476	20,000 - 35,000	100
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	42507	42508	42510	42512	8,000 - 13,000	100
3	42514	42516	42517	42518	42519	42520	42522	42524	5,000 - 9,000	50

COMBIDISC® Abrasive Discs Aluminum Oxide A-FLEX



Aluminum oxide A-FLEX discs are particularly flexible. These tools are particularly suitable for work on contours and concave or convex surfaces. For invisible grinding patterns in the surface finish of metals. These tools are widely used in tool, die and mold-making applications.

Recommendation for Use
It is recommended to use these discs with a soft holder to benefit fully from their flexibility.

Abrasive
Aluminum Oxide A-FLEX

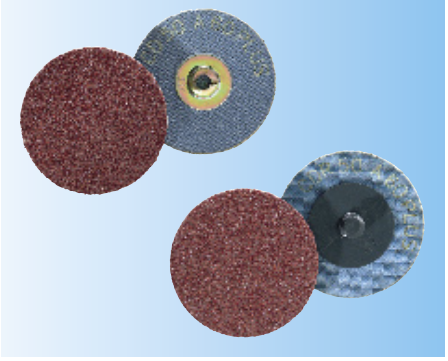
Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CD A-FLEX
CDR A-FLEX

Diameter (Inches)	Grit and EDP Number			Recom. Speed RPM	
	60-FLEX	80-FLEX	120-FLEX		
Type CD					
1-1/2	42180	42181	42182	10,000 - 16,000	100
2	42184	42185	42186	8,000 - 13,000	100
3	42189	42190	42191	5,000 - 9,000	50
Type CDR					
1-1/2	42525	42526	42527	10,000 - 16,000	100
2	42529	42530	42531	8,000 - 13,000	100
3	42534	42535	42536	5,000 - 9,000	50

COMBIDISC® Abrasive Discs

COMBIDISC® Abrasive Discs
Aluminum Oxide A-PLUS



The aluminum oxide A-PLUS version is universally suitable for all metals.
A stronger backing material ensures superior stock removal rates.

These discs are preferred for edge grinding, due to their outstanding tear resistance.

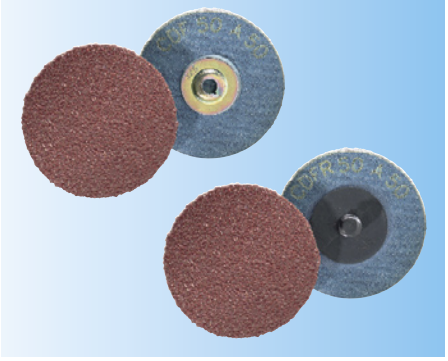
Abrasive
Aluminum Oxide A-PLUS

Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CD A-PLUS
CDR A-PLUS

Diameter (Inches)	Grit and EDP Number				Recom. Speed RPM	
	36-PLUS	60-PLUS	80-PLUS	120-PLUS		
Type CD						
2	42330	42331	42332	42333	8,000 - 13,000	100
3	42335	42336	42337	42338	5,000 - 9,000	50
Type CDR						
2	42670	42671	42672	42673	8,000 - 13,000	100
3	42675	42676	42677	42678	5,000 - 9,000	50

COMBIDISC® Mini Fiber Discs
Aluminum Oxide A



COMBIDISC® mini fiber discs with aluminum oxide A grain are ideally suited for surface and edge grinding work on metals, and for work in hard-to-reach areas. The fiber backing reinforces the disc and improves its abrasive performance.

Recommendation for Use
Use only with hard to medium holders.

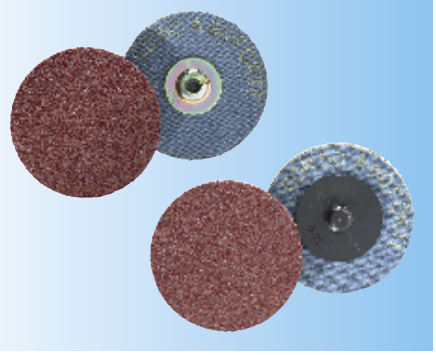
Abrasive
Aluminum Oxide A

Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CDF A
CDFR A

Diameter (Inches)	Grit and EDP Number			Recom. Speed RPM	
	36	50	80		
Type CD					
2	40411	40413	40415	8,000 - 13,000	100
3	40421	40423	40425	5,000 - 9,000	50
Type CDR					
2	40551	40553	40555	8,000 - 13,000	100
3	40561	40563	40565	5,000 - 9,000	50

COMBIDISC® Abrasive Discs
Aluminum Oxide A-FORTE



Aluminum oxide A-FORTE types are universally suitable on all metals.
High stock removal, cool grinding performance and a long tool life are the hallmarks of this product.

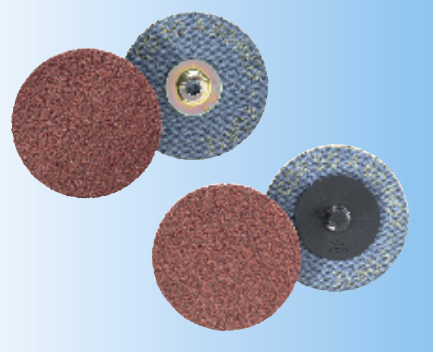
Abrasive
Aluminum Oxide A-FORTE

Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CD A-FORTE
CDR A-FORTE

Diameter (Inches)	Grit and EDP Number				Recom. Speed RPM	
	36-FORTE	60-FORTE	80-FORTE	120-FORTE		
Type CD						
1	-	42306	42307	42308	15,000 - 26,000	100
1-1/2	42309	42310	42311	42312	10,000 - 16,000	100
2	42314	42315	42316	42317	8,000 - 13,000	100
3	42319	42320	42321	42322	5,000 - 9,000	50
Type CDR						
1	-	42645	42646	42647	15,000 - 26,000	100
1-1/2	42648	42649	42650	42651	10,000 - 16,000	100
2	42653	42654	42655	42656	8,000 - 13,000	100
3	42658	42659	42660	42661	5,000 - 9,000	50

COMBIDISC® Abrasive Discs
Aluminum Oxide A-INOX-FORTE



The aluminum oxide A-INOX-FORTE version is designed for hard-to-machine materials such as stainless steel, Hastelloy, Inconel, etc. Active additive fillers in the coating increase the stock removal rate substantially while preventing loading and heat build-up.

Recommendation for Use
Use with hard or medium disc holders only.

Abrasive
Aluminum Oxide A-INOX-FORTE (top-sized)

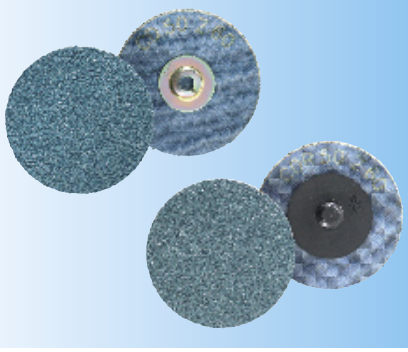
Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CD A-INOX-FORTE
CDR A-INOX-FORTE

Diameter (Inches)	Grit and EDP Number			Recom. Speed RPM	
	36 INOX-FORTE	60 INOX-FORTE	80 INOX-FORTE		
Type CD					
2	42216	42219	42220	8,000 - 13,000	100
3	42224	42227	42228	5,000 - 9,000	50
Type CDR					
2	42558	42561	42562	8,000 - 13,000	100
3	42565	42568	42569	5,000 - 9,000	50

COMBIDISC® Abrasive Discs

COMBIDISC® Abrasive Discs
Zirconia Alumina Z



COMBIDISC® abrasive discs with zirconia alumina Z grain are suitable for use on all metals. These tools perform particularly well in coarse grinding applications using grit sizes 36 and 60.

Recommendation for Use
Use with hard or medium disc holders only.

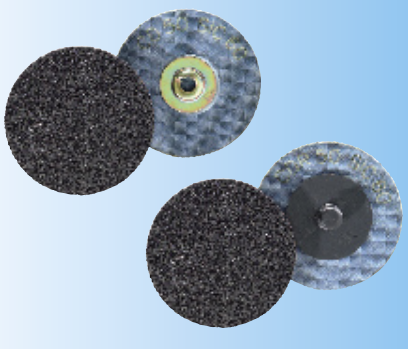
Abrasive
Zirconia Alumina Z

Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CD Z
CDR Z

Diameter (Inches)	Grit and EDP Number					Recom. Speed RPM	
	36	40	50	60	80		
Type CD							
1	42240	-	-	42243	42244	15,000 - 26,000	100
1-1/2	42247	-	-	42250	42251	10,000 - 16,000	100
2	42254	42255	42256	42257	42258	8,000 - 13,000	100
3	42261	42262	42263	42264	42265	5,000 - 9,000	50
Type CDR							
1	42579	-	-	42582	42583	15,000 - 26,000	100
1-1/2	42586	-	-	42589	42590	10,000 - 16,000	100
2	42593	42594	42595	42596	42597	8,000 - 13,000	100
3	42600	42601	42602	42603	42604	5,000 - 9,000	50

COMBIDISC® Abrasive Discs
Silicon Carbide SiC



Silicon carbide (SiC) COMBIDISC® discs are ideal for use on aluminum, copper, bronze, titanium, high-alloyed steels and plastics. They are the tool of choice for grinding titanium alloys, as their cool grinding properties help prevent thermal cracking.

The tool of choice in the aircraft industry, specifically where SiC is the only approved abrasive product for use on engine components.

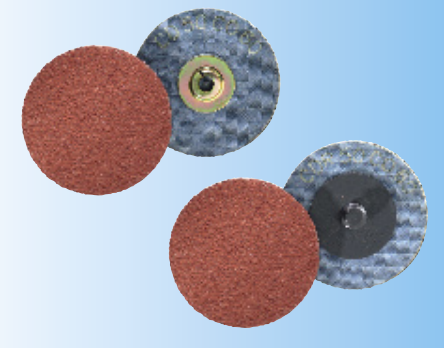
Abrasive
Silicon Carbide SiC

Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CD SiC
CDR SiC

Diameter (Inches)	Grit and EDP Number					Recom. Speed RPM	
	36	60	80	120	240		
Type CD							
2	42415	42416	42417	42418	42419	8,000 - 13,000	100
3	42420	42421	42422	42423	42424	5,000 - 9,000	50
Type CDR							
2	42750	42571	42752	42753	42754	8,000 - 13,000	100
3	42755	42756	42757	42758	42759	5,000 - 9,000	50

COMBIDISC® Abrasive Discs CD
Ceramic Oxide CO



Ceramic oxide (CO) is suitable for use on alloyed and unalloyed steels, cast iron, and hard metal coatings.

Aggressive grinding action resulting in unsurpassed stock removal rates. Active additive fillers in the coating provide substantially improved abrasive performance while preventing loading and heat build-up.

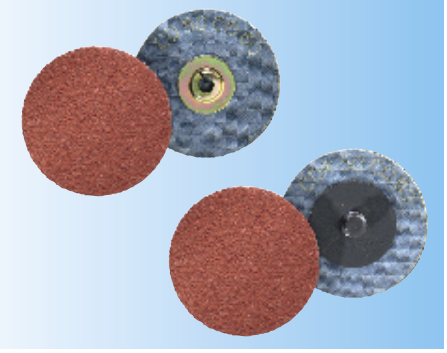
Abrasive
Ceramic Oxide CO (top-sized)

Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CD CO
CDR CO

Diameter (Inches)	Grit and EDP Number					Recom. Speed RPM	
	24	36	60	80	120		
Type CD							
2	42280	42289	42292	42293	42295	8,000 - 13,000	100
3	42281	42296	42299	42300	42302	5,000 - 9,000	50
Type CDR							
2	42619	42628	42631	42632	42634	8,000 - 13,000	100
3	42620	42635	42638	42639	42641	5,000 - 9,000	50

COMBIDISC® Mini Fiber Discs
Ceramic Oxide CO



COMBIDISC® mini fiber disc with ceramic oxide grain is designed for very hard-to-machine materials such as stainless steel, Hastelloy, Inconel, titanium etc. Active additive fillers in the coating increase the stock removal rate substantially while preventing loading and heat build-up.

The fiber backing reinforces the disc and improves abrasive performance. Ideally suited for grinding on edges and weld seams of hard materials.

Recommendation for Use
Use with hard or medium disc holders only.

Abrasive
Ceramic Oxide CO (top-sized)

Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CDF CO
CDFR CO

Diameter (Inches)	Grit and EDP Number				Recom. Speed RPM	
	36	50	80	120		
Type CD						
2	40492	40494	40496	40497	8,000 - 13,000	100
3	40499	40501	40503	40504	5,000 - 9,000	50
Type CDR						
2	40632	40634	40636	40637	8,000 - 13,000	100
3	40639	40641	40643	40644	5,000 - 9,000	50

COMBIDISC® Grinding Tools

COMBIDISC® Non-Woven Discs

COMBIDISC® Non-Woven Discs
Surface Conditioning - Hard type

Universally suitable for surface conditioning of metals, e.g., removal of prefinishing marks or oxidation, or light deburring jobs. The flexibility of these discs in surface grinding is determined by the hardness of the holder. Open structure.

Recommendation for Use
The quality of the surface finish, the cooler grind and tool life can be further improved by adding grinding oil or water.

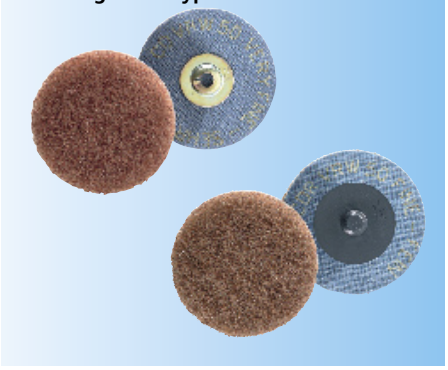
Abrasive
Aluminum Oxide A
C = Coarse (color: yellowish brown)
M = Medium (color: reddish brown)
VF = Very Fine (color: blue)

Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CD VRH A
CDR VRH A

Diameter (Inches)	Grade and EDP Number			Recom. Speed RPM	
	Coarse	Medium	Very Fine		
Type CD					
3/4	-	-	43172	14,000 - 19,000	50
1	43173	43174	43175	11,000 - 15,000	50
1-1/2	43176	43177	43179	7,000 - 10,000	50
2	43180	43181	43183	6,000 - 8,000	50
3	43184	43185	43187	4,000 - 5,000	25
Type CDR					
1-1/2	43234	43235	43237	7,000 - 10,000	50
2	43238	43239	43241	6,000 - 8,000	50
3	43242	43243	43245	4,000 - 5,000	25

COMBIDISC® Non-Woven Discs
Finishing - Soft type



For ultra-fine surface and contour grinding and cleaning of metal or painted surfaces. Highly open structure.

Recommendation for Use
The quality of the surface finish, the cooler grind and tool life can be further improved by adding grinding oil or water.

Abrasive
Aluminum Oxide A

Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CD VRW A
CDR VRW A

Diameter (Inches)	Grade and EDP Number			Recom. Speed RPM	
	Medium	Fine	Very Fine		
Type CD					
2	43200	43201	43203	5,500 - 8,000	50
3	43204	43205	43207	3,800 - 5,000	25
Type CDR					
2	43258	43259	43261	5,500 - 8,000	50
3	43262	43263	43265	3,800 - 5,000	25

COMBIDISC® Mini-POLIFAN® Discs Aluminum Oxide A

Mini flap discs with aluminum oxide A grain perform well in general-purpose coarse grinding applications. They deliver high stock removal rates on diverse materials. Ideal for weld dressing in hard-to-reach areas.

These tools excel in performance when compared to plain coated abrasive discs in terms of longevity and grinding performance.

Abrasive
Aluminum Oxide A

Ordering Note
Please order drive arbor or backing pad separately.

PFERD Specification Number
CD PFF A

Diameter (Inches)	Grit and EDP Number				Recom. Speed RPM	Max. RPM	
	40	60	80	120			
Type CD							
2	42802	42803	42804	42805	12,000 - 14,000	19,100	10
3	42808	42809	42810	42811	8,000 - 10,000	12,700	10

COMBIDISC® Mini-POLIFAN® Discs Zirconia Alumina Z

Mini flap discs with zirconia alumina grain Z perform well in general-purpose grinding applications, providing ultra-high stock removal. Particularly suitable for weld dressing in hard-to-reach areas.

These tools excel in performance when compared to plain coated abrasive discs in terms of longevity and grinding performance.

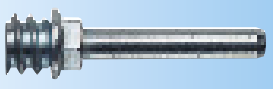
Abrasive
Zirconia Alumina Z

Ordering Note
Please order drive arbor or backing pad separately.

PFERD Specification Number
CD PFF Z

Diameter (Inches)	Grit and EDP Number				Recom. Speed RPM	Max. RPM	
	40	60	80	120			
Type CD							
2	42814	42815	42816	42817	12,000 - 14,000	19,100	10
3	42820	42821	42822	42823	8,000 - 10,000	12,700	10

Drive Arbor for COMBIDISC® Mini-POLIFAN® Discs



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

Safety Note
Max. operating speed 9,800 SFPM

PFERD Specification Number
BO PFF

Shank Diameter (Inches)	Shank Length (Inches)	EDP Number	Suitable Diameters (Inches)	
1/4	1-1/2	42851	2	1
1/4	1-1/2	42852	3	1

COMBIDISC® Textile Discs, Felt Discs

COMBIDISC® TX Discs Aluminum Oxide A

The surface quality achieved with these cotton-based discs, in a single grinding operation, lies halfway between that produced by coated abrasives and non-woven tools. They are particularly well suited for stainless steel and aluminum.

Abrasive
Aluminum Oxide A

Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CD A TX
CDR A TX

Diameter (Inches)	Grit and EDP Number 36	80	120	320	Recom. Speed RPM	
Type CD						
2	42366	42368	42369	42371	7,000 - 9,500	25
3	42373	42375	42376	42378	5,000 - 6,500	25
Type CDR						
2	42704	42706	42707	42709	7,000 - 9,500	25
3	42711	42713	42714	42716	5,000 - 6,500	25

COMBIDISC® Felt Discs

For polishing medium sized surfaces using polishing paste bars, grinding paste or diamond polishing paste.

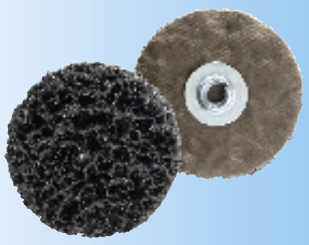
Ordering Note
Please order backing pad and polishing paste separately (backing pads listed on page 12, polishing pastes listed on page 69-70).

PFERD Specification Number
CD FR

Diameter (Inches)	EDP Number	Recom. Speed RPM	
Type CD			
2	43215	2,000 - 4,000	10
3	43216	1,200 - 2,500	10

COMBIDISC® POLICLEAN® Discs

COMBIDISC® POLICLEAN® Discs



Ideal for coarse face grinding applications such as removal of paint, scale, discolorations, rust, or adhesive residue.

Recommendation for Use
For use with a hard or medium COMBIDISC® holder (backing pad).

Abrasive
Silicon Carbide SiC

Ordering Note
Please order backing pad separately (listed on page 12).

PFERD Specification Number
CD PCLR
CDR PCLR

Diameter (Inches)	EDP Number	Recom. Speed RPM	
Type CD			
2	44850	5,500 - 8,000	10
3	44851	3,800 - 5,000	10
Type CDR			
2	44853	5,500 - 8,000	10
3	44854	3,800 - 5,000	10

COMBIDISC® Sets

COMBIDISC® Sets
Type CD

Ideal for product introduction and testing.

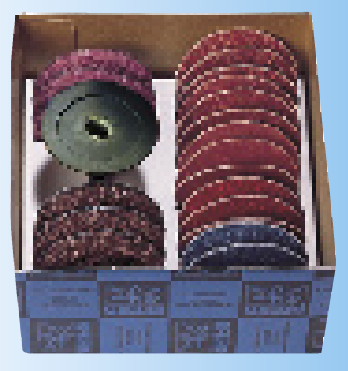
Choose from 2" or 3" diameter sets.

Contents of each COMBIDISC® Set

Disc Type	2" dia. EDP	3" dia. EDP	Qty. per set
Coated Abrasive Discs			
Aluminum Oxide - 36 Grit A FORTE	42314	42319	3
Aluminum Oxide - 60 Grit A FORTE	42315	42320	3
Aluminum Oxide - 120 Grit A FORTE	42317	42322	3
Aluminum Oxide - 60 Grit A-INOX-FORTE	42219	42227	3
Zirconia Alumina - 60 Grit Z	42257	42264	3
Non-Woven Discs			
Surface conditioning - VRH medium	43181	43185	3
Finishing - VRW medium	43200	43204	3
Backing Pad			
Type CD backing pad (medium)	42212	42215	1

Diameter (Inches)	Full Set EDP Number	
2	42771	1
3	42772	1

COMBIDISC® Sets
Type CDR



Ideal for product introduction and testing.

Choose from 2" or 3" diameter sets.

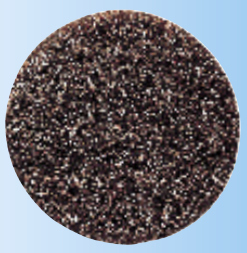
Contents of each COMBIDISC® Set

Disc Type	2" dia. EDP	3" dia. EDP	Qty. per set
Coated Abrasive Discs			
Aluminum Oxide - 36 Grit A FORTE	42653	42658	3
Aluminum Oxide - 60 Grit A FORTE	42654	42659	3
Aluminum Oxide - 120 Grit A FORTE	42656	42661	3
Aluminum Oxide - 60 Grit A-INOX-FORTE	42561	42568	3
Zirconia Alumina - 60 Grit Z	42596	42603	3
Non-Woven Discs			
Surface conditioning - VRH medium	43239	43243	3
Finishing - VRW medium	43258	43262	3
Backing Pad			
Type CDR backing pad (medium)	42460	42463	1

Diameter (Inches)	Full Set EDP Number	
2	42787	1
3	42788	1

POLIVLIES® Hook & Loop Discs

POLIVLIES® Hook & Loop Discs



POLIVLIES® hook & loop discs for surface conditioning attach to the holder by a series of hooks and loops that permits easy-on, easy-off disc changes. Strong non-woven material will make quick work of heavy oxidation removal, cleaning, and conditioning.

Application Examples
- Removal of discoloration from stainless steel surfaces
- Fine grinding of large components in process equipment and tank construction

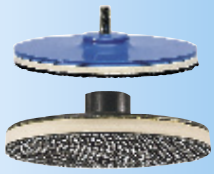
Recommendation for Use
POLIVLIES® hook & loop discs perform best at the recommended peripheral speed of 3,000 - 4,000 SFPM. An optimum compromise between stock removal, surface quality, work-piece thermal load, and tool wear is achieved at this speed.

Ordering Note
Please order disc holder separately.

PFERD Specification Number
PVKR

Diameter (Inches)	Grade and EDP Number			Recom. Speed RPM	Max. RPM	
	Coarse	Medium	Very Fine			
2	43434	43435	43437	6,500	8,000	10
3	43438	43439	43441	4,500	5,500	10
4	43442	43443	43445	3,300	5,000	10
4-1/2	43446	43447	43449	3,000	5,000	10
5	43450	43451	43453	2,600	5,000	10
7	43458	43459	43461	1,800	3,000	10
8	43462	43463	43465	1,600	3,000	10

POLIVLIES® Hook & Loop Disc Holders



The elastic interlayer of the POLIVLIES® hook & loop disc holder permits surface finishing without visible transitions, in addition to rapid tool changes.

Available in threaded and shank-mounted versions.

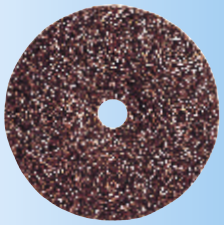
Safety Note
For safety reasons, the stated max. RPM level must not be exceeded.

PFERD Specification Number
PVKRH 4 (Shank Mounted)
PVKRH 16 (Threaded)

Diameter (Inches)	Shank Dia./ Thread	EDP Number	Max. RPM	
Shank Mounted				
2	1/4	43402	22,000	1
3	1/4	43404	20,000	1
4	1/4	43406	16,000	1
Threaded				
4-1/2	5/8-11	43410	10,000	1
5	5/8-11	43412	10,000	1
7	5/8-11	43420	6,000	1
8	5/8-11	43422	4,000	1

POLIVLIES® Disc

POLIVLIES® Grinding Disc PV with Fabric Backing



Used for finishing of large surfaces.

