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File handles and accessories

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Technical support

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

Contact your local sales representative or visit us at pferd.com to learn more.

PFERD quality

With the benefit of over 200 years of experience, PFERD files are developed, manufactured and tested in accordance with the strictest quality requirements. Research and development, our inhouse and plant construction, and the continuous testing to quality and safety standards in our internal laboratories all guarantee high PFERD quality.

PFERD quality management is certified according to ISO 9001.



PFERDVALUE® – Your added value with PFERD

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

Discover **PFERD**ERGONOMICS[®] and **PFERD**EFFICIENCY[®]:

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



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



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



3







Packaging

PFERD files in standard industrial packaging are traditionally rolled in paper, which protects them against corrosion. Depending on file length, they are packed in packaging units of 5 or 10 pieces (except chain saw files and precision files).

These files are delivered without a handle. They are recommended for experienced users who have their own handles or would like to purchase them separately.

Advantages:

- Robust, corrosion- and damage-resistant packaging.
- Easier selection of the optimum file due to the colour coding system for fast cut selection.
- Packaging labels with all the important information at a glance.



Point-of-sale packaging

PFERD also offers many files and file sets in aesthetically-pleasing point-of-sale packaging, ideal for display on a **PFERD**TOOL-CENTER.

Advantages:

- Attractive design with easy identification of product features and part number.
- Included ergonomic-grip file handles.
- Optimal protection against corrosion and damage.



PFERDTOOL-CENTER

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



PFERDPRAXIS brochures

Our **PFERD**PRAXIS brochures contain a wealth of useful information on material properties as well as tips and tricks for using PFERD products on specific materials or for specific applications. You can find information on the maintenance and care of a saw chain and repair of other forestry tools in the "PFERD tools for forestry" **PFERD**PRAXIS FOCUS brochure.

Please visit our website for more information on our products: pferd.com





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America	an pattern files
Cut 0/ ALU	 Cross cut. Suitable for coarse stock removal and for roughing.
Cut 1/ Bastard	Cross cut.Suitable for coarse stock removal and for roughing.
Cut 2/ Second	 Cross cut. Suitable for universal roughing and finishing.
Cut 3/ Smooth	Cross cut. Suitable for fine processing and finishing.
Car boo	ly files
Cut 00	 Radial cut. Suitable for very coarse stock removal and for roughing. Creates score-free surfaces.
Cut 0	 Radial cut. Suitable for coarse stock removal and for roughing. Creates score-free surfaces.
Cut 1	 Radial cut. Suitable for coarse stock removal and for roughing. Creates score-free surfaces.
Cut 2	 Radial cut. Suitable for universal roughing and finishing. Creates score-free surfaces.
Cut 3	 Radial cut. Suitable for fine stock removal and finishing. Creates score-free surfaces.
Cut 5	 Special cross cut. Suitable for finest finishing work. Creates score-free surfaces.
Milled t	tooth files
Cut 1	 Straight cut. Suitable for coarse stock removal on soft metals. Because of its milled tooth shape with large flutes, the teeth do not clog up.

Straight cut.Suitable for universal roughing and

Straight cut.

metals.

Suitable for universal roughing and finishing on soft metals.
Because of its milled tooth shape with large flutes, the teeth do not clog up.

Suitable for fine stock removal on soft

Because of its milled tooth shape with large flutes, the teeth do not clog up.

Sharpening files

Junipen	ing mes	
Classic		Classic spiral cut. For users who prefer an aggressive filing action.
Premium		Innovative spiral cut. For users who prefer a softer filing action.
Cut 1/ Bastard		Single cut. Universally suited to sharpening.
Cut 2/ Second		Single cut. Universally suited to sharpening.
Cut 3/ Smooth		Single cut. Universally suited to sharpening.
Rasps		
Cut 1/ Bastard		Rasp cut. Suitable for coarse stock removal and for roughing.
Cut 2/ Second		Rasp cut. Suitable for universal roughing and finishing.
Cut 3/ Smooth		Rasp cut. Suitable for fine processing and finishing.
Precisio	n files	
Cut 00		Cross cut. Suitable for very coarse precision work.
Cut 0		Cross cut. Suitable for coarse precision work.
Cut 1		Cross cut. Suitable for medium precision work.
Cut 2		Cross cut. Suitable for medium to fine precision work.
Cut 4	and the second	Cross cut. Suitable for very fine precision work.