Application Examples
- Fine-grinding of fillered areas in automotive body repair
- Fine-grinding of pre-ground stainless steel surfaces in process equipment and tank construction

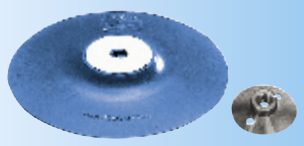
Recommendation for Use
POLIVLIES® PV grinding wheels must be used with backing pad.

Ordering Note
Please order backing pad separately.

PFERD Specification Number
PV A

Diameter (Inches)	Bore (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
7	7/8	43425	3,000 - 4,500	8,500	10

Backing Pad GT for POLIVLIES® Grinding Discs

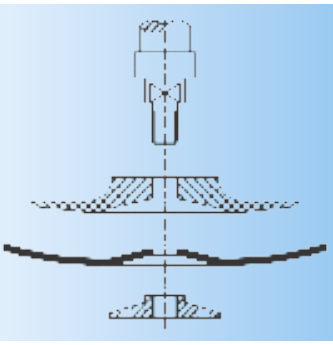


This backing pad allows POLIVLIES® grinding discs to be mounted on standard commercial angle grinders.

Ordering Note
A matching nut is included.

Safety Note
Max. peripheral speed: 15,750 SFPM

PFERD Specification Number
GT



For Tool Diameter (Inches)	Thread	EDP Number	Max. RPM	
7	5/8-11	69702	8,500	1

Marbling Tools

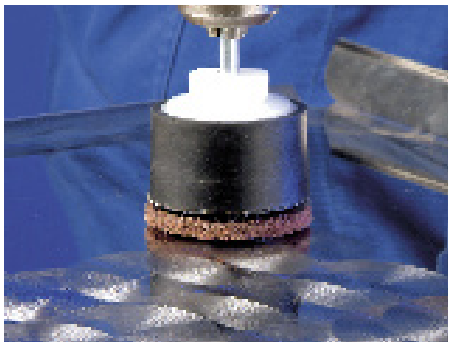
Non-Woven Marbling Tools

Marbling Discs

Marbling discs are used to apply a decorative pattern to a finished surface.
These aluminum oxide non-woven discs are available in a water and oil resistant quality in grit sizes 100, 180 and 280.

Recommendation for Use
For use with the matching disc holder.

PFERD Specification Number
MKRK A



Diameter (Inches)	Width (Inches)	Grade and EDP Number			Recom. Speed RPM	
		Medium/100	Fine/180	Very Fine/280		
1-1/2	1/4	43340	43341	43342	600 - 1,400	100
2	1/4	43344	43345	43346	600 - 1,400	100
2-3/8	1/4	43348	43349	43350	600 - 1,400	100

Marbling Disc Holder

Special-purpose tools for marbling of surfaces. The marbling tool is designed for mounting a matching non-woven marbling disc.

A highly elastic intermediate layer carries the hook & loop fastening system.

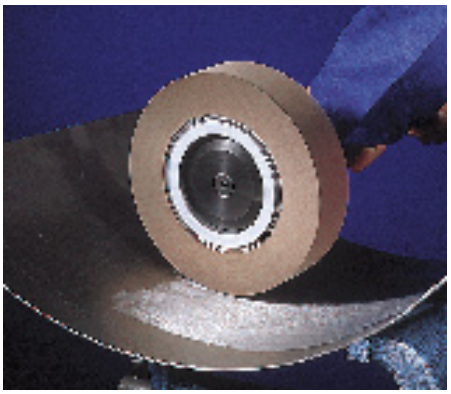
Marbling tools are available in three diameters with 1/4" dia. x 1-1/2" length shank.

PFERD Specification Number
MK

Diameter (Inches)	Shank Diameter (Inches)	EDP Number	Max. RPM	
1-1/2	1/4	43332	5,750	1
2	1/4	43333	4,600	1
2-3/8	1/4	43334	3,800	1

Flap Wheels

Unmounted Flap Wheels



The coated abrasive elements are arranged radially about the tool axis in a fan-type configuration. Due to their flexibility, they adapt ideally to the contours of the workpiece. The abrasive grain is embedded in a resinoid bond on the strong flexible backing cloth.

Advantages

- High flexibility.
- High stock removal due to aggressive coated abrasive product.
- Flaps wear off uniformly and without residue on the workpiece surface, ensuring adequate availability of sharp grit at all times.
- Due to the special mounting system, the face of the wheel can be worked up very close to the edges and corners.

Application Examples

- Fine grinding on large radii, e.g., during assembly of tanks, kitchens and process equipment
- Removal of major surface irregularities (e.g., weld dressing)
- Production of homogeneous surface patterns on large surfaces and contours with handheld power tools
- Fine-grinding in preparation of high-gloss polishing
- Also suitable for robotic and stationary usage

Recommendations for Use

- Flap wheels perform best at the recommended peripheral speed of 3,000 - 6,000 SFPM, where the optimum balance between stock removal, surface finishing quality, workpiece temperature loads and tool wear is achieved.
- Suitable drive systems include flexible shafts, straight grinders and bench grinders.
- The drive system must provide an output of 1,000 to 1,500 watts.

Factors Influencing the Grinding Result

- **Workpiece temperature load:**
  The heat load on the workpiece can be reduced substantially by working with reduced contact pressure and adding a cooling lubricant (grease/oil).
- **Tool wear:**
  To achieve higher stock removal rates it is recommended to use coarser grit rather than more contact pressure, which may result in premature tool wear and workpiece overheating.
- **Material removal rate:**
  To achieve higher stock removal it is recommended to use coarser grit rather than more contact pressure, which may result in premature tool wear and workpiece overheating.
- **Surface roughness:**
  Use of a higher peripheral speed will produce a slightly finer surface finish. Increasing the contact pressure will produce a somewhat coarser surface.
  The surface roughness obtained increases with the softness of the material (for tools of identical grit size).

Safety Notes

- Flap wheels must always be used with matching clamping flanges.
- The maximum approved peripheral speed is 9,800 SFPM.
- For safety reasons, it is imperative to remain within the stated RPM limit at all times.

Safety Recommendations

= Wear protective goggles!

= Use ear protection!

= Wear protective gloves!

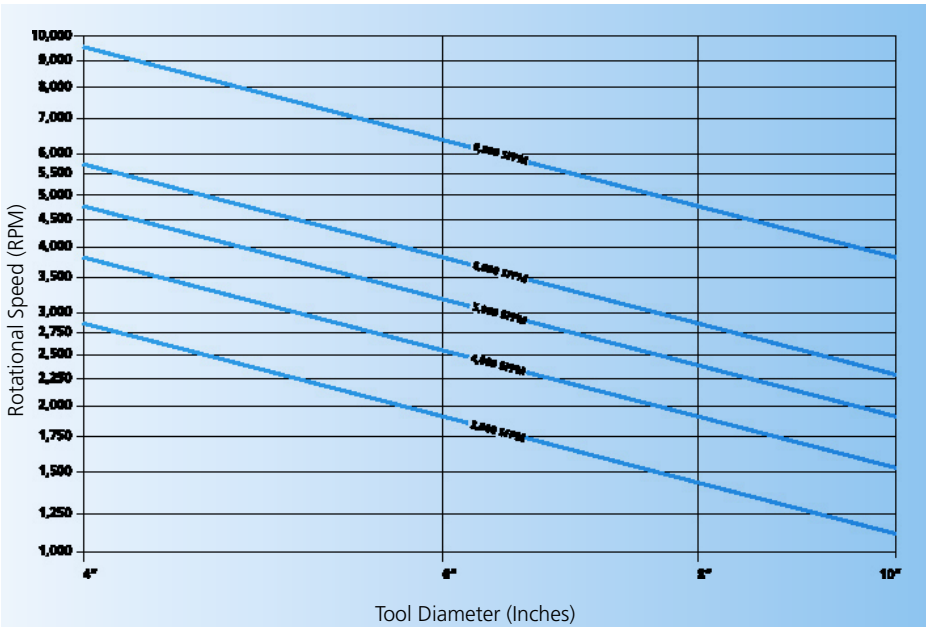
= Observe safety recommendations!

In the diagram, peripheral speeds are represented by blue diagonal lines. Each vertical line represents a tool diameter. From its point of intersection with the diagonal line for a given peripheral speed, proceed horizontally to the left margin where you will find the corresponding rotational speed (RPM) of the flap wheel and machine spindle.

Example

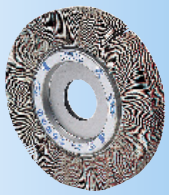
6" x 2" A 80 (EDP 45623)
Peripheral speed: 3,000 - 6,000 SFPM
Rotational speed: 1,800 - 3,800 RPM

Peripheral Speed of Unmounted Flap Wheels



Unmounted Flap Wheels

Mounted Flap Wheels
Aluminum Oxide A



Flap wheels with aluminum oxide A grain are universally suitable for all materials.

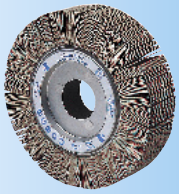
Abrasive
Aluminum Oxide A

Ordering Note
Please order drive arbor or reducer bushings separately (listed on page 28).

PFERD Specification Number
FR A

Diameter (Inches)	Width (Inches)	Bore	Grit and EDP Number							Recom. Speed RPM	Max. RPM	
			40	60	80	120	180	240	320			
4	1	5/8	45530	45532	45533	45535	45536	-	-	8,000	9,500	2
4	2	5/8	-	45552	45553	45555	45556	-	-	8,000	9,500	2
6	1	1	45600	45602	45603	45605	45607	45608	-	5,000	6,300	2
6	1-1/2	1	45610	45612	45613	45615	45616	45617	-	5,000	6,300	2
6	2	1	45620	45622	45623	45625	45626	45627	45628	5,000	6,300	2
8	1	1-3/4	-	45642	45643	45645	45646	45647	-	4,000	4,700	2
8	2	1-3/4	-	45652	45653	45655	45656	45657	-	4,000	4,700	2
10	2	1-3/4	-	45682	45683	45685	45686	45687	45688	1,800	3,800	2

Mounted Flap Wheels
Aluminum Oxide A-INOX



Flap wheels with aluminum oxide A-INOX abrasive are purpose-designed for use on stainless steel and high-temperature alloys. These tools provide high stock removal rates and particularly cool grinding action (abrasive will not load up).

Abrasive
Aluminum Oxide A-INOX (top-sized)

Ordering Note
Please order drive arbor or reducer bushings separately (listed on page 28).

PFERD Specification Number
FR A INOX

Diameter (Inches)	Width (Inches)	Bore	Grit and EDP Number				Recom. Speed RPM	Max. RPM	
			40-INOX	60-INOX	80-INOX	120-INOX			
6	1	1	45815	45816	45817	45818	5,000	6,300	2
6	1-1/2	1	45819	45820	45821	45822	5,000	6,300	2
6	2	1	45823	45824	45825	45826	5,000	6,300	2

Unmounted Flap Wheel Accessories

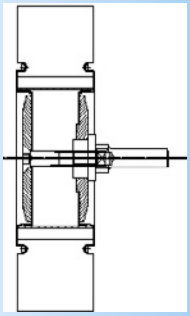
Arbors for Flap Wheels

These arbor and flange combinations are intended specially for mounting PFERD flap wheels and POLINOX® wheels.

The clamping flanges are accommodated in the tool recess. This design provides optimum face-down grinding, even near edges and corners.

Contents
1 arbor 1/2" clamping dia.
2 flanges
suitable clamping srews (for various flap wheel widths)

PFERD Specification Number
FR/VR



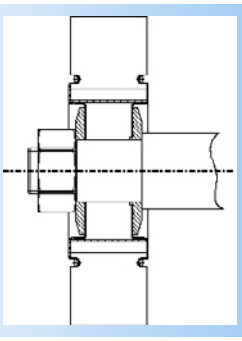
Shank Diameter (Inches)	Clamping Width (Inches)	Fits Flap Wheel I.D. (Inches)	For Wheel Diameter (Inches)	EDP Number	
1/2	1-2	1	4 - 6	45714	1
1/2	1-2	1-3/4	8 -10	45715	1

Flap Wheel Reducer Flanges

These reducing flanges can be used to mount PFERD flap wheels and POLINOX® wheels on a stationary machine (Bench Grinder).

Ordering Note
1 pair per box.

PFERD Specification Number
RF/FR

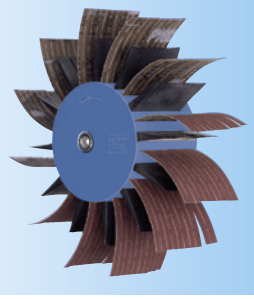


Fits Flap Wheel I.D. (Inches)	Bore (Inches)	For Wheel Diameter (Inches)	EDP Number	
1	1/2	4-6	45720	1
1	5/8	4-6	45721	1
1	3/4	4-6	45722	1
1-3/4	1/2	8-10	45725	1
1-3/4	5/8	8-10	45726	1
1-3/4	3/4	8-10	45727	1
1-3/4	1	8-10	45728	1

POLIFLAP® Wheels

POLIFLAP® Wheel, Abrasive Flaps, Rubber Flaps

POLIFLAP® Wheel



The POLIFLAP® wheel consists of a shank-mounted (3/8") hub carrying an array of rubber flaps. For use, appropriate abrasive flaps must be fitted between their rubber counterparts.
The combination arrangement of abrasive and rubber flaps results in a highly flexible tool.

Application Examples
- Redressing and restoration of surface textures
- Fine-grinding of radii, contours, curved areas or large surfaces
- Removal of fine secondary burr
- Removal of heat discoloration
- Surface cleaning

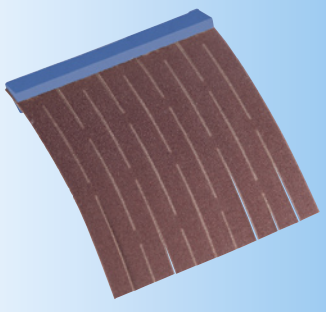
Recommendation for Use
This product is used preferably on straight grinders and flexible shaft systems. On stainless steel, an optimum surface finish is obtained in the 1,400 - 1,700 RPM speed range.

Ordering Note
POLIFLAP® wheels are supplied with rubber flaps but without abrasive flaps. Please order abrasive flaps separately, specifying the desired grit size (refer to the table below).

PFERD Specification Number
PFL

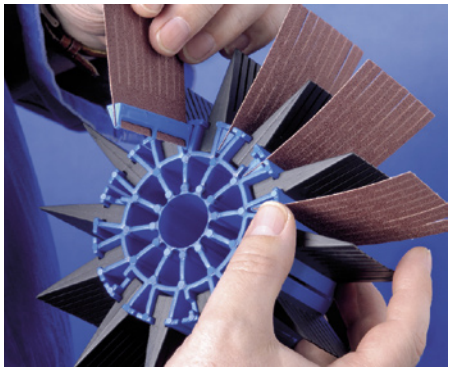
Diameter (Inches)	Width (Inches)	Shank Diameter (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
7	2-3/8	3/8	45950	1,500	3,500	1

POLIFLAP® Abrasive Flaps



Abrasive flaps are available in eight different grit sizes (refer to the table below) for different visual effects.
Worn abrasive flaps can be easily replaced on the POLIFLAP® wheel. A full set contains 12 abrasive flaps (1 pack).
Please order a starter set and any additional sets of abrasive flaps separately.

PFERD Specification Number
PFL-SL A



Dimensions (Inches)	Grit and EDP Number								
	60	80	100	120	150	180	220	320	
2-3/8 x 3	45960	45961	45962	45963	45964	45965	45966	45968	12

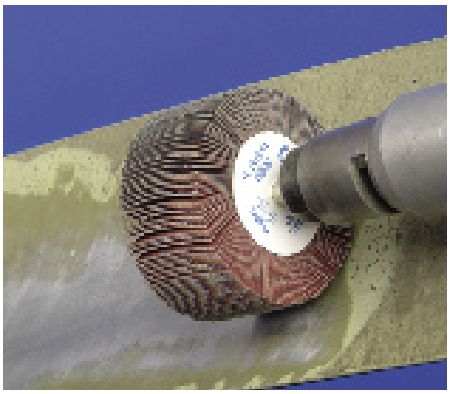
POLIFLAP® Rubber Flaps

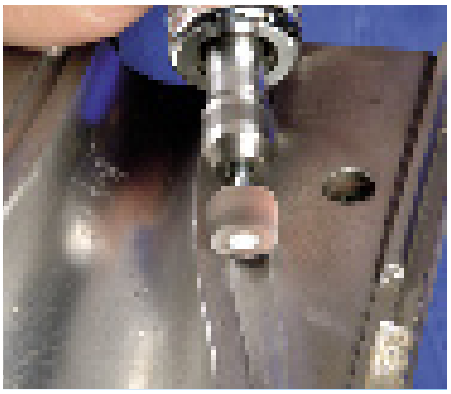
The rubber flaps placed between any two abrasive flaps support the grinding action and flexibility of this tool.
Worn rubber flaps can be easily replaced on the POLIFLAP® wheel. A full set contains 12 rubber flaps (1 pack).

PFERD Specification Number
PFL-GL

Dimensions (Inches)	EDP Number	
2 x 2	45951	12

Mounted Flap Wheels





PFERD flap wheels are constructed with coated abrasive elements arranged radially about the tool axis in a fan-type configuration. Due to their flexibility, they adapt ideally to the contours of the workpiece. The abrasive grain is embedded in a resinoid bond on the strong flexible backing cloth. Flap wheels are also available with threaded shank for quick change-ups.

Advantages

- High flexibility.
- High stock removal due to aggressive coated abrasive.
- Flaps wear off uniformly and without residue on the workpiece surface, ensuring adequate availability of sharp grit at all times.
- Due to the special cast core construction, the face of the tool can be worked up very close to the edges and corners.

Application Examples

- Fine-grinding of radii in tool, die and mold-making applications
- Grinding small or hard-to-reach surfaces in tank and process equipment construction
- Finishing work on valves and fittings made of non-ferrous metals or light alloys
- Grinding of turbine blades in jet engine assembly and maintenance

Recommendations for Use

- Flap wheels perform best at the recommended peripheral speed of 3,000 - 4,000 SFPM, where the optimum balance between stock removal, surface finishing quality, workpiece temperature loads and tool wear is achieved.
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders.

Factors Influencing the Grinding Result

- **Workpiece temperature load:**
  The heat load on the workpiece can be reduced substantially by working with reduced contact pressure and adding a cooling lubricant (grease/oil).
- **Tool wear:**
  Tool wear can be greatly reduced by working with a reduced contact pressure and adding a cooling lubricant (grease/ oil).
- **Material removal rate:**
  To achieve higher stock removal it is recommended to use coarser grit rather than more contact pressure, which may result in premature tool wear and excessive heat input into the workpiece.
- **Surface roughness:**
  Use of a higher peripheral speed will yield a slightly finer surface finish. Increasing the contact pressure will result in a somewhat coarser surface.
  The surface roughness obtained increases with the softness of the material (for tools of the same grit size).

Safety Notes

For safety reasons, it is imperative to remain within the stated RPM limit at all times. To maintain safe operating conditions, always ensure that:

- the shank clamping depth is at least 19/32"
- the maximum RPM limit is not exceeded with open shank lengths

Safety Recommendations

 = Wear protective goggles!

 = Use ear protection!

 = Wear protective gloves!

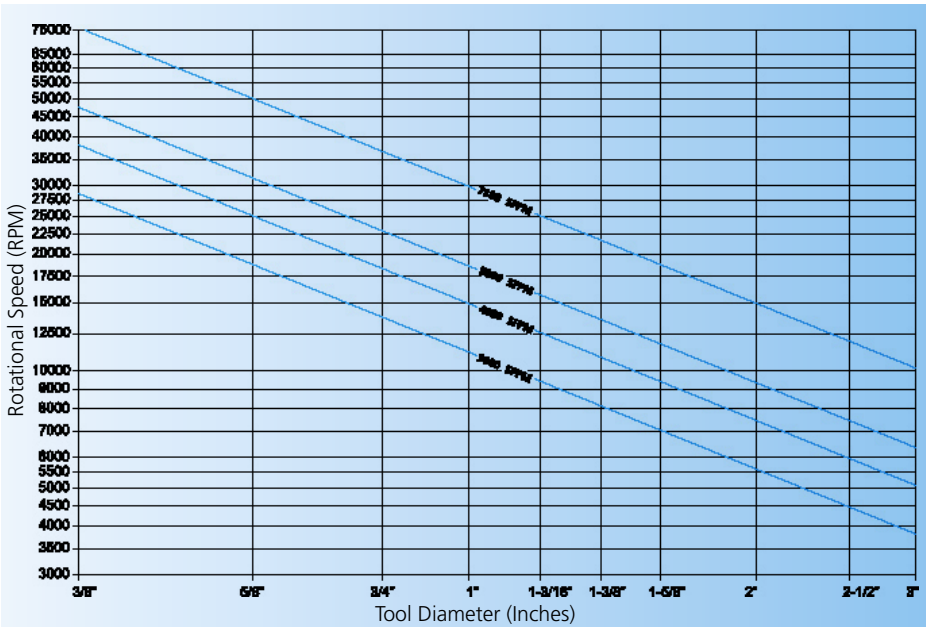
 = Observe safety recommendations!

In the diagram, peripheral speeds are represented by blue diagonal lines. Each vertical line represents a tool diameter. From its point of intersection with the diagonal line for a given peripheral speed, proceed horizontally to the left margin where you will find the corresponding rotational speed (RPM) of the flap wheel and machine spindle.

Example

2" x 1" A 80 (EDP 45239)
Peripheral speed: 3,000 - 4,000 SFPM
Rotational speed: 5,600 - 7,500 RPM

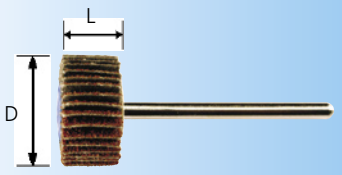
Peripheral Speed of Mounted Flap Wheels



Flap Wheels

Mounted Flap Wheels, Mini and Standard Size

Mini Mounted Flap Wheels
Aluminum Oxide A



Flap wheels with 1/8" shank and aluminum oxide A grain are universally suitable for all materials.

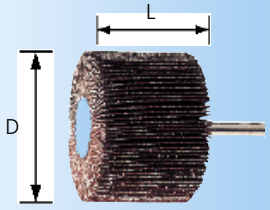
Application Examples
- Ideal for grinding in confined areas and hard-to-reach surfaces
- Tools are used in mold-making industry
- From coarse grinding to preparing polishing

Abrasive
Aluminum Oxide A

PFERD Specification Number
F A 8

Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit and EDP Number						Recom. Speed RPM	Max. RPM	
			60	80	120	180	240	320			
3/8	3/8	1/8	45070	45071	45072	45074	45075	45076	38,000	75,000	10
3/8	5/8	1/8	45077	45078	45079	45081	45082	45083	38,000	75,000	10
5/8	1/4	1/8	45084	45085	45086	45088	45089	45090	25,000	50,000	10
5/8	3/8	1/8	45091	45092	45093	45095	45096	45097	25,000	50,000	10
5/8	5/8	1/8	45098	45099	45100	45102	45103	45104	25,000	50,000	10
3/4	3/8	1/8	45154	45155	45156	45157	45158	45159	15,000	25,000	10
1	5/8	1/8	45166	45167	45168	45169	45170	45171	15,000	25,000	10
1	1	1/8	45178	45179	45180	45181	45182	45183	15,000	25,000	10
1-3/16	3/8	1/8	45013	45014	45015	45016	45017	45018	12,000	25,000	10

Mounted Flap Wheels
Aluminum Oxide A



Flap wheels with 1/4" shank and aluminum oxide A grain are universally suitable for all materials.

Abrasive
Aluminum Oxide A

PFERD Specification Number
F A 4

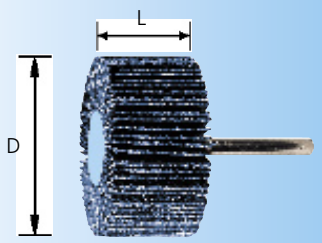
Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit and EDP Number							Recom. Speed RPM	Max. RPM	
			40	60	80	120	180	240	320			
3/4	3/8	1/4	-	45160	45161	45162	45163	45164	45165	15,000	25,000	10
1	5/8	1/4	-	45172	45173	45174	45175	45176	45177	15,000	25,000	10
1	1	1/4	45463	45184	45185	45186	45187	45188	45189	15,000	25,000	10
1-3/16	1/4	1/4	-	45007	45008	45009	45010	45011	45012	12,000	25,000	10
1-3/8	5/8	1/4	-	45226	45227	45228	45229	45230	45231	10,900	23,000	10
1-5/8	1/2	1/4	-	45245	45246	45247	45248	45249	45250	9,600	23,000	10
1-5/8	1	1/4	-	45232	45233	45234	45235	45236	45237	9,600	23,000	10
2	1/2	1/4	-	45251	45252	45253	45254	45255	45256	7,000	23,000	10
2	3/4	1/4	-	45258	45259	45260	45261	45262	45263	7,000	23,000	10
2	1	1/4	45461	45238	45239	45240	45241	45242	45243	7,000	23,000	10
2	1-1/2	1/4	-	45190	45191	45192	45193	45194	45195	7,000	15,000	10
2-1/2	1/2	1/4	-	45264	45265	45266	45267	45268	45269	6,300	23,000	10

Flap Wheels

Mounted Flap Wheels

Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit and EDP Number							Recom. Speed RPM	Max. RPM	
			40	60	80	120	180	240	320			
2-1/2	1	1/4	-	45270	45271	45272	45273	45274	45275	6,300	23,000	10
2-1/2	1-1/2	1/4	-	45276	45277	45278	-	-	-	6,300	13,000	10
3	1/2	1/4	-	45196	45197	45198	45199	45200	45201	4,800	20,000	10
3	3/4	1/4	-	45202	45203	45204	45205	45206	45207	4,800	20,000	10
3	1	1/4	45462	45208	45209	45210	45211	45212	45213	4,800	20,000	10
3	2	1/4	-	45214	45215	45216	45217	45218	45219	4,800	6,000	10

Mounted Flap Wheels
Zirconia Aluminia Z-INOX



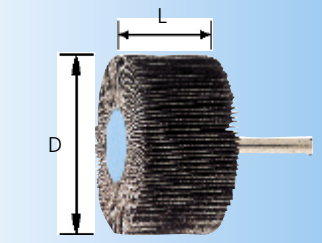
Flap wheels with Z-INOX abrasive are purpose-designed for use on stainless steel and high-temperature alloys.
These tools provide high stock removal rates and particularly cool grinding action (abrasive will not load up).

Abrasive
Zirconia Alumina Z-INOX (top-sized)

PFERD Specification Number
F Z INOX

Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit and EDP Number			Recom. Speed RPM	Max. RPM	
			60-INOX	80-INOX	120-INOX			
1	1	1/4	45465	45466	45467	15,000	25,000	10
1-5/8	1	1/4	45469	45470	45471	9,600	25,000	10
2	1	1/4	45473	45474	45475	7,000	23,000	10
2-1/2	1	1/4	45477	45478	45479	7,000	23,000	10
3	1	1/4	45481	45482	45483	4,800	20,000	10

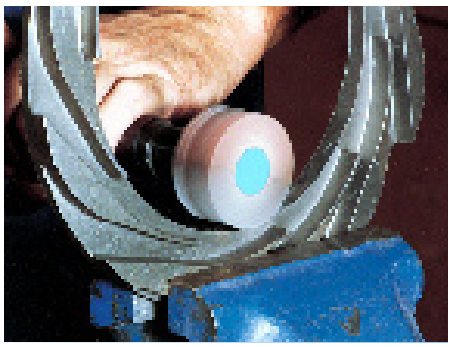
Mounted Flap Wheels
Silicon Carbide SiC



Flap wheels with silicon carbide (SiC) abrasive are suitable for use on hard and tough materials, like titanium and its alloys.
These tools have an excellent grinding effect on copper and bronze.
The SiC abrasive produces a particularly fine surface finish.

Abrasive
Silicon Carbide SiC

PFERD Specification Number
F C



Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit and EDP Number			Recom. Speed RPM	Max. RPM	
			60 SiC	80 SiC	120 SiC			
1	1	1/4	45485	45486	45487	15,000	25,000	10
2	1	1/4	45491	45492	45493	7,000	23,000	10
3	1	1/4	45494	45495	45496	4,800	20,000	10

Quick Change Flap Wheels, Accessories

Quick Change Flap Wheels
Aluminum Oxide A

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

Abrasive
Aluminum Oxide A

PFERD Specification Number
F A 4-20

Diameter (Inches)	Width (Inches)	Thread	Grit and EDP Number							Recom. Speed RPM	Max. RPM	
			40	60	80	120	180	240	320			
1	5/8	1/4-20	-	45300	45301	45302	45303	45304	-	15,000	25,000	10
1	1	1/4-20	-	45310	45311	45312	45313	45314	45315	15,000	25,000	10
1-3/8	5/8	1/4-20	-	45320	45321	45322	45323	-	-	9,600	23,000	10
1-5/8	1/2	1/4-20	-	45330	45331	45332	45333	-	-	9,600	23,000	10
1-5/8	1	1/4-20	-	45340	45341	45342	45343	-	-	9,600	23,000	10
2	1/2	1/4-20	-	45350	45351	45352	45353	-	-	7,000	23,000	10
2	3/4	1/4-20	-	45360	45361	45362	45363	-	-	7,000	23,000	10
2	1	1/4-20	45369	45370	45371	45372	45373	45374	45375	7,000	23,000	10
2	1-1/2	1/4-20	-	45380	45381	45382	-	-	-	7,000	15,000	10
2-1/2	1/2	1/4-20	-	45410	45411	45412	45413	45414	-	6,300	23,000	10
2-1/2	1	1/4-20	-	45420	45421	45422	45423	45424	45425	6,300	23,000	10
3	1/2	1/4-20	-	45430	45431	45432	45433	-	-	4,800	20,000	10
3	3/4	1/4-20	-	45440	45441	45442	-	-	-	4,800	20,000	10
3	1	1/4-20	45449	45450	45451	45452	45453	45454	45455	4,800	20,000	10

Threaded Shank Adapter
for Quick Change Flap Wheels

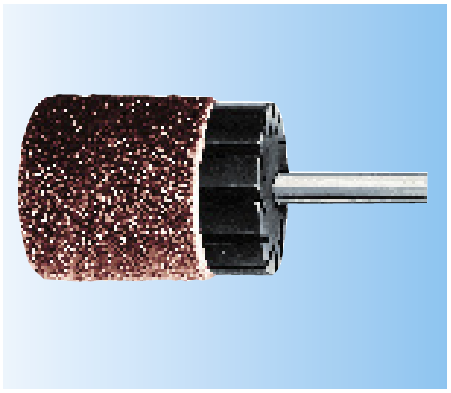
1/4" shank with 1/4-20 female thread.

PFERD Specification Number
QC-1/4-20

Shank Dia. (Inches)	Thread	EDP Number	
1/4	1/4-20	45299	10

Abrasive Spiral Bands, Drum Holders

Program Introduction



Rubber drum holders are reusable supports for our abrasive spiral bands. The PFERD range includes both cylindrical and tapered drum holders.

PFERD offers these tools in a variety of shapes, sizes, abrasive types and grit sizes.
A closely toleranced fit ensures that the sleeve will remain firmly secured to the drum holder during grinding.

Advantages

- PFERD offers an extensive range of abrasive spiral bands and drum holders.
- Drum holders are fully reusable.
- Slots allow the drum to expand during grinding, thereby tensioning the abrasive sleeve.
- A special manufacturing method ensures an outstanding tool life, even in heavy-duty use.
- Particularly high stock removal and very aggressive abrasive action.

Application Examples

- Weld dressing on structural steelwork.
- Fine grinding in tank and process equipment construction
- Rework in assembly and repair projects
- Refinement of edges and contours in jet engine construction

Recommendations for Use

- Sleeves are easily mounted and removed by a slight clockwise twist.
- Sleeves are easier to replace when the holder is mounted in a power tool.
- A secure fit of the sleeve is only ensured at RPM levels meeting or exceeding the specified minimum.
- Sleeves perform best at the recommended peripheral speed of 3,000 - 6,000 SFPM.
- The addition of grease or grinding oil is recommended, especially with long-chip or sticky materials.
- Loaded abrasive spiral bands can be cleaned with our ABRACLEAN® stick (refer to p. 55).

Safety Notes

- The maximum approved peripheral speed is 6,000 SFPM.
- For safety reasons, it is imperative to remain within the stated RPM limit.

Safety Recommendations

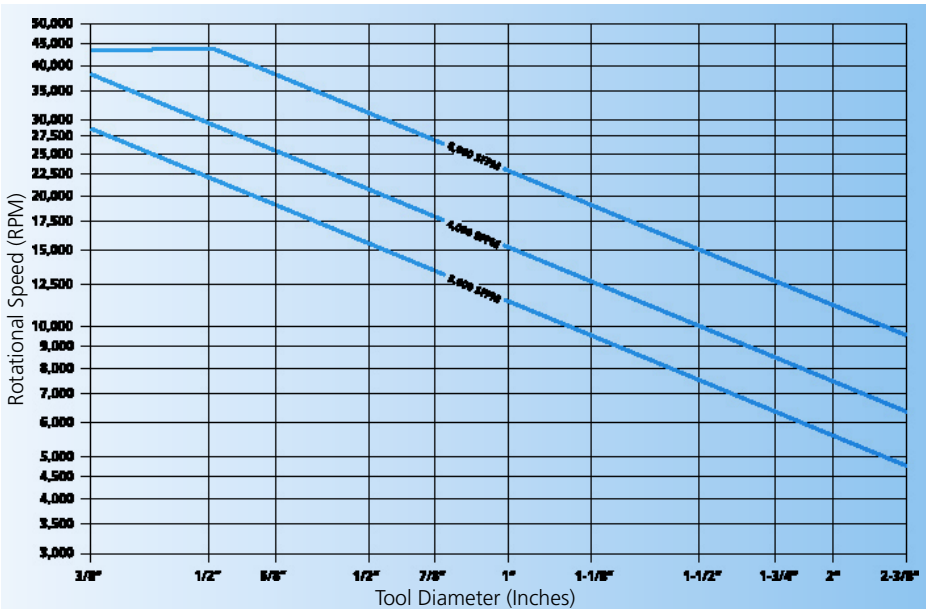
= Wear protective goggles!

= Use ear protection!

= Wear protective gloves!

= Observe safety recommendations!

Peripheral Speed of Abrasive Spiral Bands



In the diagram, peripheral speeds are represented by blue diagonal lines. Each vertical line represents a tool diameter. From its point of intersection with the diagonal line for a given peripheral speed, proceed horizontally to the left margin where you will find the corresponding rotational speed (RPM) of the tool and machine spindle.

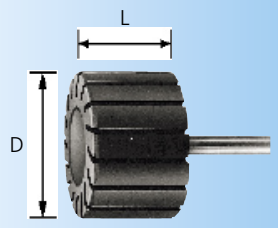
Example

1" x 1" A 60 (EDP 41982 + 41149)
Peripheral speed: 3,000 - 6,000 SFPM
Rotational speed: 15,000 - 22,500 RPM

Abrasive Spiral Bands, Drum Holders

Rubber Drum Holders

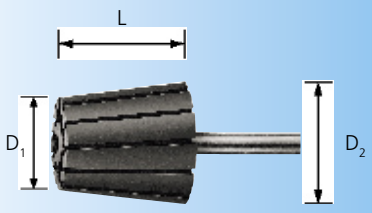
Rubber Drum Holders, Cylindrical Type



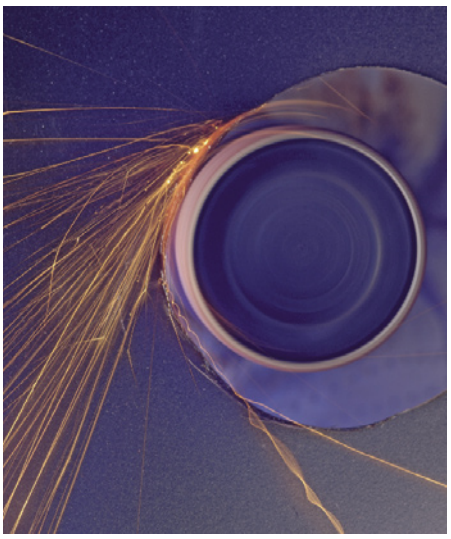
Slotted rubber drum holders available in cylindrical shape or tapered drum shape.

PFERD Specification Number
GK

Rubber Drum Holders, Tapered Type



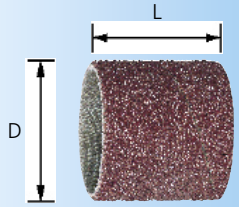
Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	EDP Number	Min. RPM	Max. RPM	
Cylindrical Type						
3/8	3/4	1/4	41966	30,000	44,000	5
1/2	1	1/4	41970	30,000	44,000	5
5/8	1-1/8	1/4	41973	26,000	36,000	5
3/4	1	1/4	41976	20,000	30,000	5
7/8	3/4	1/4	41979	18,000	26,000	5
1	1	1/4	41982	16,000	22,900	5
1-1/8	1-1/8	1/4	41985	13,000	19,100	5
1-1/2	1	1/4	41988	10,000	15,900	5
1-3/4	1-1/8	1/4	41991	8,500	12,700	5
2	1	1/4	41994	7,500	11,200	5
2-3/8	1-1/8	1/4	41997	6,500	9,500	5
Tapered Type						
3/4 x 1/2	2-1/2	1/4	42005	19,000	26,000	5
1-1/2 x 7/8	2-3/8	1/4	42006	13,000	19,100	5
1-1/8 x 7/8	2-3/16	1/4	42007	10,000	15,900	5



Abrasive Spiral Bands, Drum Holders

Abrasive Spiral Bands

Abrasive Spiral Bands, Cylindrical Type Aluminum Oxide A

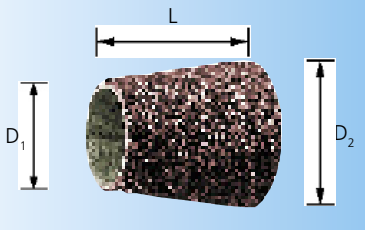


Abrasive spiral bands with aluminum oxide grain are universally suitable for many materials. Available in cylindrical shape or tapered drum shape.

Abrasive
Aluminum Oxide A

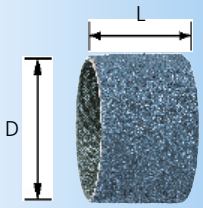
PFERD Specification Number
GSB A

Abrasive Spiral Bands, Tapered Type Aluminum Oxide A



Diameter [D] (Inches)	Length [L] (Inches)	Grit and EDP Number 40	50	60	80	150	240	Suitable Holder	Recom. Speed RPM	
Cylindrical Type										
3/8	3/4	-	-	-	41022	41023	41024	EDP 41966	30,000 - 44,000	100
1/2	1	-	-	-	41046	41049	41051	EDP 41970	30,000 - 44,000	100
5/8	1-1/8	-	41068	41069	41070	41072	41074	EDP 41973	26,000 - 36,000	100
3/4	1	-	-	41102	41103	41106	-	EDP 41976	20,000 - 30,000	100
7/8	3/4	-	41131	41132	41133	41135	41137	EDP 41979	18,000 - 26,000	100
1	1	-	-	41149	41150	41153	-	EDP 41982	16,000 - 22,900	100
1-1/8	1-1/8	41190	41191	41192	41193	41195	41197	EDP 41985	13,000 - 19,100	100
1-1/2	1	41200	-	41202	41203	41206	-	EDP 41988	10,000 - 15,900	100
1-3/4	1-1/8	41238	41239	41240	41241	41243	41245	EDP 41991	8,500 - 12,700	100
2	1	41248	-	41250	41251	41254	41256	EDP 41994	7,500 - 11,200	100
2-3/8	1-1/8	41295	41296	41297	41298	41300	-	EDP 41997	6,500 - 9,500	100
Tapered Type										
3/4 x 1/2	2-1/2	41350	-	41351	41352	41353	-	EDP 42005	18,500-26,000	100
1-1/8 x 7/8	2-3/16	41355	-	41356	41357	41358	-	EDP 42006	13,000-19,100	100
1-1/2 x 7/8	2-3/8	41360	-	41361	41362	41363	-	EDP 42007	10,000-15,900	100

Abrasive Spiral Bands, Cylindrical Type INOX



The INOX version of these abrasive bands provides particularly cool grinding action, preventing tool loading. It is therefore preferable for use on stainless steel.

High abrasive performance and long service life are the hallmarks of these tools.

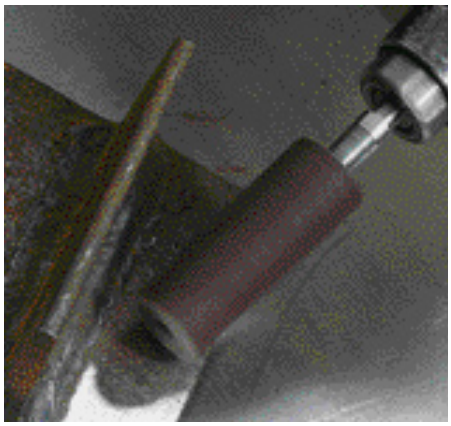
Abrasive
Grit 36, 50, 80 = Zirconia Aluminia Z (top-sized)
Grit 150 = Aluminum Oxide A (top-sized)

PFERD Specification Number
GSB INOX

Diameter [D] (Inches)	Length [L] (Inches)	Grit and EDP Number 36	50	80	150	Suitable Holder	Recom. Speed RPM	
5/8	1-1/8	-	41405	41406	41407	EDP 41973	26,000 - 36,000	100
7/8	3/4	-	41408	41409	41410	EDP 41979	18,000 - 26,000	100
1-1/8	1-1/8	41415	41416	41417	41418	EDP 41985	13,000 - 19,100	100
1-3/4	1-1/8	41419	41420	41421	41422	EDP 41991	8,500 - 12,700	100
2-3/8	1-1/8	41427	41428	41429	41430	EDP 41997	6,500 - 9,500	100

POLIROLL®

Program Introduction,Tapered Cartridge Rolls



POLIROLL® cartridge rolls consist of a spiral-wound coated abrasive. The grit is embedded in a resinoid bond on the strong cloth backing material for maximum grinding effectiveness.

The tool is held securely in place during grinding by a grooved tapered arbor.

PFERD's program includes both cylindrical and tapered abrasive rolls.

Advantages

- POLIROLL® tools are ideal for grinding in confined areas.
- Fresh grain is exposed in successive layers as the outer coated abrasive wears off.
- Very good stock removal performance.
- Special arbor for easy tool replacement.

Application Examples

- Deburring on bores and in hard-to-reach places
- Fillet weld dressing on metal structures
- Removal of flash on castings

Recommendations for Use

- Always grind with the tip and not with the full roll surface as this would cause thermal weakening of the adhesive bond.
- Tools must be placed on the arbor with their adhesive-bonded end.

Safety Notes

- The maximum approved peripheral speed for these tools is 2,300 SFPM.
- For safety reasons, it is imperative to remain within the stated RPM limit at all times.

Safety Recommendations

= Wear protective goggles!

= Use ear protection!

= Wear protective gloves!

= Observe safety recommendations!

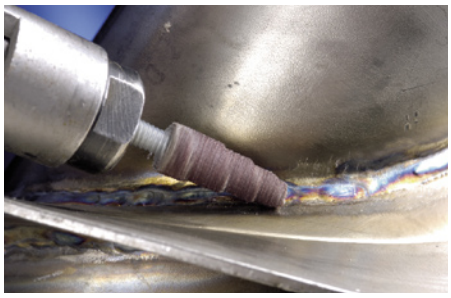
204

POLIROLL®
Tapered Cartridge Rolls

Abrasive
Aluminum Oxide (A)

Ordering Note
Please order the arbors separately.

PFERD Specification Number
PRK



Diameter (Inches)	Width (Inches)	Bore (Inches)	Grit and EDP Number				Suitable Arbors	Recom. Speed RPM	Max. RPM	
			60	80	120	180				
3/8	1	1/8	41800	41801	41803	41804	EDP 42060	16,000	24,000	50
3/8	1-1/2	1/8	41807	41808	41810	41811	EDP 42061	16,000	24,000	50
1/2	1	1/8	41817	41818	41820	41821	EDP 42060	12,000	18,000	50
1/2	1-1/2	1/8	41827	41828	41830	41831	EDP 42061	12,000	18,000	50
1/2	2	1/8	41837	41838	41840	41841	EDP 42062	12,000	18,000	50
3/4	1-1/2	3/16	41874	41875	41876	-	EDP 42063	8,000	12,000	50
3/4	2	3/16	41882	41883	41884	-	EDP 42064	8,000	12,000	50

POLIROLL® Cartridge Rolls and Arbors

POLIROLL®
Untapered Cartridge Rolls

Abrasive
Aluminum Oxide (A)

Ordering Note
Please order the arbors separately.

PFERD Specification Number
PR

Diameter (Inches)	Width (Inches)	Bore (Inches)	Grit and EDP Number								Suitable Arbors	Recom. Speed RPM	Max. RPM	
			36	60	80	100	120	180	240	320				
1/4	1	1/8	-	41468	41469	41470	41471	41473	41474	41475	EDP 42060	20,000	25,000	50
1/4	1-1/2	1/8	-	41479	41480	41481	41482	41484	41485	41486	EDP 42061	20,000	25,000	50
5/16	1-1/2	1/8	-	41512	41513	41514	41515	-	-	-	EDP 42061	18,500	23,000	50
3/8	1	1/8	-	41523	41524	41525	41526	-	-	-	EDP 42060	16,000	24,000	50
3/8	1-1/2	1/8	-	41534	41535	41536	41537	41539	41540	41541	EDP 42061	16,000	24,000	50
3/8	2	1/8	-	41545	41546	41547	41548	-	-	-	EDP 42062	16,000	24,000	50
1/2	1	1/8	-	41567	41568	41569	41570	-	-	-	EDP 42060	12,000	18,000	50
1/2	1-1/2	1/8	41586	41589	41590	41591	41592	41594	41595	41596	EDP 42061	12,000	18,000	50
1/2	2	1/8	-	41600	41601	41602	41603	-	-	-	EDP 42062	12,000	18,000	50
5/8	1-1/2	1/8	-	41633	41634	41635	41636	-	-	-	EDP 42061	9,500	15,000	50
3/4	1	1/8	-	41666	41667	41668	41669	-	-	-	EDP 42060	8,000	12,000	50
3/4	1-1/2	3/16	41674	41677	41678	41679	41680	-	-	-	EDP 42063	8,000	12,000	50
3/4	2	3/16	-	41721	41722	41723	41724	-	-	-	EDP 42064	8,000	12,000	50
1	1-1/2	1/4	41740	41743	41744	41745	41746	-	-	-	EDP 42066	6,000	9,000	25
1	2	1/4	-	41776	41777	41778	41779	-	-	-	EDP 42067	6,000	9,000	25

Arbors for POLIROLL® Cartridge Rolls

These arbors are intended specially for untapered and tapered POLIROLL® cartridge rolls.

PFERD Specification Number
PRBO

Shank Diameter (Inches)	Pilot Hole (Inches)	Pilot Length (Inches)	EDP Number	Max. RPM	
1/4	1/8	1	42060	25,000	1
1/4	1/8	1-1/2	42061	25,000	1
1/4	1/8	2	42062	24,000	1
1/4	3/16	1-1/2	42063	12,000	1
1/4	3/16	2	42064	12,000	1
1/4	1/4	1-1/2	42066	9,000	1
1/4	1/4	2	42067	9,000	1

Program Introduction

POLICAP® abrasive caps and cones are mounted on reusable cap and cone holders.
Due to their seamless design, POLICAP® abrasive caps and cones grind effectively with their entire surface area. A closely toleranced fit keeps the abrasive cap or cone securely attached to its holder.

PFERD supplies POLICAP® tools in diverse shapes, dimensions and grit sizes.

Advantages

- The PFERD range comprises an extensive selection of POLICAP® abrasive caps and cones.
- Cap and cone holders are fully reusable.
- Slots in the holder facilitate its expansion, locking the tool firmly in place.
- The special manufacturing process guarantees good shapeholding and excellent fine-grinding properties.
- Easy tool replacement.

Application Examples

- Fine grinding in tool, die and mold-making applications.
- Grinding in hard-to-reach areas and bores.

Recommendations for Use

- Abrasive caps and cones are mounted and removed with a slight clockwise twist.
- Abrasive caps and cones are easier to replace with the holder mounted on the power tool.
- Abrasive cones perform best at a recommended peripheral speed of 2,000 - 4,000 SFPM.

Safety Notes

- The maximum approved peripheral speed is 5,000 SFPM.
- For safety reasons, it is imperative to remain within the stated RPM limit at all times.