6 1

Cut 2

Cut 3



Several criteria determine PFERD quality



Uniform hardness through flawless steel microstructure

The profiling in the rolling mill, the forging of shape and tang, the annealing prior to cutting and the heat treatment each cause a change in the steel microstructure. The high carbon content of the steel microstructure determines the hardness and cutting performance of the file and must therefore be maintained.



Exact shape and uniform cut from tang to tip

The file blanks acquire their exact shape through forging and grinding. This enables accurate work. Equally spaced cuts and a uniform depth of cut ensure good filing performance and good surface finishes. The type and angle of the cut depend on the purpose for which the file is intended.



Perfectly milled tooth geometries for every application

Tooth shapes suited to various applications ensure the best stock removal rate. There is no universally appropriate tooth shape for every application. PFERD has developed the tooth shapes and tooth geometries for each of the various applications. The figure shows a car body file tooth with its typical rounded tooth face and large flute.

Number of teeth per Inch

Length (with-	Machinists files Teeth number ± 8 %			Sharpening files Teeth number ± 5 %						
out	Destand	Second	Smooth			Extra	Double		Mill files	
tang) [Inch]	Bastard Cut 1	Cut 2	Cut 3	Regular	Slim	slim extra slim		Bastard Cut 1	Second Cut 2	Smooth Cut 3
4	43	56	71	51	58	66	-	-	-	-
5	-	-	-	48	56	61	64	-	-	-
6	33	46	56	43	51	56	61	51	61	71
7	-	-	-	41	48	53	58	-	-	-
8	25	36	46	38	43	51	56	46	51	56
10	23	30	41	36	41	43	-	41	46	51
12	20	28	36	-	-	-	-	36	41	46
14	18	25	33	-	-	-	-	31	36	41

Determining the number of teeth:

The number of teeth for a file is the number of scores (cuts) per inch of file length, counted along the file axis. For cross cut files, the number of cuts is determined by the upper cut.



Example:

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

Colour code for the file cut

Cuts are colour-coded to allow for rapid file selection.

Cut 1	Cut 2	Cut 3
green =	yellow =	red =
coarse	medium	fine
(Bastard)	(Second)	(Smooth)
10 Hand	10 Hand	10 Hand
Planas paralelas	Planas paralelas	Planas paralelas
Inches bastard	Inches Second cut	Inches Smooth
basto	medio	fino
1112 10" 1	1112 10" 2	1112 10" 3

Dimensions:



The cross-sectional dimensions indicated in the tables are measured across the cut and may vary depending on cut type. For tapered files the cut is measured at the highest and widest position. PFERD files are manufactured in compliance with DIN and ISO standards.

Products made to order

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

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



American pattern files Aluminum files



		and various non-ferrou: uniform in thickness, sp eliminates loading. Advantages:	iminum alloys, soft steel s metals. Single cut, becial tooth construction try prevents the file from rous metal, plastics			
Length [inches]	Cross-section [Inches]	Cut and EDP number Cut 0		Compatible handle EDP		
10	31/32 x 1/4	17103		11146	10	
12	1-5/32 x 9/32	17104		11148	5	
Aluminum half round Like the flat aluminum, this file is made for use on aluminum and soft metals. The half round shape permits filing on concave surfaces and rounding out holes. The flat side is single cut and the half round side is spiral cut. Advantages:						

Advantages:

Special tooth geometry prevents the file from loading.

- Good surface finish.
- Labour-saving work.

Workpiece materials:

aluminum, soft non-ferrous metal, plastics

Applications:

deburring, surface work

Length			Compatible	
[Inches]	s] [Inches]	Cut 0	handle EDP	
10	15/16 x 9/32	17107	11146	10
12	1-1/8 x 11/32	17108	11148	5





PFERD produces machinists files with the highest quality standards. They achieve a long service life and high stock removal rates. Three application-oriented cuts are available.