Safety Recommendations

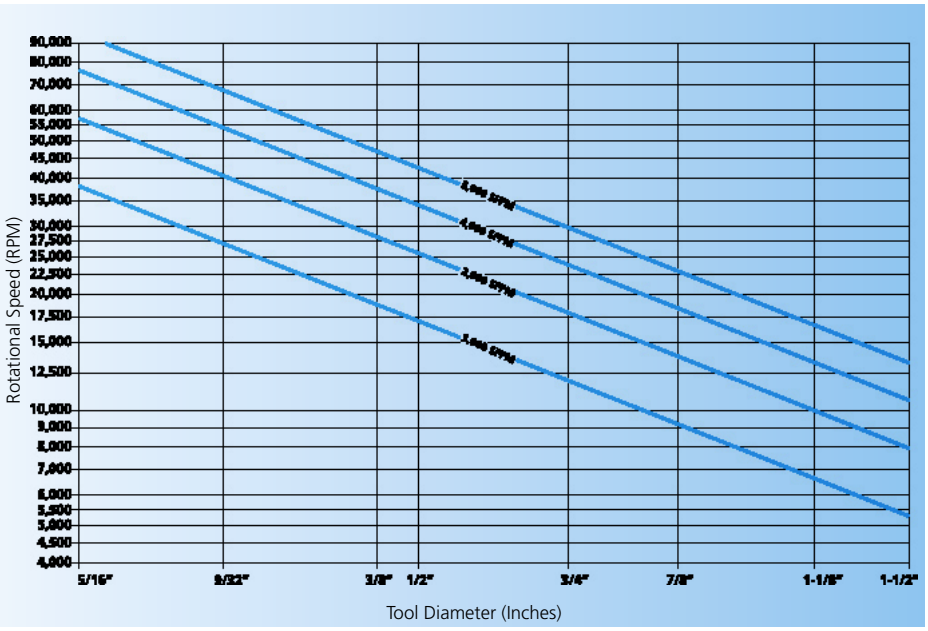
= Wear protective goggles!

= Use ear protection!

= Wear protective gloves!

= Observe safety recommendations!

Peripheral Speed of POLICAP® Tools



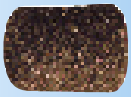
In the diagram, peripheral speeds are represented by blue diagonal lines. Each vertical line represents a tool diameter. From its point of intersection with the diagonal line for a given peripheral speed, proceed horizontally to the left margin where you will find the corresponding rotational speed (RPM) of the POLICAP® tool and machine spindle.

Example

Shape A
Diameter 3/8"
EDP: 42010 (holder), 46036 (cap)
Peripheral speed: 2,000 - 4,000 SFPM
Rotational speed: 19,000 - 38,000 RPM

POLICAP® Abrasive Caps and Holders, Set

POLICAP® Abrasive Cap
Shape A



Cylindrical shape.

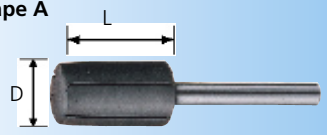
Abrasive
Aluminum Oxide A

Grit Size Color Code
brown = 60 and 80 grit
black = 150 grit
reddish brown = 280 grit

PFERD Specification Number
PC A A

Diameter (Inches)	Length (Inches)	Grit and EDP Number				Suitable Holder	
		60	80	150	280		
3/16	3/8	-	46029	46030	46031	EDP 42008	50
9/32	1/2	46032	-	46033	46034	EDP 42009	50
3/8	5/8	46035	-	46036	46037	EDP 42010	50
1/2	11/16	46065	-	46066	46067	EDP 42021	50
5/8	1	46068	-	46069	46070	EDP 42022	50

POLICAP® Abrasive Cap Holder
Shape A

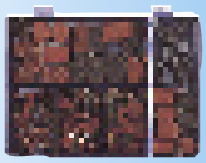


Cylindrical shape.

PFERD Specification Number
PCT A

Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
3/16	3/8	1/8	42008	40,000	95,000	5
9/32	1/2	1/8	42009	30,000	65,000	5
3/8	5/8	1/8	42010	20,000	45,000	5
1/2	11/16	1/4	42021	16,000	35,000	5
5/8	1	1/4	42022	12,000	30,000	5

POLICAP® Tool Set
Shape A



POLICAP® shape A set contains 105 abrasive caps in various sizes and grits, and 5 rubber expanding heads, including all EDP numbers above. Cylindrical shape.

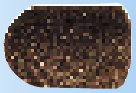
Contents – PCS 110 A:
10 ea. - POLICAP® abrasive caps 3/16" - 9/32"
5 ea. - POLICAP® abrasive caps 3/8" - 5/8"
1 ea. - POLICAP® abrasive cap holders

PFERD Specification Number
PCS 110 A

Case Dimensions (Inches)	EDP Number	
7 x 5-3/4 x 1-1/2	46093	1

POLICAP® Abrasive Caps and Holders, Set

POLICAP® Abrasive Cap
Shape C



Cylindrical shape with radius end.

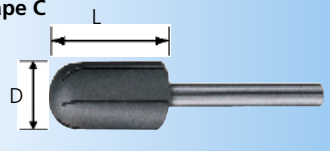
Abrasive
Aluminum Oxide A

Grit Size Color Code
brown = 60 and 80 grit
black = 150 grit
reddish brown = 280 grit

PFERD Specification Number
PC C A

Diameter (Inches)	Length (Inches)	Grit and EDP Number				Suitable Holder	
		60	80	150	280		
3/16	3/8	-	46038	46039	46040	EDP 42011	50
9/32	1/2	46041	-	46042	46043	EDP 42012	50
3/8	5/8	46044	-	46045	46046	EDP 42013	50
1/2	11/16	46071	-	46072	46073	EDP 42023	50
5/8	1	46074	-	46075	46076	EDP 42024	50

POLICAP® Abrasive Cap Holder
Shape C

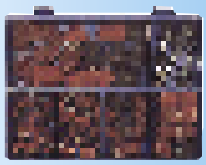


Cylindrical shape with radius end.

PFERD Specification Number
PCT C

Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
3/16	3/8	1/8	42011	40,000	95,000	5
9/32	1/2	1/8	42012	30,000	65,000	5
3/8	5/8	1/8	42013	20,000	45,000	5
1/2	11/16	1/4	42023	16,000	35,000	5
5/8	1	1/4	42024	12,000	30,000	5

POLICAP® Tool Set
Shape C



POLICAP® shape C set contains 105 abrasive caps in various sizes and grits, and 5 rubber expanding heads, including all EDP numbers above. Cylindrical shape with radius end.

Contents – PCS 110 C:
10 ea. - POLICAP® abrasive caps 3/16" - 9/32"
5 ea. - POLICAP® abrasive caps 3/-8" - 5/8"
1 ea. - POLICAP® abrasive cap holders

PFERD Specification Number
PCS 110 C

Case Dimensions (Inches)	EDP Number	
7 x 5-3/4 x 1-1/2	46094	1

POLICAP® Abrasive Caps and Holders, Set

POLICAP® Abrasive Cap
Shape G

Cylindrical shape with pointed cone end.

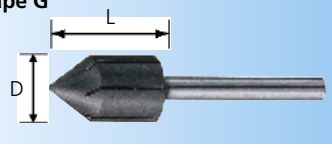
Abrasive
Aluminum Oxide A

Grit Size Color Code
brown = 60 and 80 grit
black = 150 grit
reddish brown = 280 grit

PFERD Specification Number
PC G A

Diameter (Inches)	Length (Inches)	Grit and EDP Number 60	80	150	280	Suitable Holder	
3/16	3/8	-	46047	46048	46049	EDP 42014	50
9/32	1/2	46050	-	46051	46052	EDP 42015	50
3/8	5/8	46053	-	46054	46055	EDP 42016	50
1/2	11/16	46077	-	46078	46079	EDP 42025	50
5/8	1	46080	-	46081	46082	EDP 42026	50

POLICAP® Abrasive Cap Holder
Shape G



Cylindrical shape with pointed cone end.

PFERD Specification Number
PCT G

Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
3/16	3/8	1/8	42014	40,000	95,000	5
9/32	1/2	1/8	42015	30,000	65,000	5
3/8	5/8	1/8	42016	20,000	45,000	5
1/2	11/16	1/4	42025	16,000	35,000	5
5/8	1	1/4	42026	12,000	30,000	5

POLICAP® Tool Set
Shape G

POLICAP® shape G set contains 105 abrasive caps in various sizes and grits, and 5 rubber expanding heads, including all EDP numbers above. Cylindrical shape with pointed cone end.

Contents – PCS 110 G:
10 ea. - POLICAP® abrasive caps 3/16" - 9/32"
5 ea. - POLICAP® abrasive caps 3/8" - 5/8"
1 ea. - POLICAP® abrasive cap holders

PFERD Specification Number
PCS 110 G

Case Dimensions (Inches)	EDP Number	
7 x 5-3/4 x 1-1/2	46095	1

POLICAP® Abrasive Caps and Holders, Sets

POLICAP® Abrasive Cap
Shape L

Tapered cylindrical shape.

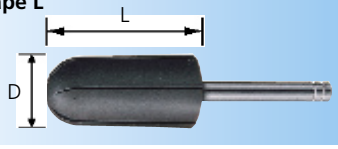
Abrasive
Aluminum Oxide A

Grit Size Color Code
brown = 60 and 80 grit
black = 150 grit
reddish brown = 280 grit

PFERD Specification Number
PC L A

Diameter (Inches)	Length (Inches)	Grit and EDP Number				Suitable Holder	
		60	80	150	280		
1/4	5/8	-	46083	46084	46085	EDP 42017	50
7/16	1	46056	-	46057	46058	EDP 42018	50
5/8	1-1/4	46059	-	46060	46061	EDP 42019	50
27/32	1-9/16	46062	-	46063	46064	EDP 42020	50

POLICAP® Abrasive Cap Holder
Shape L

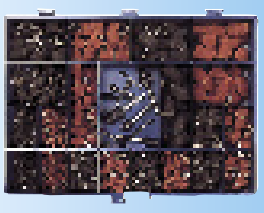


Tapered cylindrical shape.

PFERD Specification Number
PCT L

Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
1/4	5/8	1/4	42017	40,000	95,000	5
7/16	1	1/4	42018	20,000	40,000	5
5/8	1-1/4	1/4	42019	12,000	30,000	5
27/32	1-9/16	1/4	42020	9,000	20,000	5

POLICAP® Tool Sets



POLICAP® set 285 contains 270 abrasive caps in various sizes and grits, and 15 rubber expanding heads, shapes A, C, and G.

POLICAP® set 650 contains 640 abrasive caps in various sizes and grits, and 10 rubber expanding heads, shapes A and G.

PFERD Specification Number
PCS 285
PCS 650

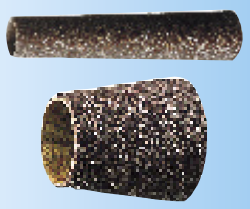
Contents – PCS 285:
90 pcs. POLICAP® abrasive caps, shape A
90 pcs. POLICAP® abrasive caps, shape C
90 pcs. POLICAP® abrasive caps, shape G
in five dimensions and three grit sizes.
15 pcs. POLICAP® abrasive cap holders

Contents – PCS 650:
320 pcs. POLICAP® abrasive caps, shape A
320 pcs. POLICAP® abrasive caps, shape G
in five dimensions and three grit sizes.
10 pcs. POLICAP® abrasive cap holders

Case Dimensions (Inches)	EDP Number		
	PCS 650	PCS 285	
13 x 9-1/4 x 2	46090	46091	1

POLICAP® Abrasive Caps and Holders

POLICAP® Abrasive Cap
Seamless Type



Tapered cylindrical shape.

Abrasive
Aluminum Oxide A

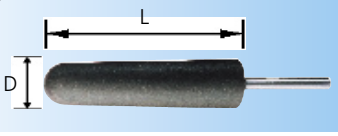
Grit Size Color Code
brown = 60 grit
black = 150 grit
reddish brown = 280 grit

PFERD Specification Number
PCH L A

Diameter (Inches)	Length (Inches)	Grit and EDP Number 60	150	280	Suitable Holder	
5/16	3-3/8	46008	46009	46010	EDP 42001	10
1/2	3-3/8	46011	46012	46013	EDP 42002	10
3/4	3-3/8	46014	46015	46016	EDP 42003	10
7/8	3-3/8	46017	46018	46019	EDP 42004	10
3/4 x 1/2	2-1/2	46020	46021	46022	EDP 42005	10
1-1/2 x 7/8	2-3/8	46023	46024	46025	EDP 42006	10
1-1/8 x 7/8	2-3/16	46026	46027	46028	EDP 42007	10

204

POLICAP® Rubber Abrasive
Cylindrical Cone Holders



Tapered cylindrical shape.

PFERD Specification Number
PCT L

Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
5/16	3-3/8	1/4	42001	12,000	20,000	5
1/2	3-3/8	1/4	42002	12,000	15,000	5
3/4	3-3/8	1/4	42003	12,000	13,000	5
7/8	3-3/8	1/4	42004	12,000	12,000	5

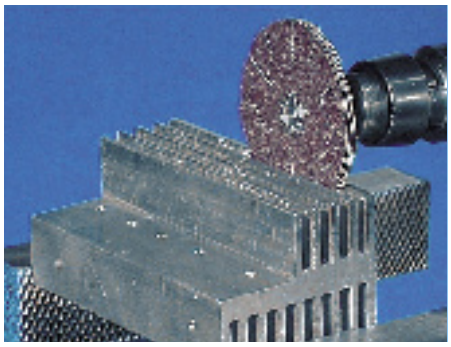
POLICAP® Rubber Abrasive
Tapered Cone Holders

Tapered drum shape.

PFERD Specification Number
GK

Diameter [D_1] x [D_2] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	EDP Number	Min. RPM	Max. RPM	
3/4 x 1/2	2-1/2	1/4	42005	19,000	26,000	5
1-1/2 x 7/8	2-3/8	1/4	42006	13,000	19,100	5
1-1/8 x 7/8	2-3/16	1/4	42007	10,000	15,900	5

Overlap Slotted Discs

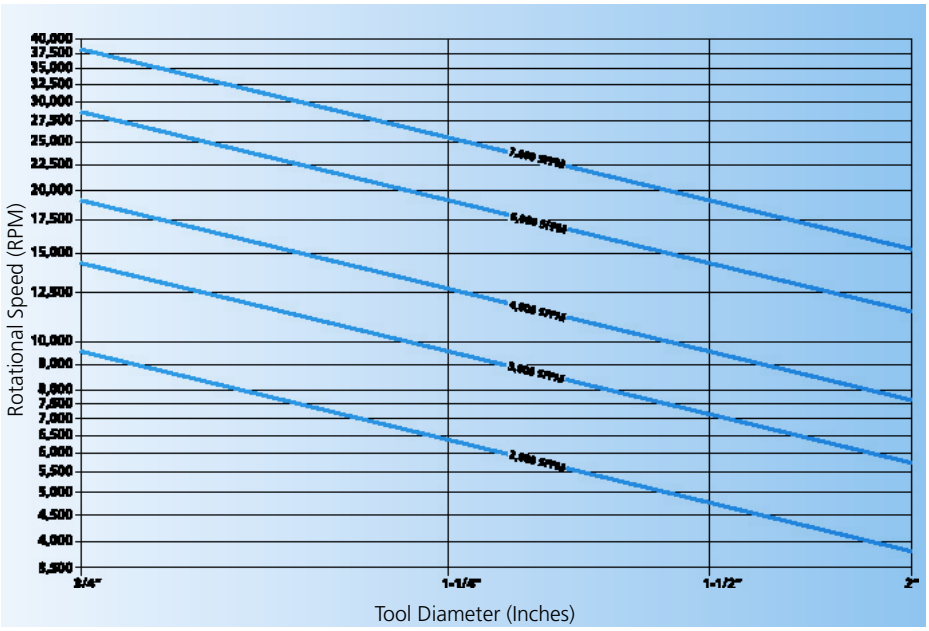


In the diagram, peripheral speeds are represented by blue diagonal lines. Each vertical line represents a tool diameter. From its point of intersection with the diagonal line for a given peripheral speed, proceed horizontally to the left margin where you will find the corresponding rotational speed of the overlap slotted disc and POLISTAR (machine spindle RPM).

Example

Overlap slotted disc 1-1/4" (EDP 42865)
Peripheral speed: 3,000 SFPM
Rotational speed: 7,600 RPM

Peripheral Speed of Overlap Discs and POLISTAR



Safety Note

For safety reasons, it is imperative to remain within the stated RPM limit at all times.

Overlap Slotted Discs

Overlap slotted discs are special-purpose tools for lateral grinding work in grooves and slot areas. They are mounted via a central threaded hub.

Advantages

- Tool provides abrasive action on both its front and rear side.
- The two-sided overlapping fan structure is flexible and ideal for deburring in grooves, slots and finned structures.

Recommendation for Use
By holding the tool at an angle it is possible to machine opposing slot faces simultaneously.

Ordering Note
Please order arbors separately.

PFERD Specification Number
KS A

Diameter (Inches)	Grit Size	No. of Layers	EDP Number	Suitable Arbor	Max. RPM	
1-1/4	80	4	42865	EDP 42855	12,000	20
2	80	4	42882	EDP 42856	8,000	20

Arbors for Overlap Slotted Discs

Reduces setup times significantly. Discs can be changed without removing the arbor from the collet mounted in the machine.

PFERD Specification Number
BO 6

Shank Dia. (Inches)	Shank Length (Inches)	Thread (Inches)	EDP Number	Suitable Tool	
1/4	1-1/4	1/4	42855	EDP 42865	20
1/4	1-1/4	1/8	42856	EDP 42882	20

POLISTAR

POLISTAR pads are flexible tools for grinding on internal surfaces of bores or pipes.

Advantages

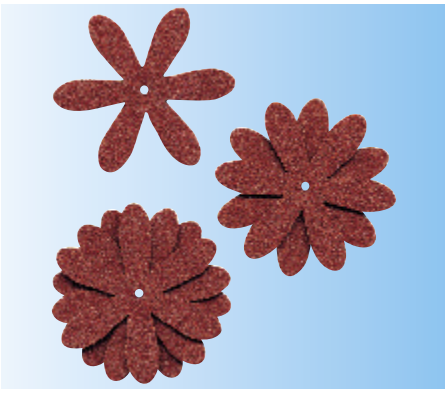
- High flexibility.
- Perfect for grinding internal surfaces of small-diameter bores or pipes.
- Their small sizes makes these tools particularly suitable for the 1/4" - 1-1/2" diameter range:

Recommendations for Use

POLISTAR tools perform best at the recommended peripheral speed of 3,000 - 4,000 SFPM.

POLISTAR pads can be stacked in several layers. To benefit from a maximum abrasive surface area, ensure that the lobes of the individual star pads are aligned offset.

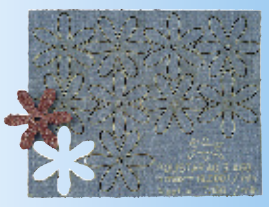
3/4" Dia. POLISTAR for 1/4" to 9/16" ID
1-1/4" Dia. POLISTAR for 3/16" to 3/4" ID
1-1/2" Dia. POLISTAR for 9/16" to 1" ID
2" Dia. POLISTAR for 3/4" to 1-1/2" ID



Safety Note

For safety reasons, it is imperative to remain within the stated RPM limit at all times.

POLISTAR



Application Examples

- Cleaning, fine grinding and ultrafine finishing of bores
- Post-weld removal of metal discolorations in stainless steel pipes
- Inlet and outlet radiusing of bores/holes
- Light deburring work on bores (removal of secondary burrs) in preparation of coating
- Deburring in cross-bores

Abrasive
Aluminum Oxide A

Ordering Note
Please order arbors separately.
POLISTAR tools come in sheets.
Each sheet contains the following quantities:
3/4" and 1-1/4" dia.: 25 pcs.
1-1/2" and 2" dia.: 10 pcs.

PFERD Specification Number
PST A

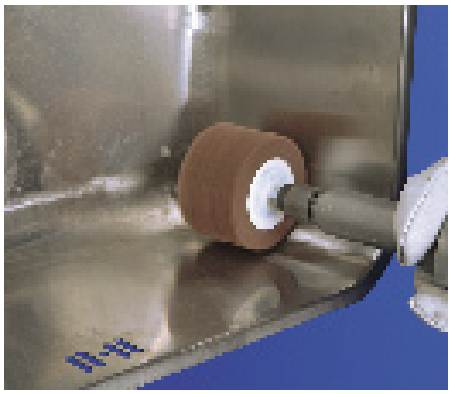
Diameter (Inches)	Bore (Inches)	Grit and EDP Number			Recom. Speed RPM	Max. RPM	Suitable Arbor	
		36	50	120				
3/4	1/16	44070	44071	44072	15,000	38,000	EDP 44061	100
1-1/4	1/16	44080	44081	44082	9,500	25,000	EDP 44061	100
1-1/2	1/8	44085	44086	44087	7,200	19,000	EDP 44060	100
2	1/8	44090	44091	44092	5,700	15,000	EDP 44060	100

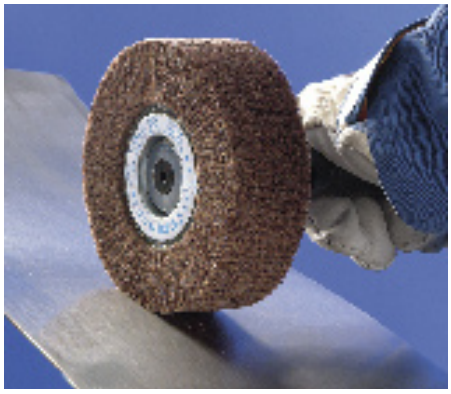
Arbors for POLISTAR

Reduces setup times significantly. Pads can be changed without removing the arbor from the collet mounted in the machine.

Shank Dia. (Inches)	Mounting Dia. (Inches)	Clamping Width (Inches)	EDP Number	
1/4	1/8	1/32 - 1/4	44060	1
1/8	1/16	1/32 - 3/16	44061	1

POLINOX® Mounted and Unmounted Flap Wheels





POLINOX® mounted and unmounted flap wheels are manufactured with abrasive impregnated nylon filament. The flexible open-cell structure of the non-woven material gives very elastic and cool-grinding properties. Due to the flexibility of the non-woven fleece, the tool will not alter the surface geometry of the workpiece in any way. Different surface textures and roughness levels can be obtained by selecting from a range of grit sizes, abrasive grains, and tool designs.

Advantages

- No heat buildup during grinding.
- Extensive and diverse range of dimensions, grit sizes, and tool types.

Application Examples

- Matt and satin-finishing of metals
- Non-ferrous metal depolishing
- Cleaning of oxidized non-ferrous metals
- Continuous matt finishing of stainless steel (without visible transitions)
- Surface roughening of plastics in preparation for adhesive bonding

Recommendations for Use

- POLINOX® mounted points and ring wheels perform best at the recommended peripheral speed of 2,000 - 4,000 SFPM, where the optimum balance between stock removal, surface finishing quality, workpiece temperature loads and tool wear is achieved.
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders.

Safety Notes

- The maximum approved peripheral speed is 6,300 SFPM
- For safety reasons, it is imperative to remain within the stated RPM limit.

Safety Recommendations

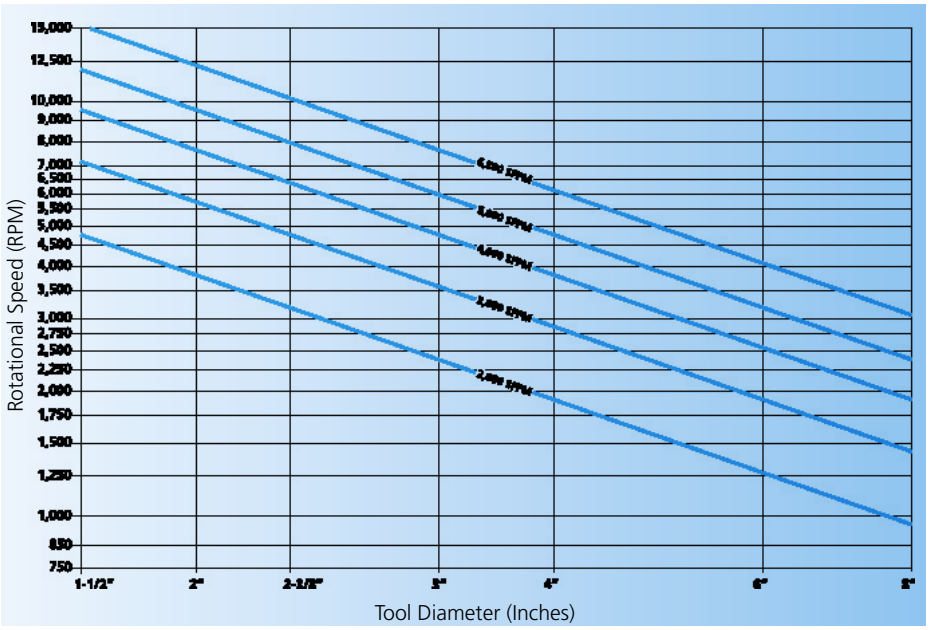
 = Wear protective goggles!

 = Use ear protection!

 = Wear protective gloves!

 = Observe safety recommendations!

Peripheral Speed of POLINOX® Flap Wheels



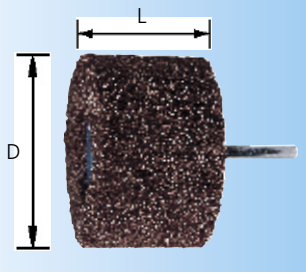
In the diagram, peripheral speeds are represented by blue diagonal lines. Each vertical line represents a tool diameter. From its point of intersection with the diagonal line for a given peripheral speed, proceed horizontally to the left margin where you will find the corresponding rotational speed (RPM) of the flap wheel and machine spindle.

Example

PNL, 2-3/8" Dia. A 100 (EDP 46207)
Peripheral speed: 3,000 SFPM
Rotational speed: 4,750 RPM

POLINOX® Mounted Flap Wheels

POLINOX® Mounted Flap Wheels PNL Aluminum Oxide A

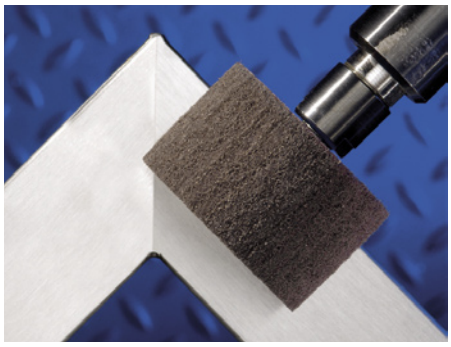


Made of multiple elements of non-woven abrasive material, arranged radially. Dense packing of the layers ensures a long service life.

These tools are used chiefly for surface conditioning.

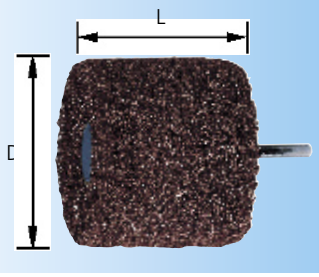
Abrasive
Aluminum Oxide A

PFERD Specification Number
PNL A



Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit and EDP Number			Recom. Speed RPM	Max. RPM	
			100	180	280			
1-1/2	3/4	1/4	46201	46202	46203	7,500	15,000	10
2	1-1/4	1/4	46204	46205	46206	6,000	12,000	10
2-3/8	2	1/4	46207	46208	46209	5,000	10,000	10
3	2	1/4	46210	46211	46212	4,000	7,500	10

POLINOX® Mounted Flap Wheels PNR Aluminum Oxide A



The non-woven abrasive is arranged in multiple axial layers.
Since the individual layers are not interconnected, the abrasive surface adapts easily to different workpiece contours (e.g. in grinding sections or pipes).

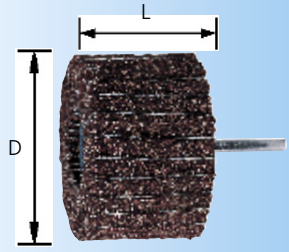
Abrasive
Aluminum Oxide A

PFERD Specification Number
PNR A

Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit and EDP Number			Recom. Speed RPM	Max. RPM	
			100	180	280			
2-3/8	2	1/4	46213	46214	46215	5,000	10,000	10
3	2	1/4	46216	46217	46218	4,000	7,500	10

POLINOX® Mounted Flap Wheels

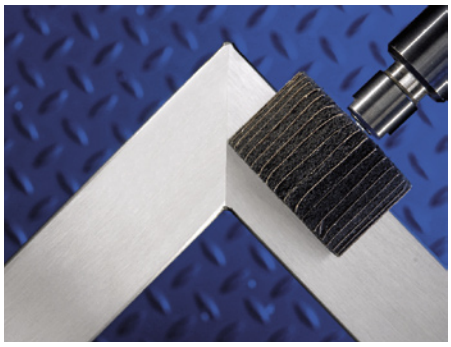
POLINOX® Mounted Flap Wheels PNZ Aluminum Oxide A



The non-woven abrasive is arranged in a plurality of radial elements with abrasive cloth interlayers. This structure permits an improved stock removal and produces a coarser finish.

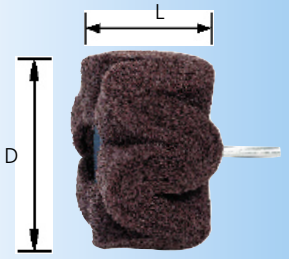
Abrasive
Aluminum Oxide A

PFERD Specification Number
PNZ A



Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit and EDP Number		Recom. Speed RPM	Max. RPM	
			100	180			
1-1/2	3/4	1/4	46219	46225	7,500	15,000	10
2	1-1/4	1/4	46220	46226	6,000	12,000	10
2-3/8	2	1/4	46221	46227	5,000	10,000	10
3	2	1/4	46222	46228	4,000	7,500	10
4	2	1/4	46223	46229	3,000	6,000	10

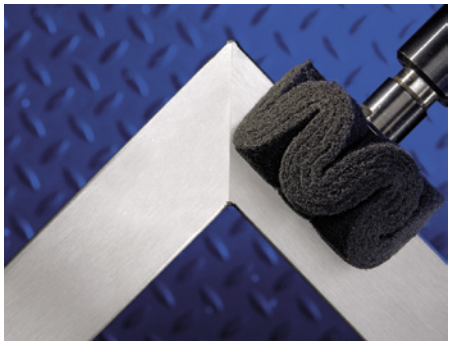
POLINOX® Mounted Flap Wheels PNG Aluminum Oxide A



Made of several strips of corrugated non-woven material, wrapped around a common core. The wavy structure of the non-woven fabric permits depolishing and matt finishing of surfaces without visible transitions.

Abrasive
Aluminum Oxide A

PFERD Specification Number
PNG A



Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit and EDP Number			Recom. Speed RPM	Max. RPM	
			100	180	280			
3	2	1/4	46236	46237	46238	4,000	7,500	10
4	2	1/4	46232	46230	46231	3,000	6,000	10

POLINOX® Unmounted Flap Wheels

POLINOX® Unmounted Flap Wheels PNL Aluminum Oxide A

Made of radially arranged elements of non-woven abrasive material. Used mainly for work on large surfaces.

Abrasive
Aluminum Oxide A

Ordering Note
Please order drive arbors separately.

PFERD Specification Number
PNL A

Diameter (Inches)	Width (Inches)	Bore (Inches)	Grit and EDP Number			Recom. Speed RPM	Max. RPM	
			100	180	280			
6	2	1	43128	43129	43130	2,000	4,000	1
8	2	1-3/4	43137	43138	43139	1,500	3,000	1

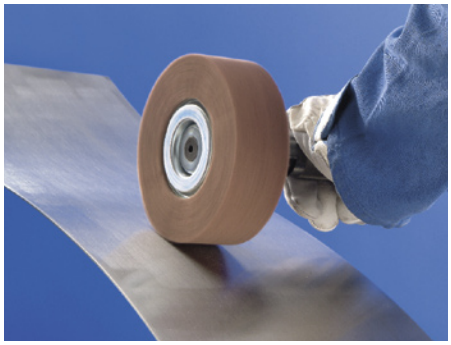
POLINOX® Unmounted Flap Wheels PNZ Aluminum Oxide A

The non-woven abrasive is arranged in multiple radial elements with abrasive cloth interlayers. This structure permits an improved stock removal and produces a coarser finish.

Abrasive
Aluminum Oxide A

Ordering Note
Please order drive arbors separately.

PFERD Specification Number
PNZ A



Diameter (Inches)	Width (Inches)	Bore (Inches)	Grit and EDP Number		Recom. Speed RPM	Max. RPM	
			100	180			
6	2	1	43045	43046	2,000	4,000	1
8	2	1-3/4	43048	43049	1,500	3,000	1

POLINOX® Unmounted Flap Wheels PNG Aluminum Oxide A

Made of several strips of corrugated non-woven material, wrapped around a common core.

The wavy structure of the non-woven fabric permits depolishing and matt finishing of surfaces without visible transitions.

Abrasive
Aluminum Oxide A

Ordering Note
Please order drive arbors separately.

PFERD Specification Number
PNG A

Diameter (Inches)	Width (Inches)	Bore (Inches)	Grit and EDP Number			Recom. Speed RPM	Max. RPM	
			100	180	280			
6	2	1	43030	43031	43032	2,000	4,000	1
8	2	1-3/4	43036	43037	43038	1,500	3,000	1

POLINOX® Unmounted Flap Wheel Accessories

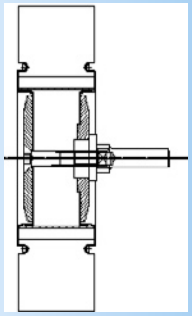
Arbors for Flap Wheels

These arbor and flange combinations are intended specially for mounting PFERD flap wheels and POLINOX® wheels.

The clamping flanges are accommodated in the tool recess. This design provides optimum face-down grinding, even near edges and corners.

Contents
1 arbor 1/2" clamping dia.
2 flanges
suitable clamping srews (for various flap wheel widths)

PFERD Specification Number
FR/VR



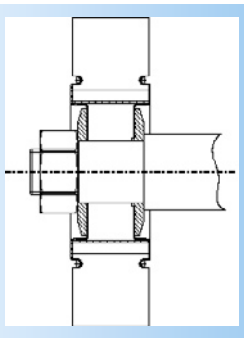
Shank Diameter (Inches)	Clamping Width (Inches)	Fits Flap Wheel I.D. (Inches)	For Wheel Diameter (Inches)	EDP Number	
1/2	1-2	1	4 - 6	45714	1
1/2	1-2	1-3/4	8 -10	45715	1

Flap Wheel Reducer Flanges

These reducing flanges can be used to mount PFERD flap wheels and POLINOX® wheels on a stationary machine (Bench Grinder).

Ordering Note
1 pair per box.

PFERD Specification Number
RF/FR



Fits Flap Wheel I.D. (Inches)	Bore (Inches)	For Wheel Diameter (Inches)	EDP Number	
1	1/2	4-6	45720	1
1	5/8	4-6	45721	1
1	3/4	4-6	45722	1
1-3/4	1/2	8-10	45725	1
1-3/4	5/8	8-10	45726	1
1-3/4	3/4	8-10	45727	1
1-3/4	1	8-10	45728	1

POLINOX® Grinding Drums

POLINOX® Grinding Drums PNL-W Aluminum Oxide A

Made of radially arranged elements of non-woven abrasive material. Especially for work on large surfaces.

Abrasive
Aluminum Oxide A

Ordering Note
Center hole with 4 keyways, suitable for all drive units.

PFERD Specification Number
PNL-W A

Diameter (Inches)	Width (Inches)	Bore (Inches)	Grit and EDP Number			Recom. Speed RPM	Max. RPM	
			100	180	280			
4	4	3/4	43103	43104	43105	2,000 - 3,700	5,000	1

POLINOX® Grinding Drums PNZ-W Aluminum Oxide A

The non-woven abrasive is arranged in multiple radial elements with abrasive cloth interlayers. This structure permits an improved stock removal and produces a coarser finish.

Abrasive
Aluminum Oxide A

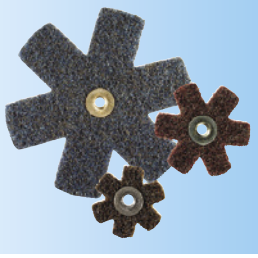
Ordering Note
Center hole with 4 keyways, suitable for all drive units.

PFERD Specification Number
PNZ-W A

Diameter (Inches)	Width (Inches)	Bore (Inches)	Grit and EDP Number			Recom. Speed RPM	Max. RPM	
			60	80	120			
4	4	3/4	43113	43114	43115	2,000 - 3,700	5,000	1

POLIVLIES® Star Pads, POLINOX® Cross Buffs and Accessories

POLIVLIES® Star Pads



Star pads are ideal for cleaning, finishing, and polishing interiors of pipe, tubing, and cylinders. At operating speed, the tips of the pads deliver consistent outward pressure to the walls of the workpiece, leaving a smooth and uniform finish.

Application
Suitable for use on steel, aluminum, and plastic. Designed for use on die grinders, straight shaft grinders, and electric drills.

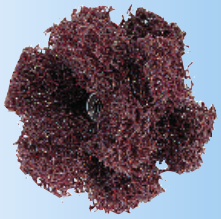
Abrasive
Aluminum Oxide A

Ordering Note
Please order arbor separately.

PFERD Specification Number
STR

Diameter (Inches)	Thread	Grade and EDP Number			Max. RPM	Suitable Arbor	
		Coarse	Medium	Very Fine			
1-1/2	1/4-20	44100	44101	44102	24,000	EDP 44120	50
2	1/4-20	44103	44104	44104	24,000	EDP 44120	50
3	1/4-20	44106	44107	44108	18,000	EDP 44120	50

POLINOX® Cross Buffs



Suitable for cleaning, deburring and finishing of interior surfaces and contours.
Excellent for use in cramped spaces, e.g., inside bores and recesses, and in hard-to-reach areas.
Available in two dimensions and two grit sizes.

Application Examples
- Deburring of bores in non-ferrous metals
- Fine grinding on insides of stainless steel pipe
- Thread cleaning

Abrasive
Aluminum Oxide A

Recommendation for Use
Recommended peripheral speed:
2,000 - 5,000 SFPM

Ordering Note
Please order arbor separately.

PFERD Specification Number
PNST A

Diameter (Inches)	No. of Layers	Thread	Grade and EDP Number		Max. RPM	Suitable Arbor	
			Coarse	Medium			
1	2	8-32	44200	44201	24,000	EDP 44830	20
1-1/2	3	8-32	44208	44209	16,000	EDP 44830	20

Arbors for POLIVLIES® Star Pads and POLINOX® Cross Buffs

Arbor for POLIVLIES® star pads and POLINOX® cross buffs.

PFERD Specification Number
BO PNST

Shank Dia. (Inches)	Shank Length (Inches)	Thread	EDP Number	Suitable Tool	Max. RPM	
1/4	3	1/4-20	44120	POLIVLIES® Star Pads	25,000	1
1/4	3	8-32	44830	POLINOX® Cross Buffs	25,000	1

POLIVLIES® Spindle Mount Discs and Arbors

POLIVLIES® Spindle Mount Discs

For flexible grinding of difficult workpiece contours.

Application Examples
- Deburring of ribs and deep fins
- Cleaning of cylinder heads
- Fine grinding on radiator-type heat exchangers

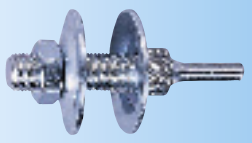
Recommendation for Use
Up to three discs can be stacked to achieve an optimum tool width.
Recommended peripheral speed:
2,000 - 5,000 SFPM

Ordering Note
Please order arbor separately.

PFERD Specification Number
PVR A

Diameter (Inches)	Thickness (Inches)	Bore (Inches)	Grade and EDP Number			Recom. Speed RPM	Max. RPM	
			Medium	Fine	Very Fine			
4	3/8	1/4	43476	43477	43478	2,800	6,000	10
6	3/8	1/2	43488	43489	43490	1,900	4,000	10
8	3/8	1/2	43494	43495	43496	1,500	2,700	10

Arbors for POLIVLIES® Spindle Mount Discs



Drive arbors for POLIVLIES® discs.

Recommendations for Use
The clamping depth is preset via a hexagonal nut on the shank side. Up to three POLIVLIES® discs can be mounted on one arbor.

Arbors are supplied with one pair of metal discs (2" and 3" dia.) for lateral flexibility adjustment. The tool can be changed from the front by slackening the mounting screw. The arbor need not be removed from the machine to replace the tool.

PFERD Specification Number
BO PVR

Shank Dia. (Inches)	Mounting Dia. (Inches)	EDP Number	Clamping Width (Inches)	
1/4	1/4	43466	5/8	10
1/4	1/2	43468	1/2	10

Masking Tape, ABRACLEAN® Cleaning Stick

High-Strength Masking Tape, ABRACLEAN® Cleaning Stick

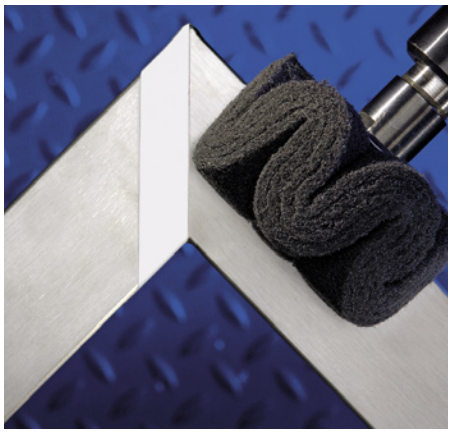
High-Strength Masking Tape

This self-adhesive masking tape is designed to preserve the clear separation between differently stroke-finished surfaces in transition areas, e.g., near mitred joints. Masking tape is applied to protect areas not to be machined.

Advantages
- High elasticity and tear strength
- Pulls off cleanly
- Exceptional edge stability
- Leaves no undesirable oily stains on workpieces

Application Examples
- Clear-cut separation of surface areas requiring different abrasive finish patterns
- Protection of previously finished surfaces

Recommendation for Use
- Use masking tape for surface protection only when finish machining with soft, flexible tools (e.g. non-woven tools).
- To avoid inadvertent removal, take care to apply load to masking tape only in the direction of tool rotation when grinding.



PFERD Specification Number
ADB 20

Width (Inches)	Length (Feet)	EDP Number	
3/4	82	43000	1

ABRACLEAN® Cleaning Stick

Special-purpose accessory for cleaning loaded abrasive tools.
PFERD product providing powerful cleaning action on coated abrasive products.

Recommendation for Use
The ABRACLEAN® cleaning stick cleans loaded belts and virtually any coated product. Just apply the rotating abrasive to the cleaning stick. Always use protective goggles when using this product.

PFERD Specification Number
RG 300 50

Dimension (Inches)	EDP Number	
12 x 2 x 2	62918	2

POLICLEAN® Tools

Program Introduction

POLICLEAN® is a coarse-structured non-woven abrasive material made of a special combination of synthetic fiber and abrasive grain.

PFERD offers POLICLEAN® tools in several types and versions:

- POLICLEAN® wheels
- POLICLEAN® mounted tools
- COMBIDISC®-POLICLEAN® discs (refer to COMBIDISC® tools)
- POLICLEAN® discs

Advantages

- The flexible structure adapts ideally to the surface contours and shape of the workpiece.
- Open-cell material prevents loading and gives cool grinding properties.
- POLICLEAN® tools leave no corrosive residue on the workpiece surface.

Application Examples

- Removal of rust, corrosion stains, scale, dirt, stubborn paint or adhesive residue, old coatings or residue of seals or gaskets
- Cleaning of weld seams, removal of slight drawing marks and heat discolorations, especially on stainless steel
- Surface roughening in preparation of adhesive bonding or application of fillers
- Cleaning of surfaces of diverse characteristics

Recommendations for Use

POLICLEAN® tools perform best at a recommended peripheral speed of 3,000 - 4,000 SFPM, where the optimum balance between stock removal, surface finishing quality, workpiece temperature loads and tool wear is achieved.

Safety Note

For safety reasons, it is imperative to remain within the stated RPM limit at all times.

Safety Recommendations

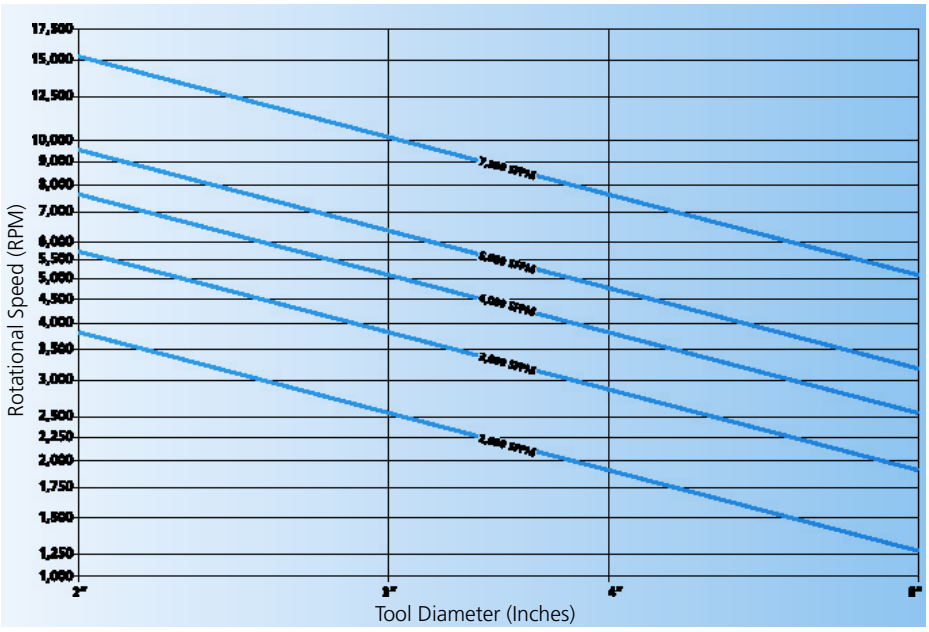
 = Wear protective goggles!

 = Use ear protection!

 = Wear protective gloves!

 = Observe safety recommendations!

Peripheral Speed of POLICLEAN® Tools



In the diagram, peripheral speeds are represented by blue diagonal lines. Each vertical line represents a tool diameter. From its point of intersection with the diagonal line for a given peripheral speed, proceed horizontally to the left margin where you will find the corresponding rotational speed (RPM) of the POLICLEAN® tool and machine spindle.

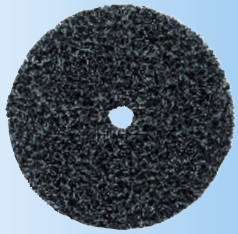
Example

POLICLEAN® Wheel
3" x 1/2", 1/4" Bore
EDP 44802
Peripheral speed: 3,000-4,000 SFPM
Rotational speed: 3,800-5,000 RPM

POLICLEAN® Tools

POLICLEAN® Wheels and Arbors

POLICLEAN® Wheels



For general-purpose peripheral grinding applications.

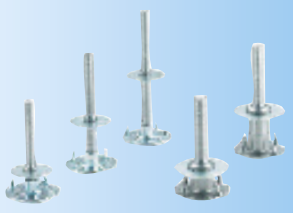
Recommendation for Use
These tools can be used on flexible shaft drives or straight grinders (electrical or air-powered).

Ordering Note
Please order arbors separately.

PFERD Specification Number
PCLS

Diameter (Inches)	Width (Inches)	Bore (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
2	1/2	1/4	44800	6,000 - 7,600	12,000	6
3	1/2	1/4	44802	4,000 - 5,100	8,500	6
4	1/2	1/2	44804	3,000 - 3,800	6,000	4
6	1/2	1/2	44806	2,000 - 2,500	4,000	4

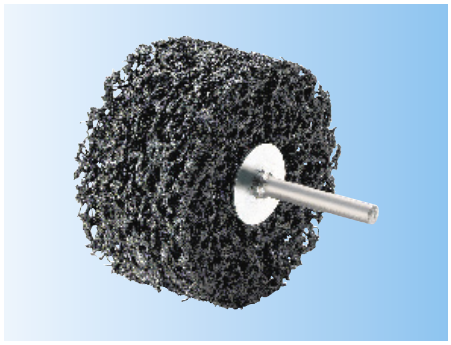
Arbors for POLICLEAN® Wheels



Mounting system for POLICLEAN® wheels, with wheel stacking capability.

The use of this arbor reduces set-up times significantly. Discs can be changed without removing the shank from the machine collet. PFERD offers three arbors for clamping one, two or three wheels, respectively.

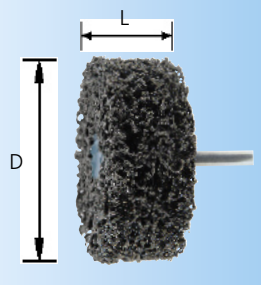
PFERD Specification Number
PCLB



Shank Dia. (Inches)	Mounting Dia. (Inches)	No. of Discs	EDP Number	Suitable POLICLEAN® Wheels	
1/4	1/4	1	44832	EDP 44800, EDP 44802	1
1/4	1/4	2	44833	EDP 44800, EDP 44802	1
1/4	1/4	3	44834	EDP 44800, EDP 44802	1
1/4	1/2	1	44835	EDP 44804, EDP 44806	1
1/4	1/2	2	44836	EDP 44804, EDP 44806	1
3/8	1/2	1	44838	EDP 44804, EDP 44806	1
3/8	1/2	2	44839	EDP 44804, EDP 44806	1

POLICLEAN® Mounted Tools, POLICLEAN® Discs

POLICLEAN® Mounted Tools



For general-purpose peripheral grinding.

Recommendation for Use
These tools can be used on flexible shaft drives or straight grinders (electrical or air-powered).

PFERD Specification Number
PCLZY

Diameter [D] (Inches)	Width [L] (Inches)	Shank Dia. (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
2	1/2	1/4	44810	6,000 - 7,000	15,000	5
2	1	1/4	44811	6,000 - 7,000	15,000	5
3	1/2	1/4	44812	4,000 - 5,100	10,000	5
3	1	1/4	44813	4,000 - 5,100	10,000	5
4	1/2	1/4	44814	3,000 - 3,800	7,500	5

POLICLEAN® Discs

The non-woven cleaning fabric is supported by a backing pad. This design allows POLICLEAN® discs to be used very effective in face grinding.

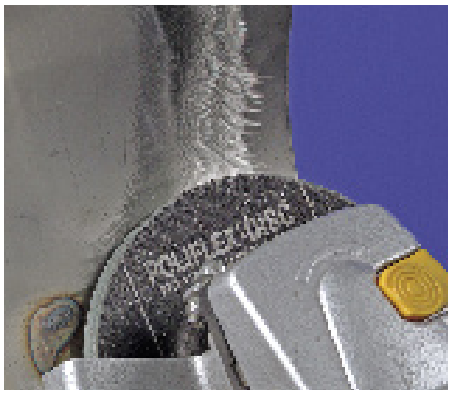
Recommendation for Use
Preferably for use on slow-running angle grinders.

Recommended peripheral speed:
6,000 - 8,000 SFPM.

PFERD Specification Number
PCLD

Diameter (Inches)	Width (Inches)	Bore/Thread (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
Plain Arbor Hole						
4-1/2	1/2	7/8	44862	5,000 - 7,000	10,000	5
5	1/2	7/8	44863	5,000 - 7,000	10,000	5
Threaded Hub						
4-1/2	1/2	5/8-11	44867	5,000 - 7,000	10,000	5
5	1/2	5/8-11	44868	5,000 - 7,000	10,000	5

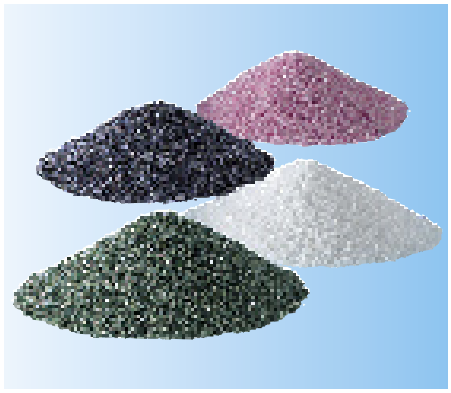
Program Introduction



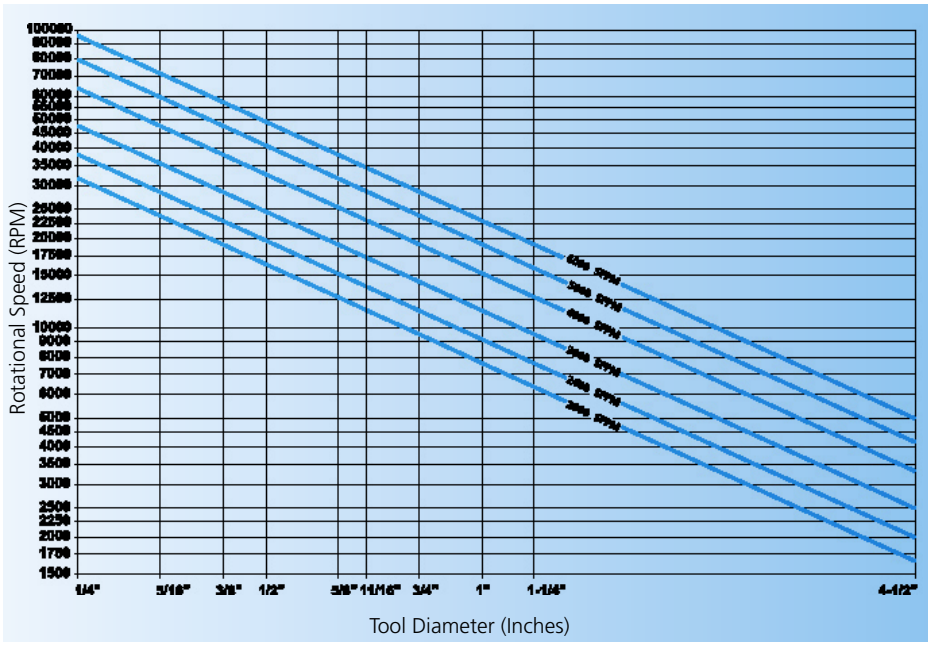
PFERD offers a very comprehensive range of Poliflex® mounted points and wheels for fine-grinding. These products are available in diverse abrasive materials, grit sizes, hardness grades and shapes to suit a host of specific applications. Poliflex® fine-grinding tools are made on advanced production lines to high standards of dimensional accuracy, constant quality, and close tolerances. They perform exceptionally well in fine-grinding and are ideal for preparing surfaces for subsequent polishing steps.

Advantages

- Poliflex® fine-grinding tools provide a high-quality surface finish.
- Poliflex® mounted fine-grinding points can be easily profiled for a given application by means of a dressing stone or ceramic grinding segments (refer to catalog 203 for dressing stones) at low RPM.
- Specially adapted bonds, grit sizes and hardness grades are available for every application.
- The high concentricity of PFERD mounted points
  - protects the operator's safety and health,
  - reduces the load on the power tool,
  - minimizes operating vibrations,
  - prevents chatter marks,
  - reduces wear.



Peripheral Speed of Poliflex® Fine-Grinding Tools



In the diagram, peripheral speeds are represented by blue diagonal lines. Each vertical line represents a tool diameter. From its point of intersection with the diagonal line for a given peripheral speed, proceed horizontally to the left margin where you will find the corresponding rotational speed (RPM) of the Poliflex® tool and machine spindle.

Example

W220 GR 120 (EDP 36311)
Peripheral speed: 1,900 - 2,900 SFPM
Rotational speed: 7,500 - 17,200 RPM

Safety Recommendations, Application Guide

Safety Recommendations

For safety reasons, it is imperative to remain within the stated RPM limit at all times.


= Wear protective goggles!


= Use ear protection!


= Wear protective gloves!

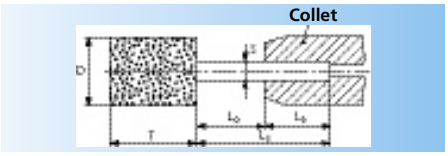

= Observe safety recommendations!

Maximum RPM levels for the various shank lengths and shank diameters are defined in ANSI B7.1-2000. These limits must be strictly observed to prevent hazards due to shank buckling.

Regardless of the shank length, the shank clamping depth (L_3) in the machine collet must be at least 1/2".

Each pack of PFERD mounted points comes with RPM recommendations for a given unsupported shank length (L_0) of that product. Check each tool for proper concentricity and correct clamping in the power unit before commencing work. Tables stating approved maximum RPM levels for the entire range of Poliflex® fine grinding points can be made available upon request.

The buckling speed (RPM) calculated in accordance with ANSI B7.1-2000 is a function of the following factors:
- shape and dimensions of the mounted point
- steel shank diameter
- unsupported shank length (overhang) L_0



D = Diameter of mounted point
T = Height of mounted point
S = Shank diameter
L_0 = Unsupported shank length (overhang)
L_2 = Shank length
L_3 = Shank clamping depth.

Products Made to Order

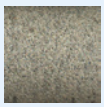
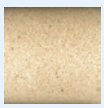
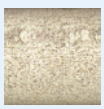
Mounted points can be made to order for your specific application needs. Please enquire.

Customer Support

Our experienced sales consultants and customer support engineers will be glad to assist with any specific grinding problem you may have.

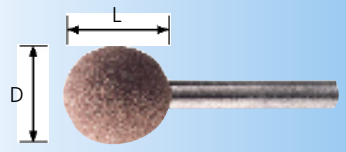
204

Application Guide

Abrasive Material And Color	Bond	Abrasive Grain	Properties	Recommended Applications	Recommended Peripheral Speed (SFPM)
Rubber Bond 	GR Rubber	Aluminum Oxide	Soft fine grinding, preparation for polishing and matt polishing of non-ferrous metals.	Food & chemical industry Tank construction Mold & die making Tool fabrications shops Jet engine production	1,900 - 2,900 Max. 2,900 SFPM
Polyurethane bond 	PUR	Silicon Carbide	Soft to very soft, elastic, cool grinding properties, adapts to contours.	Mold making Tanks for chemical industry Non-ferrous metals Aluminum dies Preparation for surface coat	1,900 - 2,900 Max. 2,900 SFPM
Leather Bond 	LR Leather	Aluminum Oxide	High-quality surface finish and long tool life. Preparation for polishing, edge rounding.	Press and drop forge dies Fabrication shops Apparatus and tank construction	2,900 - 4,900 Max. 4,900 SFPM
Textile Bond 	TX Textile	Aluminum Oxide & Silicon Carbide	Good stock removal, fine surface finish, very high edge-holding capability, light deburring, edge rounding and surface fine grinding work.	Mold making Press and drop forge dies Surface fine grinding of high-temperature materials	2,900 - 5,900 Max. 5,900 SFPM

Poliflex® Fine Grinding Points, Rubber Bond

Poliflex® Fine Grinding Points GR Bond, A and B Shapes



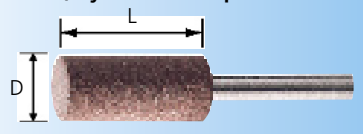
Poliflex® fine grinding tools in GR bond are made of pink aluminum oxide, a soft, elastomer based bond type. Soft elastic bond ensures a soft, fine grinding action.
Available in a variety of standard shapes.

Safety Note
For safety reasons, the stated max. RPM level must not be exceeded. The maximum permissible tool speed (Max. RPM) applies to an overhang of 1/2" or less.

PFERD Specification Number
PF SP GR (Tapered Cone)
PF KE GR (Tapered Cylinder, Pointed End)
PF KU GR (Ball Shape)
PF WR GR (Cylinder With Radius End)

Shape		Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit	EDP Number	Max. RPM	
	A5	3/4	1-1/8	1/4	120	36461	14,320	10
	A11	7/8	2	1/4	120	36471	14,320	10
	A12	11/16	1-1/4	1/4	120	36481	14,320	10
	A21	1	1	1/4	120	36491	11,450	10
	A25	1	1	1/4	120	36451	11,450	10
	A26	5/8	5/8	1/4	120	36431	19,090	10
	A40	3/4	3/4	1/4	120	36441	14,320	10
	B52	3/8	3/4	1/4	120	36501	28,640	10
	B121	1/2	1/2	1/4	120	36421	23,870	10
	B122	3/8	3/8	1/8	120	36361	28,670	10
	B125	5/16	5/16	1/8	120	36401	35,800	10

Poliflex® Fine Grinding Points GR Bond, Cylindrical Shape W



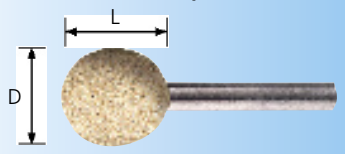
Safety Note
For safety reasons, the stated max. RPM level must not be exceeded. The maximum permissible tool speed (Max. RPM) applies to an overhang of 1/2" or less.

PFERD Specification Number
PF ZY GR

Shape	Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit	EDP Number	Max. RPM	
W162	1/4	3/8	1/8	120	36101	47,740	10
W168	5/16	5/16	1/8	120	36111	35,800	10
W170	5/16	1/2	1/8	120	36121	35,800	10
W174	3/8	1/4	1/8	120	36131	28,640	10
W175	3/8	3/8	1/8	120	36141	28,640	10
W176	3/8	5/8	1/8	120	36151	28,640	10
W178	3/8	1	1/4	120	36191	28,640	10
W185	1/2	1/2	1/8	120	36171	23,870	10
W193	5/8	3/8	1/4	120	36231	19,090	10
W196	5/8	1	1/4	120	36251	19,090	10
W204	3/4	3/4	1/4	120	36281	14,320	10
W206	3/4	1-1/4	1/4	120	36291	14,320	10
W220	1	1	1/4	120	36311	11,450	10
W230	1	1-1/4	1/4	120	36331	9,540	10

Poliflex® Fine Grinding Points, Leather Bond

Poliflex® Fine Grinding Points
LR Bond, A and B Shapes



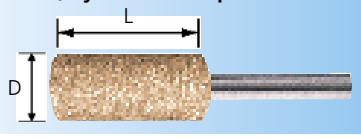
Poliflex® fine grinding tools in LR bond are made of white aluminum oxide. LR is a harder bond providing enhanced durability. Smooth, cool, fine grinding with good edge-holding qualities. Provides long tool life and very fine pre-polish finish. Recommended for fine grinding of all metals. Available in a variety of standard shapes.

Safety Note
For safety reasons, the stated max. RPM level must not be exceeded. The maximum permissible tool speed (Max. RPM) applies to an overhang of 1/2" or less.

PFERD Specification Number
PF SP LR (Tapered Cone)
PF KE LR (Tapered Cylinder, Pointed End)
PF KU LR (Ball Shape)
PF WR LR (Cylinder With Radius End)

Shape		Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit	EDP Number	Max. RPM	
	A5	3/4	1-1/8	1/4	120	36465	23,870	10
	A11	7/8	2	1/4	120	36475	23,870	10
	A12	11/16	1-1/4	1/4	120	36485	23,870	10
	A21	1	1	1/4	120	36495	19,090	10
	A25	1	1	1/4	120	36455	19,000	10
	A26	5/8	5/8	1/4	120	36435	31,830	10
	A40	3/4	3/4	1/4	120	36445	23,870	10
	B52	3/8	3/4	1/4	120	36505	47,740	10
	B121	1/2	1/2	1/4	120	36425	39,780	10
	B122	3/8	3/8	1/8	120	36365	23,870	10
	B125	5/16	5/16	1/8	120	36405	59,680	10

Poliflex® Fine Grinding Points
LR Bond, Cylindrical Shape W



Safety Note
For safety reasons, the stated max. RPM level must not be exceeded. The maximum permissible tool speed (Max. RPM) applies to an overhang of 1/2" or less.

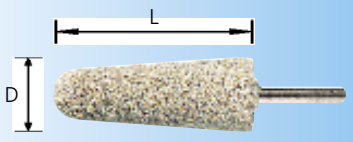
PFERD Specification Number
PF ZY LR

Shape	Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit	EDP Number	Max. RPM	
W162	1/4	3/8	1/8	120	36105	67,210	10
W168	5/16	5/16	1/8	120	36115	59,680	10
W170	5/16	1/2	1/8	120	36125	54,860	10
W174	3/8	1/4	1/8	120	36135	47,740	10
W175	3/8	3/8	1/8	120	36145	47,740	10
W176	3/8	5/8	1/8	120	36155	44,170	10
W178	3/8	1	1/4	120	36195	40,630	10
W185	1/2	1/2	1/8	120	36175	39,780	10
W186	1/2	3/4	1/8	120	36185	31,220	10
W193	5/8	3/8	1/4	120	36235	31,830	10
W196	5/8	1	1/4	120	36255	31,830	10
W204	3/4	3/4	1/4	120	36285	23,870	10
W206	3/4	1-1/4	1/4	120	36295	23,870	10
W220	1	1	1/4	120	36315	19,090	10
W230	1-1/4	1-1/4	1/4	120	36335	15,910	10

Poliflex® Tools

Poliflex® Fine Grinding Points, Textile Bond

Poliflex® Fine Grinding Points TX Bond, A and B Shapes



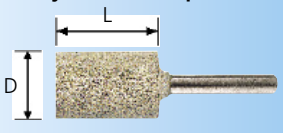
Poliflex® fine-grinding tools in TX bond are made of a mix of green silicon carbide (SiC) and regular aluminum oxide. The textile fabric makes TX-bonded tools very hard and durable. Available in a variety of standard shapes.

Safety Note
For safety reasons, the stated max. RPM level must not be exceeded. The maximum permissible tool speed (Max. RPM) applies to an overhang of 1/2" or less.

PFERD Specification Number
PF SP ANCN TX (Tapered Cone)
PF KE ANCN TX (Tapered Cylinder, Pointed End)
PF KU ANCN TX (Ball Shape)
PF WR ANCN TX (Cylinder With Radius End)

Shape	Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit and EDP Number		Max. RPM	
				80	120		
A1	3/4	2-1/2	1/4	37003	37004	20,960	10
A3	1	2-3/4	1/4	37008	37009	15,530	10
A5	3/4	1-1/8	1/4	37018	37019	29,990	10
A11	7/8	2	1/4	37023	37024	22,550	10
A12	11/16	1-1/4	1/4	37028	37029	32,740	10
A21	1	1	1/4	37048	37049	22,550	10
A25	1	1	1/4	37063	37064	22,550	10
B52	3/8	3/4	1/8	37118	37119	60,310	10

Poliflex® Fine Grinding Points TX Bond, Cylindrical Shape W



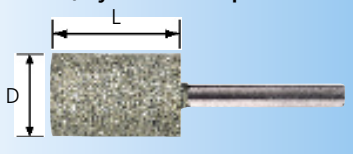
Safety Note
For safety reasons, the stated max. RPM level must not be exceeded. The maximum permissible tool speed (Max. RPM) applies to an overhang of 1/2" or less.

PFERD Specification Number
PF ZY ANCN TX

Shape	Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit and EDP Number		Max. RPM	
				80	120		
W187	1/2	1	1/4	37313	37314	36,950	10
W189	1/2	2	1/4	37318	37319	26,830	10
W196	5/8	1	1/4	37328	37329	34,670	10
W204	3/4	3/4	1/4	37368	37369	29,990	10
W220	1	1	1/4	37413	37414	22,550	10
W222	1	2	1/4	37423	37424	20,250	10

Poliflex® Tools, Polyurethane Bond

Poliflex® Fine Grinding Points PUR Bond, Cylindrical Shape W



Poliflex® fine-grinding tools are made of PUR-bonded green silicon carbide (SiC). The PUR-bond is a very soft bond type. Abrasive grain is homogeneously distributed through the polyurethane bond. The open-cell surface and elastic properties of the bond ensure a good adaptability to workpiece contours and soft, cool grinding action.

Safety Note
For safety reasons, the stated max. RPM level must not be exceeded. The maximum permissible tool speed (Max. RPM) applies to an overhang of 1/2" or less.

PFERD Specification Number
PF ZY PUR

Shape	Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Grit and EDP Number 30	80	150	Max. RPM	
W196	5/8	1-1/4	1/4	36601	36602	36603	17,900	10
W206	3/4	1-1/4	1/4	36604	36605	36606	14,300	10
W220	1	1-1/4	1/4	36607	36608	36609	11,400	10

Poliflex® Discs, PUR Bond

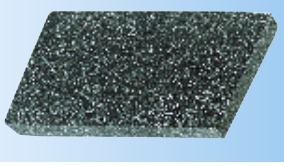
Suitable for face grinding applications on larger surfaces.
Preferably used on slow-running angle grinders.

Safety Note
For safety reasons, the stated max. RPM level must not be exceeded.

PFERD Specification Number
PFD CN PUR

Diameter (Inches)	Bore (Inches)	Bond Hardness	Grit and EDP Number 60	150	Recom. Speed RPM	Max. RPM	
4-1/2	7/8	soft	48063	48065	2,400	5,300	5
4-1/2	7/8	medium	48067	48069	2,400	5,300	5

Poliflex® Blocks, PUR Bond



Due to their rhomboid shape, these pads permit convenient grinding in hard-to-reach areas such as fillets or corners. They can be reduced in size or cut into any desired shape with a cut-off wheel to meet specific application needs.

PFERD Specification Number
PFB CU PUR

Length (Inches)	Width (Inches)	Thickness (Inches)	Grit and EDP Number 60	120	240	
4-1/2	2-3/8	1-3/16	48090	48091	48092	5

Poliflex® Block Set

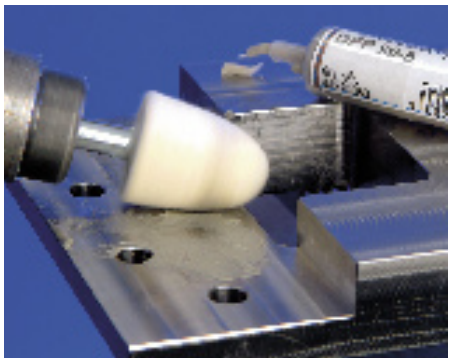
Poliflex® blocks in a sales promoting display carton.

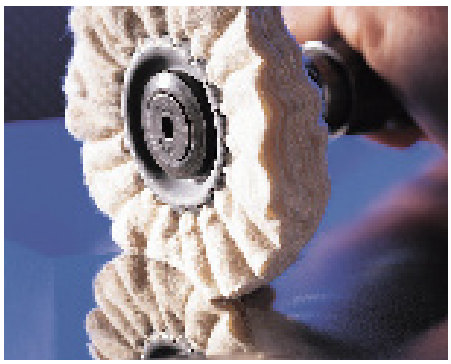
Box contains 9 Poliflex® blocks, 3 each in:
- grit 60 (coarse)
- grit 120 (medium)
- grit 240 (fine)

PFERD Specification Number
PSO

Length (Inches)	Width (Inches)	Thickness (Inches)	EDP Number	
11-1/4	6	2-3/8	48099	1

Program Introduction





In the diagram, peripheral speeds are represented by blue diagonal lines. Each vertical line represents a tool diameter. From its point of intersection with the diagonal line for a given peripheral speed, proceed horizontally to the left margin where you will find the corresponding rotational speed of the felt tool or cloth ring, respectively (machine spindle RPM).

Example

FK ZYA 1 x 1-1/4 (EDP 48526)
Peripheral speed: 1,000-2,000 SFPM
Rotational speed: 3,800-7,600 RPM

Example

TR 4 x 3/8 (EDP 48711)
Peripheral speed: 2,000 - 3,000 SFPM
Rotational speed: 1,900-2,850 RPM

PFERD offers an extensive range of polishing tools in diverse shapes and diameters. Our range consists essentially of two types:

- Felt tools, used mainly for high-gloss polishing work.
- Felt tools with brass impregnated, provide higher stock removal rates and designed mainly for pre-polishing with diamond grinding pastes.

In addition, this range includes four different types of cloth rings.

Advantages

- The broad range of shapes and diameters permits polishing of complex workpiece geometries.
- PFERD felt tools can be profiled as required.

Application Examples

- Pre-polishing and high-gloss polishing of plastic components
- High-gloss polishing of stainless steel
- Pre-polishing of valves and fittings
- Polishing of tungsten carbide cutting blades

Recommendations for Use

- Felt tools perform best at the recommended peripheral speed of 2,000 - 3,000 SFPM, where the optimum balance between stock removal, surface finishing quality, workpiece temperature loads and tool wear is achieved.
- Felt tools are used in conjunction with diamond polishing pastes or polishing paste bars.

Safety Note

For safety reasons, it is imperative to remain within the stated RPM limit at all times.

Safety Recommendations

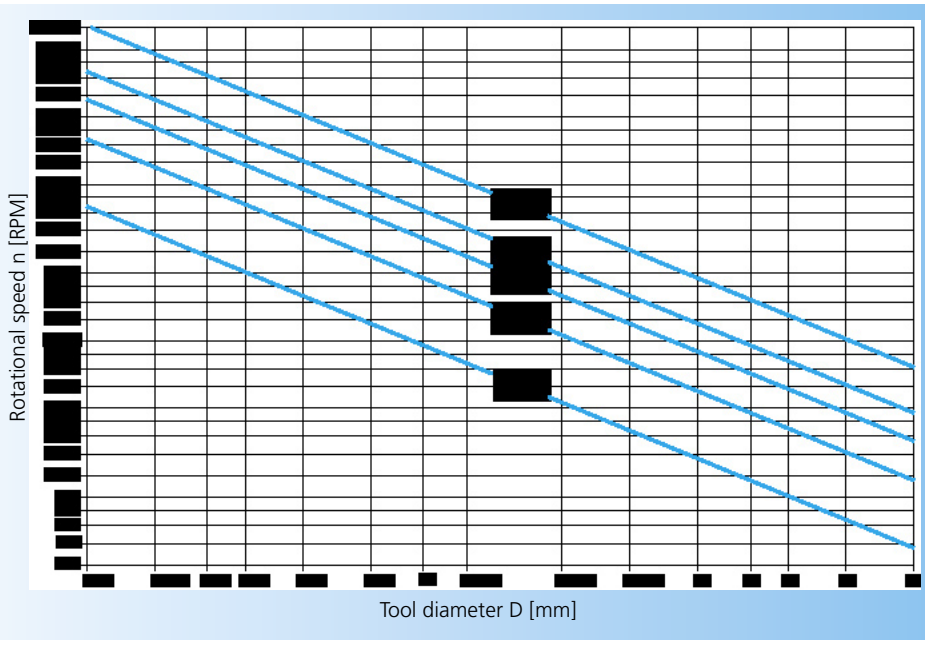
 = Wear protective goggles!

 = Use ear protection!

 = Wear protective gloves!

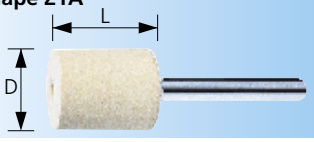
 = Observe safety recommendations!

Recommended Peripheral Speed for Felt Tools and Cloth Rings



Felt Points

Felt Points
Shape ZYA

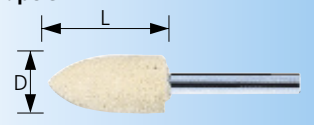


ZYA style (cylindrical) mounted felt points are mainly used peripherally. The ST-BO type with center hole is suitable particularly for face-down polishing.
Brass impregnated felt points provide increased stock removal in pre-polishing with diamond polishing pastes.

PFERD Specification Number
FK ZYA
FK ZYA MS (Brass Impregnated)

Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Shank Length (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
1/4	3/8	1/8	1-5/8	48520	16,000 - 32,000	100,000	10
5/16	3/8	1/8	1-5/8	48521	12,000 - 24,000	75,000	10
3/8	9/16	1/8	1-5/8	48222	10,000 - 20,000	61,000	10
3/8	9/16	1/4	1-5/8	48523	10,000 - 20,000	61,000	10
9/16	3/4	1/4	1-5/8	48524	6,000 - 12,000	40,000	10
3/4	1	1/4	1-5/8	48525	5,000 - 10,000	30,000	10
1	1-1/4	1/4	1-5/8	48526	4,000 - 8,000	25,000	10
Brass Impregnated							
3/8	9/16	1/8	1-5/8	48527	10,000 - 20,000	61,000	10
9/16	3/4	1/4	1-5/8	48528	6,000 - 12,000	40,000	10
3/4	1	1/4	1-5/8	48529	5,000 - 10,000	30,000	10
1	1-1/4	1/4	1-5/8	48530	4,000 - 8,000	25,000	10

Felt Points
Shape SPK

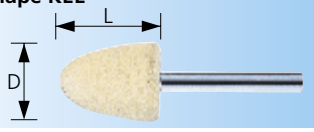


The SPK (conical pointed) style is preferred for work on radii and contours.

PFERD Specification Number
FK SPK

Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Shank Length (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
5/16	1/2	1/8	1-5/8	48570	12,000 - 24,000	75,000	10
3/8	3/4	1/8	1-5/8	48571	10,000 - 20,000	61,000	10
3/8	3/4	1/4	1-5/8	48572	10,000 - 20,000	61,000	10
1/2	3/4	1/8	1-5/8	48573	8,000 - 16,000	50,000	10
9/16	3/4	1/4	1-5/8	48574	6,000 - 12,000	40,000	10
9/16	1-1/4	1/4	1-5/8	48575	6,000 - 12,000	40,000	10
3/4	1	1/4	1-5/8	48576	5,000 - 10,000	30,000	10

Felt Points
Shape KEL



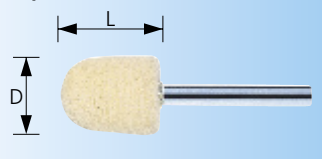
KEL type (conical with radius end) felt points are employed chiefly for work in radius areas.

PFERD Specification Number
FK KEL

Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Shank Length (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
9/16	3/4	1/4	1-5/8	48600	6,000 - 12,000	40,000	10
3/4	1	1/4	1-5/8	48601	5,000 - 10,000	30,000	10
1	1-1/4	1/4	1-5/8	48602	4,000 - 8,000	25,000	10
1-1/4	1-3/8	1/4	1-5/8	48603	3,000 - 6,000	20,000	10

Felt Points, Felt Wheels

Felt Points
Shape WRC

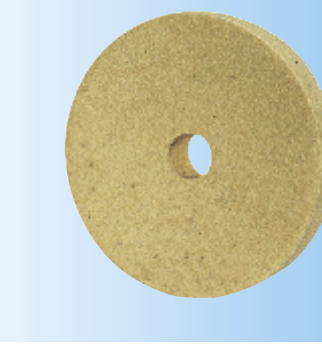


WRC style felt points (cylindrical with radius end) are the tool of choice for minor concave and convex contours.

PFERD Specification Number
FK WRC

Diameter [D] (Inches)	Length [L] (Inches)	Shank Dia. (Inches)	Shank Length (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	
5/16	1/2	1/8	1-5/8	48630	12,000 - 24,000	75,000	10
3/8	9/16	1/8	1-5/8	48631	10,000 - 20,000	61,000	10
9/16	3/4	1/4	1-5/8	48632	6,000 - 12,000	40,000	10
3/4	1	1/4	1-5/8	48633	5,000 - 10,000	30,000	10
1	1-1/4	1/4	1-5/8	48634	4,000 - 8,000	25,000	10

Felt Wheels



Felt wheels are normally used for polishing with the peripheral surface.

Brass impregnated felt wheels provide increased stock removal in pre-polishing with diamond abrasive pastes.

Ordering Note
Please order arbor separately.

PFERD Specification Number
FK SC
FK SC MS (Brass Impregnated)

Diameter (Inches)	Width (Inches)	Center Hole Dia. (Inches)	EDP Number	Recom. Speed RPM	Max. RPM	Suitable Arbors	
1-1/4	1/4	1/4	48690	3,000 - 6,000	20,000	EDP 69029	5
1-3/4	3/8	1/4	48691	2,000 - 4,000	13,500	EDP 68029	5
2-1/4	3/8	1/4	48692	1,500 - 3,000	10,000	EDP 69029	5
3	3/8	3/8	48693	1,000 - 2,000	8,100	EDP 69027	5
4	3/4	3/8	48695	900 - 1,800	6,100	EDP 69031	1
5	3/4	3/4	48697	750 - 1,500	4,800	EDP 69032	1
6	1	3/4	48699	600 - 1,200	4,000	EDP 69032	1
8	1-1/4	3/4	48700	500 - 1,000	3,000	EDP 69032	1
Brass Impregnated							
3	3/8	3/8	48694	1,000 - 2,000	8,100	EDP 69027	5
4	3/4	3/8	48696	900 - 1,800	6,100	EDP 69031	1
5	3/4	3/4	48698	750 - 1,500	4,800	EDP 69032	1

Cloth Rings and Arbors

Cloth Rings

These tools are available in four types:
- ST Sisal Fabric = pre-polishing
- TH Hard Cloth = pre-polishing
- TW Soft Cloth = high-gloss polishing
- FL Flannel = high-gloss polishing

Cloth rings used with polishing pastes for pre-polishing and high-gloss polishing tasks.

For very smooth finishes it may be recommended to use several, or even all, types in succession.

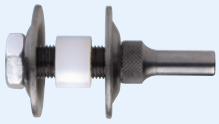
Recommended Peripheral Speeds
TW and FL 1,000-3,000 SFPM
ST and TH 2,000-3,000 SFPM

Recommendation for Use
- Pre-polishing of steel or stainless steel, cloth ring sisal fabric or hard cloth with green polishing paste (EDP 48760)
- Pre-polishing of aluminum or brass, cloth ring sisal fabric or hard cloth with grey polishing paste (EDP 48761)
- Pre-polishing of non-ferrous metals, cloth ring sisal fabric or hard cloth with brown polishing paste (EDP 48762)
- High-gloss polishing of all metals, cloth rings soft cloth or flannel with pink polishing paste (EDP 48763)
- High-gloss polishing of plastics, cloth rings soft cloth or flannel with beige polishing paste (EDP 48764)

PFERD Specification Number
TR

Diameter (Inches)	Center Hole Dia. (Inches)	Useful Width (Inches)	Type and EDP Number				Recom. Speed RPM	Max. RPM	Suitable Arbors		
			ST Sisal Fabric	TH Hard Cloth	TW Soft Cloth	FL Flannel			Sisal	Hard, Soft and Flannel	
3	3/8	3/8	48710	48720	48730	48740	2,500	8,100	EDP 84656	EDP 69027	5
4	3/8	3/8	48711	48721	48731	48741	1,900	6,100	EDP 84656	EDP 69027	5
5	3/4	3/8	48712	48722	48732	48742	1,500	4,800	EDP 84656	EDP 84656	5
6	3/4	3/8	48713	48723	48733	48743	1,250	4,000	EDP 69032	EDP 84656	5
8	3/4	3/8	48714	48724	48734	48744	950	3,000	EDP 69032	EDP 84656	5

These arbors can be used to mount PFERD felt wheels and cloth rings.

Arbor	Shank Diameter (Inches)	Clamping Width (Inches)	Tool Bore (Inches)	EDP Number	
	1/4	1/4 - 1/2	1/4	69029	1
	1/4	0 - 1/2	3/8	69027	1
	1/4	1/2 - 1	3/8	69031	1
	1/4	1/8 - 3/8	3/4	84656	1
	3/8	1/4 - 1-1/4	3/4	69032	1

Grinding and Polishing Pastes

Diamond Polishing Pastes

These pastes are designed for work on very hard materials, e.g. tungsten carbide and heat-treated steels. They are used with felt points or felt wheels.

The high concentration of abrasive grain guarantees fast and efficient results.

Available Grit Sizes
30 = Coarse
15 = Medium
7 = Fine
3 = Very Fine

Recommendation for Use
The selection of the appropriate grit size will essentially depend on the required surface finish.

When working with diamond polishing paste, it is recommended to start with the coarsest grit. Where major surface improvements have to be achieved, use several grits of increasing fineness in successive steps and clean the workpiece thoroughly after each passed step. Always use a new, clean tool (e.g., felt point, felt wheel) before switching to finer grit.

Ordering Note
Grit sizes are indicated in µm.

PFERD Specification Number
DPP

Grit Size (µm)	EDP Number	Content (fl oz)	Content (grams)	Cap Color	
30	48751	0.18	5	Brown	1
30	48750	0.70	20	Brown	1
15	48753	0.18	5	Blue	1
15	48752	0.70	20	Blue	1
7	48755	0.18	5	Red	1
7	48754	0.70	20	Red	1
3	48757	0.18	5	Green	1
3	48756	0.70	20	Green	1

Special Diluting Preparation for Diamond Polishing Pastes

Used to maintain a constant lubrication layer between the tool and the workpiece in polishing applications.

Recommendation for Use
The diluting preparation should be used extremely sparingly. Excessive use will wash out diamond grain from the paste, thus diminishing polishing performance.

PFERD Specification Number
PSP

EDP Number	Content (ml)	
48758	125	1

Grinding and Polishing Pastes

Polishing Paste Bars

The PFERD range comprises five different pastes, color-coded by application purpose.

PFERD Specification Number
PP

Type	EDP Number	Color	Use for	Width x Depth x Height (Inches)	
1-pre-polish	48760	green	Steel + Stainless Steel	2-3/4 x 2 x 5-1/2	1
2-pre-polish	48761	grey	Aluminum + Brass	2-3/4 x 2 x 5-1/2	1
3-pre-polish	48762	brown	Non-Ferrous Metals	2-3/4 x 2 x 5-1/2	1
4-high-gloss polish	48763	pink	All Metals	2-3/4 x 2 x 5-1/2	1
5-high-gloss polish	48764	beige	Plastics	2-3/4 x 2 x 5-1/2	1

Grinding Compounds

Oil-soluble grinding compounds with sharp-edged SiC grain are ideal for fine-polishing operations, e.g., regrinding of valves or shaft bearings, and in preparation of polishing steps with felt tools and cloth rings.

PFERD Specification Number
SFP

Grit Size	EDP Number	Content		
		(fl 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

Abrasive Belts

Program Introduction

PFERD supplies a core range of abrasive belts in the dimensions and grit sizes most widely used in industry and the trades. These products are available in a variety of:

- dimensions
- grit sizes
- flexibility and
- abrasive grain

The PFERD range is designed for use with standard commercial belt grinders.

Advantages

- High abrasive performance.
- High tear strength, combined with optimum flexibility.
- Very good grain adhesion.
- Long service life.
- Rapid availability, since all items can be supplied ex stock
- Special products can be supplied by special order.

Fields of Application

Abrasive belts made by PFERD are suitable for diverse machining and finishing jobs on metals, wood, paints/coatings or other materials.

Recommendations for Use

Recommendations for use of these tools under various operating conditions, as well as belt/grinder compatibility information, are given in the table "Application Recommendations for Use of Long/Short Abrasive Belts" (page 73).

Safety Note

For safety reasons, it is imperative to remain within the stated RPM limit at all times. The safety recommendations and pictograms must be observed when using flexible abrasives!

Safety Instructions

- Carefully mount belt on tool and check for proper belt tracking (refer to tool manual).
- For finishing and grinding, attempt to run belt in the direction of the prior grain pattern.
- Always use appropriate protective glasses, face shields and body protection.
- Follow power tool manufacturer's recommended use procedures and safety instructions. Use guards provided with machine.
- Periodically check tooling and mounting hardware to make sure they are in good operating condition. Repair or replace damaged tooling before use.

Safety Recommendations


= Wear protective goggles!


= Use ear protection!

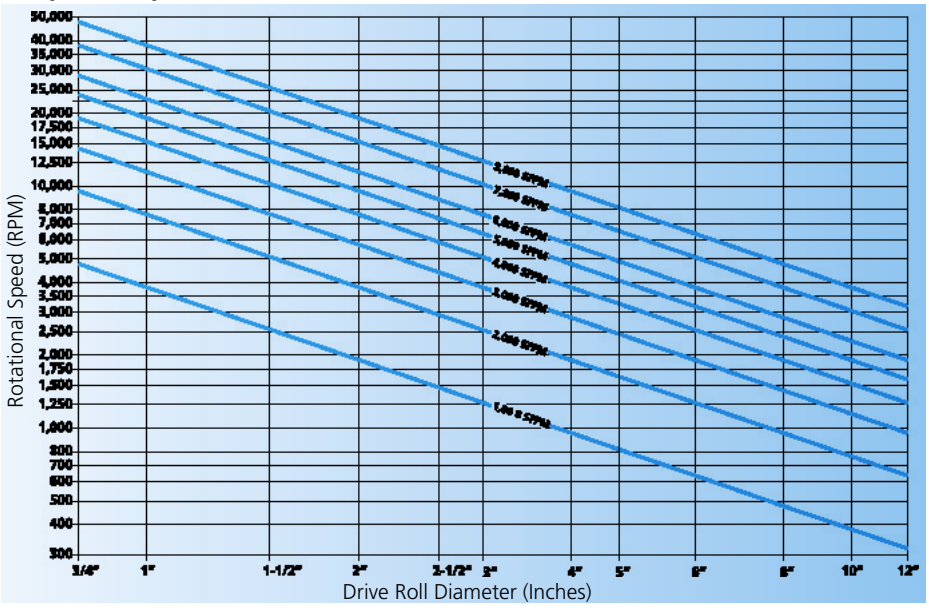

= Wear protective gloves!


= Observe safety recommendations!


= Wear a dust mask!

204

Peripheral Speed of Abrasive Belts



In the diagram, peripheral speeds are represented by blue diagonal lines. Each vertical line represents a drive roll diameter. From its point of intersection with the diagonal line for a given peripheral speed, proceed horizontally to the left margin where you will find the corresponding rotational speed (RPM) of the drive roll.

Example

Drive Roll Diameter: 5"
Peripheral speed: 4,000 - 6,000 SFPM
Rotational speed: 3,000 - 4,600 RPM

Removal Performance, Speed and Troubleshooting

Variables Influencing Removal Performance

This chart illustrates the variables that affect grinding results on the workpiece surface.

Variable	Most aggressive, Better cutting	Less aggressive, Lower cutting
Workpiece feed speed	← slower	faster →
Belt speed (SFPM)	← slower	faster →
Belt length	← longer	shorter →
Grit size	← coarse	fine →
Contact wheel: Type	← serrated	smooth →
Diameter	← smaller	larger →
Composition	← steel – rubber	canvas →
Feed pressure	← high	low →
Grinding aid	← straight oil – oil solubles – water	dry →
Workpiece hardness	← softer	harder →

Troubleshooting – Symptoms and Solutions

This table is a partial listing of potential problems and possible solutions to grinding problems with abrasive belts. If you experience problems that cannot be solved using these recommendations, PFERD has trained technicians that will try to solve your problems via telephone or on-site at your location.

Belt Breakage	
Too much work pressure	■ reduce pressure ■ use coarser grit ■ change belts
Not enough belt tension under work load	■ increase tension (do not over-tighten)
Too much belt tension for grit in use	■ adjust tension (should not be more than required under load to prevent slippage)
Foreign materials caught between belt's backer and drive or contact wheels	■ use dust collection system ■ clean work area
Belts creased or damaged during handling	■ handle carefully, see storage and handling information

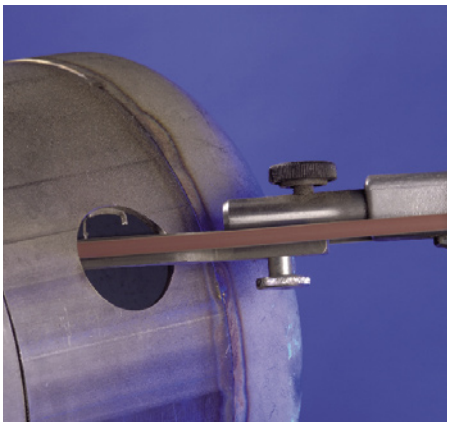
Belt Not Tracking Properly	
Tracking mechanism not properly adjusted	■ follow machine manual to properly adjust tracking
Damaged or fluttering edges of belt	■ increase belt tension, replace belt if necessary
Belt runs off due to slippage under load	■ increase tension to prevent slippage (do not overtighten)
Tapered contact roll or idler roll, idler roll and contact roll not parallel	■ redress roll to remove taper, align to parallel

Poor Grinding Results	
Burnishing of work surface – indication of over-used belt	■ use belt only as long as efficient ■ use proper feed speeds
Streaks and/or ridges on workpiece	■ clean or redress contact roll ■ clean platen, replace felt or graphite ■ check dust collection for blockages
Too coarse finish	■ use finer grit ■ increase SFPM ■ apply more feed pressure
Too fine finish	■ use coarser grit ■ decrease SFPM ■ apply less feed pressure

Application Recommendations for Use of Long/Short Abrasive Belts

Material Groups			Operation	Surface Finish	Grit Size	Recommended Abrasive Grit	Recommended Peripheral Speed (SFPM)
Steel and Steel Castings	Non-hardened, non-heat-treated steels up to 1200 N/mm² (≤ 35 HRC)	Constructional steels Carbon steels Tool steels Non-alloyed steels Case-hardened steels Steel castings	coarse grinding	coarse ▼ fine	coarse ▼ fine	**Aluminum Oxide A**	**4,900-6,900**
			fine grinding				
			very fine grinding				
	Hardened, heat-treated steels over 1200 N/mm² (> 35 HRC)	Tool steels Quenched and tempered steel Alloyed steels Steel castings	coarse grinding	coarse ▼ fine	coarse ▼ fine	**Aluminum Oxide A Zirconia Z**	**3,900-5,900**
			fine grinding				
			very fine grinding				
High-grade steels	Stainless steels (INOX)	Austenitic and ferritic high-grade steels	coarse grinding	coarse ▼ fine	coarse ▼ fine	**Zirconia Z Ceramic CO**	**2,900-4,900**
			fine grinding				
			very fine grinding				
Non-ferrous Metals	Soft non-ferrous metals	Aluminum alloys Brass Copper Zinc	coarse grinding	coarse ▼ fine	coarse ▼ fine	**Aluminum Oxide A**	**5,900-7,900**
			fine grinding				
			very fine grinding				
	Hard non-ferrous metals	Bronze Titanium/titanium alloys Very hard aluminum alloys (high Si content)	coarse grinding	coarse ▼ fine	coarse ▼ fine	**Aluminum Oxide A**	**3,900-5,900**
			fine grinding				
			very fine grinding				
	High-temperature materials	Nickel-based alloys NiCo alloys (jet engine and turbine construction)	coarse grinding	coarse ▼ fine	coarse ▼ fine	**Zirconia Z Ceramic CO**	**1,000-2,900**
			fine grinding				
			very fine grinding				
Cast Iron		Grey cast iron Nodular cast iron	coarse grinding	coarse ▼ fine	coarse ▼ fine	**Aluminum Oxide A**	**4,900-6,900**
			fine grinding				
			very fine grinding				
Other Materials	Plastics Wood Paint/coatings	Fiber-reinforced plastics Thermoplastics Wood, chipboard Paint/coatings Melamine	coarse grinding	coarse ▼ fine	coarse ▼ fine	**Aluminum Oxide A**	**1,900-4,900**
			fine grinding				
			very fine grinding				

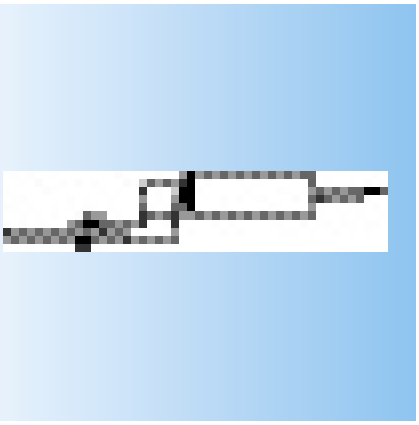
File Belts



Application Examples

File Belts

- Portable, light duty use
- For grinding, deburring, finishing and polishing
- Small area of surface contact
- For use on hard-to-reach areas and contours, e.g., tubes, railings



Recommendations for Use

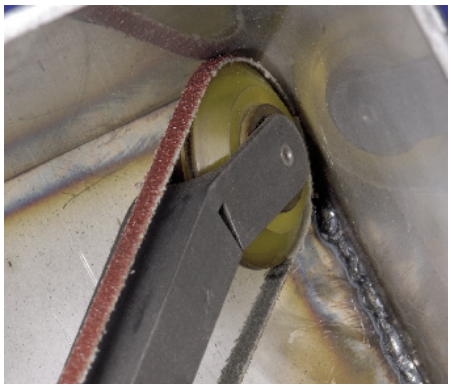
Recommendations for use of these tools under various operating conditions, as well as belt/grinder compatibility information, are given in the table "Application Recommendations for Use of Long/Short Abrasive Belts" (page 73).

File Belts
Aluminum Oxide (A)

For general-purpose grinding, from coarse to fine in diverse applications.

Abrasive
Aluminum Oxide A

PFERD Specification Number
BA-A



Belt Size (Inches)	Grit and EDP Number							
	36	40	50	60	80	100	120	
1/8 x 12	48944	48945	48946	48947	48948	48949	48950	10
1/8 x 20-1/2	48952	48953	48954	48955	48956	48957	48958	10
1/4 x 12	48960	48961	48962	48963	48964	48965	48966	10
1/4 x 18	49000	49001	49002	49003	49004	49005	49006	10
1/4 x 20-1/2	48968	48969	48970	48971	48972	48973	48974	10
1/4 x 24	49008	49009	49010	49011	49012	49013	49014	10
3/8 x 12	48976	48977	48978	48979	48980	48981	48982	10
3/8 x 13	49016	49017	49018	49019	49020	49021	49022	10
1/2 x 12	49024	49025	49026	49027	49028	49029	49030	10
1/2 x 20-1/2	48984	48985	48986	48987	48988	48989	48990	10
1/2 x 18	49032	49033	49034	49035	49036	49037	49038	10
1/2 x 24	49040	49041	49042	49043	49044	49045	49046	10
5/8 x 20-1/2	48992	48993	48994	48995	48996	48997	48998	10
3/4 x 18	49048	49049	49050	49051	49052	49053	49054	10
3/4 x 20-1/2	49056	49057	49058	49059	49060	49061	49062	10
1 x 12	49064	49065	49066	49067	49068	49069	49070	10
1 x 30	49083	49084	49085	49086	49087	49088	49089	10

File Belts

File Belts
Zirconia Alumina (Z)

Designed for coarse grinding and high stock removal, these tools nevertheless attain a long service life. Zirconia alumina is a high-performance abrasive which delivers best results at increased contact pressure.

Abrasive
Zirconia Alumina Z

PFERD Specification Number
BA-Z

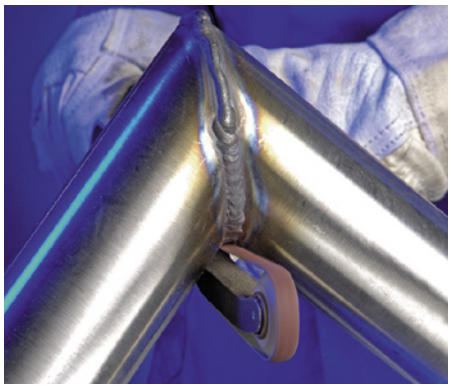
Belt Size (Inches)	Grit and EDP Number					
	36	40	50	60	80	
1/4 x 18	49691	49692	49693	49694	49695	10
1/4 x 24	49696	49697	49698	49699	49700	10
3/8 x 13	49701	49702	49703	49704	49705	10
1/2 x 12	49712	49713	49714	49715	49716	10
1/2 x 18	49717	49718	49719	49720	49730	10
1/2 x 24	49734	49735	49736	49738	49739	10
3/4 x 18	49740	49741	49742	49743	49744	10
3/4 x 20-1/2	49746	49747	49748	49749	49750	10

File Belts
Ceramic Grain (CO)

For aggressive grinding achieving maximum stock removal on hard, poorly heat-conducting materials. Active additives in the coating ensure a substantially improved abrasive performance while preventing loading and reducing heat build-up in the workpiece.

Abrasive
Ceramic Oxide CO (top-sized)

PFERD Specification Number
BA-CO



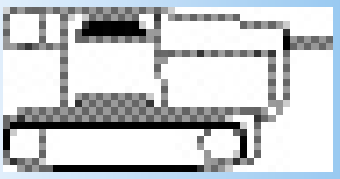
Belt Size (Inches)	Grit and EDP Number				
	40	50	60	80	
1/4 x 18	49497	49498	49499	49500	10
1/4 x 24	49504	49505	49506	49507	10
3/8 x 13	49511	49512	49513	49514	10
1/2 x 12	49529	49530	49531	49532	10
1/2 x 18	49536	49537	49538	49539	10
1/2 x 24	49543	49544	49545	49546	10
3/4 x 18	49560	49561	49562	49563	10
3/4 x 20-1/2	49567	49568	49569	49570	10

Portable Belts

Application Examples

Portable Belts

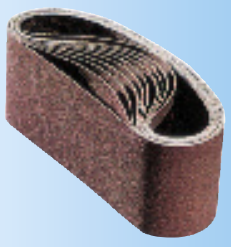
- Portable use for working large flat or near flat surfaces
- For grinding, deburring, finishing and polishing
- Removing rust and corrosion, surface conditioning
- Tool designed for use on metals, wood, plastic, fiberglass and composites



Recommendations for Use

Recommendations for use of these tools under various operating conditions, as well as belt/grinder compatibility information, are given in the table "Application Recommendations for Use of Long/Short Abrasive Belts" (page 73).

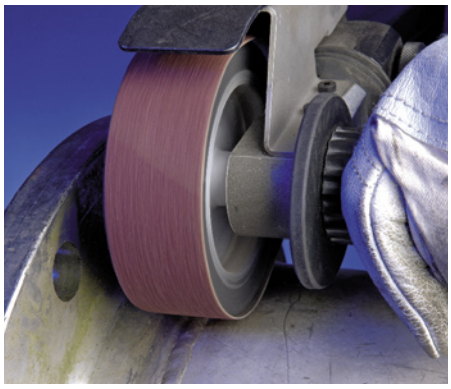
Portable Belts
Aluminum Oxide (A)



For general-purpose grinding, from coarse to fine in diverse applications.

Abrasive
Aluminum Oxide A

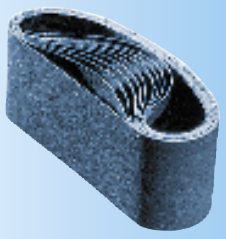
PFERD Specification Number
BA-A



Belt Size (Inches)	Grit and EDP Number												
	24	36	40	50	60	80	100	120	150	180	240	320	
3 x 18	49196	49197	49198	49199	49200	49201	49202	49203	49204	49205	49207	49208	10
3 x 21	49209	49210	49211	49212	49213	49214	49215	49216	49217	49218	49220	49221	10
3 x 24	49248	49249	49250	49251	49252	49253	49254	49255	49256	49257	49259	49260	10
3-1/2 x 15-1/2	49310	49311	49312	49313	49314	49315	49316	49317	-	-	-	-	10
4 x 24	49358	49359	49360	49361	49362	49363	49364	49365	49366	49367	49369	49370	10

Portable Belts

Portable Belts
Zirconia Alumina (Z)



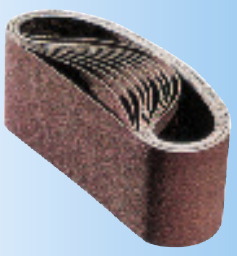
Designed for coarse grinding and high stock removal, these tools nevertheless attain a long service life. Zirconia alumina is a high-performance abrasive which delivers best results at increased contact pressure.

Abrasive
Zirconia Alumina Z

PFERD Specification Number
BA-Z

Belt Size (Inches)	Grit and EDP Number						
	24	36	40	50	60	80	
3 x 18	-	49835	49836	49837	49838	49839	10
3 x 21	49840	49841	49842	49843	49844	49845	10
3 x 24	49846	49847	49848	49849	49850	49851	10
4 x 24	49872	49873	49874	49875	49876	49877	10

Portable Belts
Ceramic Grain (CO)



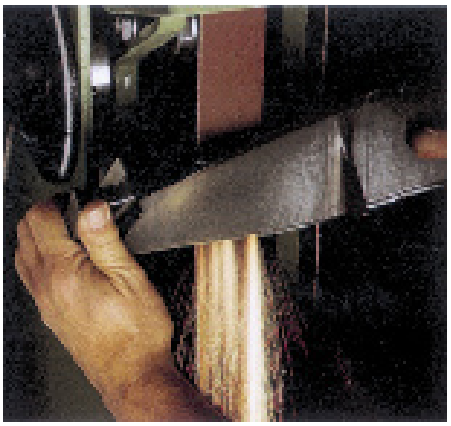
For aggressive grinding achieving maximum stock removal on hard, poorly heat-conducting materials. Active additives in the coating ensure a substantially improved abrasive performance while preventing loading and reducing heat build-up in the workpiece.

Abrasive
Ceramic Oxide CO (top-sized)

PFERD Specification Number
BA-CO

Belt Size (Inches)	Grit and EDP Number				
	40	50	60	80	
3 x 18	49623	49624	49625	49626	10
3 x 21	49630	49631	49632	49633	10
3 x 24	49637	49638	49639	49640	10
4 x 24	49651	49652	49653	49654	10

Benchstand Belts



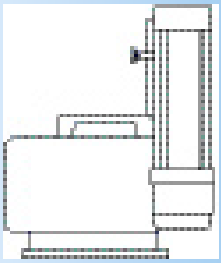
Application Examples

Benchstand Belts

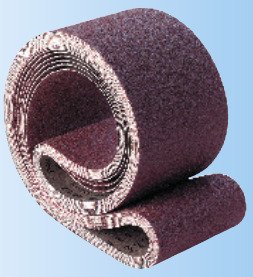
- Stationary machine for light to moderate duty use
- Most machines are sanding attachments to bench grinder
- Versatile, low powered machines for general purpose use
- Grinding and finishing against platen or contact wheel

Recommendations for Use

Recommendations for use of these tools under various operating conditions, as well as belt/grinder compatibility information, are given in the table "Application Recommendations for Use of Long/Short Abrasive Belts" (page 73).



Benchstand Belts
Aluminum Oxide (A)



For general-purpose grinding, from coarse to fine in diverse applications.

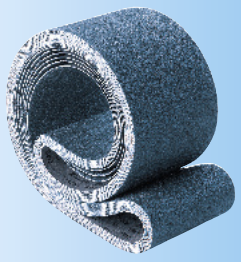
Abrasive
Aluminum Oxide A

PFERD Specification Number
BA-A

Belt Size (Inches)	Grit and EDP Number													
	24	36	40	50	60	80	100	120	150	180	220	240	320	
1 x 42	-	49092	49093	49094	49095	49096	49097	49098	49099	49100	49101	49102	49103	10
1-1/2 x 60	-	49105	49106	49107	49108	49109	49110	49111	-	49113	-	-	-	10
2 x 48	-	49132	49133	49134	49135	49136	49137	49138	-	-	-	-	-	10
2 x 60	-	49141	49142	49143	49144	49145	49146	49147	-	-	-	-	-	10
2 x 72	-	49150	49151	49152	49153	49154	49155	49156	-	-	-	-	-	10
2-1/2 x 60	-	49179	49180	49181	49182	49183	49184	49185	-	-	-	-	-	10
4 x 36	49371	49372	49373	49374	49375	49376	49377	49378	49379	49380	-	49382	49383	10
4 x 54	-	49392	49393	49394	49395	49396	49397	49398	-	-	-	-	-	10
6 x 48	49463	49464	49465	49466	49467	49468	49469	49470	49471	49472	49473	49474	49475	10

Benchstand Belts

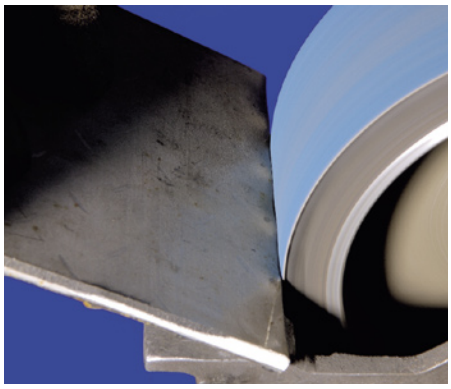
Benchstand Belts
Zirconia Alumina (Z)



Designed for coarse grinding and high stock removal, these tools nevertheless attain a long service life. Zirconia alumina is a high-performance abrasive which delivers best results at increased contact pressure.

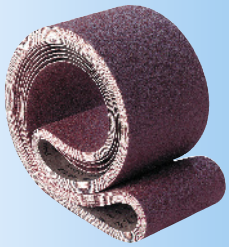
Abrasive
Zirconia Alumina Z

PFERD Specification Number
BA-Z



Belt Size (Inches)	Grit and EDP Number					
	36	40	50	60	80	
1 x 42	49774	49775	49776	49777	49778	10
1-1/2 x 60	49780	49781	49782	49783	49784	10
2 x 48	49786	49787	49788	49789	49790	10
2 x 60	49792	49793	49794	49795	49796	10
2 x 72	49798	49799	49800	49801	49802	10
2-1/2 x 60	49828	49829	49830	49831	49832	10
4 x 36	49879	49880	49881	49882	49883	10
6 x 48	49885	49886	49887	49888	49889	10

Benchstand Belts
Ceramic Grain (CO)



For aggressive grinding achieving maximum stock removal on hard, poorly heat-conducting materials. Active additives in the coating ensure a substantially improved abrasive performance while preventing loading and reducing heat build-up in the workpiece.

Abrasive
Ceramic Oxide CO (top-sized)

PFERD Specification Number
BA-CO

Belt Size (Inches)	Grit and EDP Number				
	40	50	60	80	
1 x 42	49574	49575	49576	49577	10
1-1/2 x 60	49581	49582	49583	49584	10
2 x 48	49588	49589	49590	49591	10
2 x 60	49595	49596	49597	49598	10
2 x 72	49602	49603	49604	49605	10
2-1/2 x 60	49616	49617	49618	49619	10
4 x 36	49658	49659	49660	49661	10
6 x 48	49672	49673	49674	49675	10

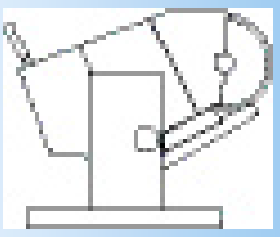
Backstand Belts

Application Examples

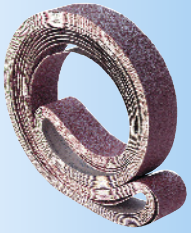
Backstand Belts
- Stationary, heavy-duty machine
- Deburring, blending and finishing
- Work performed at contact wheel for most aggressive action
- Grinding and finishing castings and forgings

Recommendations for Use

Recommendations for use of these tools under various operating conditions, as well as belt/grinder compatibility information, are given in the table "Application Recommendations for Use of Long/Short Abrasive Belts" (page 73).



Backstand Belts
Aluminum Oxide (A)



For general-purpose grinding, from coarse to fine in diverse applications.

Abrasive
Aluminum Oxide A

PFERD Specification Number
BA-A

Belt Size (Inches)	Grit and EDP Number							
	36	40	50	60	80	100	120	
2 x 132	49159	49160	49161	49162	49163	49164	49165	10
3 x 132	49289	49290	49291	49292	49293	49294	49295	10
4 x 132	49446	49447	49448	49449	49450	49451	49452	10
6 x 132	49477	49478	49479	49480	49481	49482	49483	10

Backstand Belts
Zirconia Alumina (Z)

Designed for coarse grinding and high stock removal, these tools nevertheless attain a long service life. Zirconia alumina is a high-performance abrasive which delivers best results at increased contact pressure.

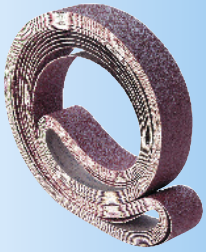
Abrasive
Zirconia Alumina Z

PFERD Specification Number
BA-Z

Belt Size (Inches)	Grit and EDP Number					
	36	40	50	60	80	
2 x 132	49804	49805	49806	49807	49808	10
3 x 132	49853	49854	49855	49856	49857	10
4 x 132	49861	49862	49863	49864	49865	10

Backstand Belts, POLIVLIES® Surface Conditioning Belts

Backstand Belts
Ceramic Grain (CO)



For aggressive grinding achieving maximum stock removal on hard, poorly heat-conducting materials. Active additives in the coating ensure a substantially improved abrasive performance while preventing loading and reducing heat build-up in the workpiece.

Abrasive
Ceramic Oxide CO (top-sized)

PFERD Specification Number
BA-CO

Belt Size (Inches)	Grit and EDP Number				
	40	50	60	80	
2 x 132	49609	49610	49611	49612	10
3 x 132	49644	49645	49646	49647	10
4 x 132	49665	49666	49667	49668	10

POLIVLIES® Surface Conditioning Belts

These heavy-duty non-woven surface conditioning belts are manufactured with aluminum oxide impregnated fiber 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
C = Coarse (color: yellowish brown)
M = Medium (color: reddish brown)
F = Fine (color: blue)

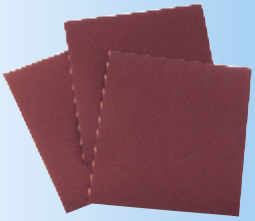
Recommendation for Use
Please observe indicated direction of rotation.

PFERD Specification Number
VB

Belt Size (Inches)	Grade and EDP Number			
	Coarse	Medium	Fine	
1/4 x 12	43634	43635	43636	10
1/4 x 18	43550	43551	43552	10
1/4 x 20-1/2	43637	43638	43639	10
1/4 x 24	43553	43554	43555	10
3/8 x 12	43640	43641	43642	10
1/2 x 12	43643	43644	43645	10
1/2 x 18	43556	43557	43558	10
1/2 x 20-1/2	43646	43647	43648	10
1/2 x 24	43559	43560	43561	10
5/8 x 20-1/2	43649	43650	43651	10
3/4 x 18	43562	43563	43564	10
3/4 x 20	43565	43566	43567	10
3/4 x 20-1/2	43652	43653	43654	10
3/4 x 24	43607	43608	43609	10
3-1/2 x 5-1/2	43613	43614	43615	10
4 x 24	43616	43617	43618	10

Abrasive Sheets (Cloth/Paper Backed)

Abrasive Sheets, Cloth-Backed (HP)
Aluminum Oxide A



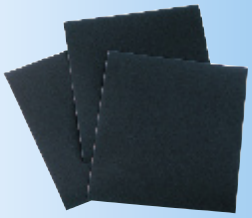
For use on metals or wood. Designed for ultra heavy-duty applications, resists oil and petroleum.

Abrasive
Aluminum Oxide A

PFERD Specification Number
BG HP

Width x Length (Inches)	Grit	EDP Number	
9 x 11	40	46912	50
9 x 11	60	46913	50
9 x 11	80	46914	50
9 x 11	100	46915	50
9 x 11	120	46916	50
9 x 11	150	46917	50
9 x 11	180	46918	50
9 x 11	220	46919	50
9 x 11	240	46920	50
9 x 11	280	46921	50
9 x 11	320	46922	50
9 x 11	360	46923	50
9 x 11	400	46924	50
9 x 11	444	46925	50
9 x 11	999	46926	50

Abrasive Sheets, Cloth-Backed (BG)
Aluminum Oxide A



Suitable for use on metals or wood. A cost-efficient alternative for standard-duty applications.

Abrasive
Aluminum Oxide A

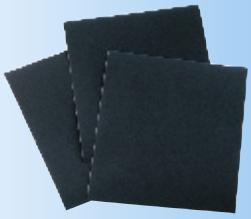
PFERD Specification Number
BG

Width x Length (Inches)	Grit	EDP Number	
9 x 11	40	46900	50
9 x 11	60	46901	50
9 x 11	80	46902	50
9 x 11	100	46903	100
9 x 11	120	46904	100
9 x 11	150	46905	100

Abrasive Sheets (Cloth/Paper Backed)

Width x Length (Inches)	Grit	EDP Number	
9 x 11	180	46906	100
9 x 11	220	46907	100
9 x 11	240	46908	100
9 x 11	280	46909	100
9 x 11	320	46910	100
9 x 11	400	46911	100

Abrasive Sheets, Paper-Backed (Water Resistant) SiC



Can be used on paintwork and glass. Particularly suitable for wet grinding on conventional coating systems.

Abrasive
Silicon Carbide SiC

PFERD Specification Number
BP SiC

Width x Length (Inches)	Grit	EDP Number	
9 x 11	100	46927	50
9 x 11	120	46928	50
9 x 11	150	46929	50
9 x 11	180	46930	50
9 x 11	220	46931	50
9 x 11	240	46932	50
9 x 11	280	46933	50
9 x 11	320	46934	50
9 x 11	360	46935	50
9 x 11	400	46936	50
9 x 11	500	46937	50
9 x 11	600	46938	50
9 x 11	800	46939	50
9 x 11	1000	46940	50
9 x 11	1200	46941	50

Abrasive Sheets (Cloth/Paper Backed)

Abrasive Sheets, Paper-Backed Aluminum Oxide A

For removing paint and coatings from metal or wood.

Abrasive
Aluminum Oxide A

PFERD Specification Number
BP A

Width x Length (Inches)	Grit	EDP Number	
9 x 11	40	46942	50
9 x 11	60	46943	50
9 x 11	80	46944	50
9 x 11	100	46945	100
9 x 11	120	46946	100
9 x 11	150	46947	100
9 x 11	180	46948	100
9 x 11	220	46949	100
9 x 11	240	46950	100
9 x 11	280	46951	100
9 x 11	400	46952	100

POLIVLIES® Hand Pads, Holder

POLIVLIES® Hand Pads

Designed for light manual grinding, deburring and cleaning work on metals, plastics, glass-fiber reinforced plastics, stainless steel, aluminum, paint, coatings and fillers.
Due to their flexibility, POLIVLIES® hand pads provide outstanding results on contours and in hard-to-reach workpiece areas.

Abrasive
A = Aluminum Oxide
C = Silicon Carbide

Application
- Light deburring work
- Corrosion removal
- Cleaning jobs in tool and mold-making
- Fine grinding / patterning of stainless steel

Recommendation for Use
Suitable for dry or wet grinding.

PFERD Specification Number
PVSK

Maroon (general purpose)
Most widely used of all hand pads. Aluminum oxide grain, noted for its toughness and durability on tasks such as cleaning, deburring, rust removal, blending and finishing. May be used dry or with solvents.

Tan
This heavy-duty pad consists of a dense aluminum oxide grain concentration on heavy backing material. Designed for the most severe applications, it is extremely durable and resists tearing and fraying. Excellent for removal of oxidation, weld cleaning, deburring, and finishing stainless and aluminum.

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.

Green
General purpose grade pads made from aluminum oxide and available in standard and heavy-duty. Commonly used in the food service industry, these pads are recommended for light duty and finishing applications.

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.

Width x Length (Inches)	EDP Number	Description	Grain	Color	
6 x 9	44600	General purpose	Aluminum Oxide	Maroon	20
6 x 9	44606	Medium finish	Aluminum Oxide	Tan	20
6 x 9	44609	Ultra fine	Silicon Carbide	Grey	20
6 x 9	44613	Standard	Aluminum Oxide	Green	20
6 x 9	44618	Non-abrasive	None	White	20

Pad Holder

Ergonomic pad holder designed for use with 6 x 9" hand pads.

PFERD Specification Number
PVPH

Dimension (Inches)	EDP Number	
3-1/2 x 6	44620	1

Shop Rolls

Shop Rolls are used in workshops, maintenance, tool-making, fabrications. The material can be torn by hand to any length for practicality and economy. Choose from a wide selection of type, sizes and grits.

Light, Flexible Shop Rolls

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

Abrasive
A = Aluminum Oxide

PFERD Specification Number
SBRG

Dimensions (Inches)	Grit and EDP Number														
	40	50	60	80	100	120	150	180	220	240	280	320	400	500	
1 x 50	47100	47101	47102	47103	47104	47105	47106	47107	47108	47109	47110	47111	47112	47113	1
1-1/2 x 50	47150	47151	47152	47153	47154	47155	47156	47157	47158	47159	47160	47161	47162	47163	1
2 x 50	47200	47201	47202	47203	47204	47205	47206	47207	47208	47209	47210	47211	47212	47213	1

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
A = Aluminum Oxide

PFERD Specification Number
SBRR

Dimensions (Inches)	Grit and EDP Number													
	40	50	60	80	100	120	150	180	220	240	280	320	400	
1 x 50	47114	47115	47116	47117	47118	47119	47120	47121	47122	47123	47124	47125	47126	1
1-1/2 x 50	47164	47165	47166	47167	47168	47169	47170	47171	47172	47173	47174	47175	47176	1
2 x 50	47214	47215	47216	47217	47218	47219	47220	47221	47222	47223	47224	47225	47226	1

Screen Rolls

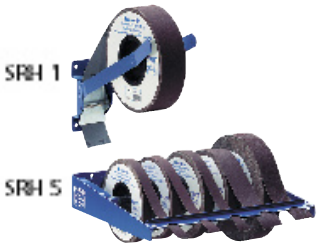
Silicon carbide screen cloth is highly resistant to loading. Offers long life on ferrous and non-ferrous metals, wood, plastics and other materials. Double sided.

Abrasive
C = Silicon Carbide

PFERD Specification Number
SBRS

Dimensions (Inches)	Grit and EDP Number			
	80	120	180	
1-1/2 x 5 Yards	47230	47231	47232	1
1-1/2 x 10 Yards	47233	47234	47235	1

Shop Roll Holders SRH 1 and SRH 5



Two different holders are available for convenient storage of shop rolls - rip off any desired length:

Single Roll Holder SRH 1 (empty)
For 1", 1-1/2" or 2" roll width.

Multi Roll Holder SRH 5 (empty)
For 1", 1-1/2" or 2" roll width.
Permits various roll width combinations, e.g., 5 x 2" or 5 x 1-1/2".

Both holders are prepared for wall mounting.

PFERD Specification Number
SRH

Type	EDP Number	No. of rolls	Suitable for roll widths (Inches)	Suitable for roll dia. (Inches)	
Holder 1	47238	1	1, 1-1/2 or 2	15	1
Holder 5	47239	variable	1, 1-1/2 or 2	10	1

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PFERD quality certified according to EN ISO 9001.

Printed in Germany
Subject to technical modifications.
10/2006
820 904