Advantages:

- Consistently high stock removal rate from the tip to the tang.
- Long service life.
- Application-oriented design.
- Half-round and round versions with outstanding filing performance due to PFERD spiral cut.

Recommendations for use:

- Choose bastard cut (cut 1) for roughing or coarse stock removal.
- Choose second cut (cut 2) for universal use.
- Choose smooth cut (cut 3) for fine processing and finishing.

Workpiece materials:

- Aluminum
- Bronze
- Copper
- Brass
- Zinc
- Grey cast iron
- Steels up to 370 HV (38 HRC)
- Cast steel

Applications:

- Deburring
- Surface work
- Work on edges (chamfering, rounding)

G

Ordering notes:

PFERD files for the workshop are available in industrial packaging without handle or in POP packaging with ergonomic file handle. EDPs ending in "P" include handle.

Matching accessories:

You can find matching ergonomic file handles and other PFERD handles on page 51.

PFERDVALUE®:

PFERDERGONOMICS[®] recommends the ergonomic file handle for comfortable work.



Flat

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

PFERDVALUE®:



Length Cross-section		Cut and EDP number			Compatible	Included	
[Inches]	[Inches] Bastard Second Smooth (cut 1) (cut 2) (cut 3)		handle EDP	handle EDP			
Without handle							
4	13/32 x 3/32	11001	11002	11003	11143	-	10
6	5/8 x 5/32	11004	11005	11006	11144	-	10
8	25/32 x 7/32	11007	11008	11009	11146	-	10
10	31/32 x 1/4	11010	11011	11012	11146	-	10
12	1-5/32 x 9/32	11013	11014	11015	11148	-	5
14	1-11/32 x 5/16	11016	-	-	11148	-	5
With handle							
8	25/32 x 7/32	11007 P	11008 P	11009 P	-	11146	5
10	31/32 x 1/4	11010 P	11011 P	11012 P	-	11146	5
12	1-5/32 x 9/32	11013 P	11014 P	11015 P	-	11148	5



			Flat PLUS	
		2	producing a smooth f metals, wood and pla for outstanding stock shaped teeth, requirir	metal removal and for inish on steel, non-ferrous stics. PLUS files are noted removal due to spade- ig minimum effort in use. revent loading problems rials.
			due to a wide chip Can be used univer purposes.	eth. rocessing soft materials
			PFERDVALUE®: Haptic Filter	
Length [inches]	Cross-section	Cut and EDP number	Compatible	

	[inches]	[Inches]	PLUS Cut	handle EDP	
With handle					
	8	25/32 x 7/32	11134 P	11146	5
	10	31/32 x 1/4	11135 P	11148	5
	12	1-5/32 x 9/32	11136 P	11148	5



Half round (tapered)

These files are used for filing out concave surfaces and crevices, and for rounding out holes. The spiral cut enables them to remove metal rapidly and leaves a smooth finish.

PFERDVALUE®:



Length	Cross-section	C	ut and EDP numb	er	Compatible	Included	
[Inches]	[Inches]	Bastard (cut 1)	Second (cut 2)	Smooth (cut 3)	handle EDP	P handle EDP	
Without handle							
4	13/32 x 3/32	11150	11151	11152	11143	-	10
6	19/32 x 5/32	11020	11021	11022	11144	-	10
8	3/4 x 7/32	11023	11024	11025	11146	-	10
10	15/16 x 9/32	11026	11027	11028	11146	-	10
12	1-1/8 x 11/32	11029	11030	11031	11148	-	5
14	1-9/32 x 13/32	11032	-	-	11148	-	5
With handle							
8	3/4 x 7/32	11023 P	11024 P	11025 P	-	11146	5
10	15/16 x 9/32	11026 P	11027 P	11028 P	-	11146	5
12	1-1/8 x 11/32	11029 P	-	-	-	11148	5



Half round pipeline

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



PFERDVALUE®:



Length [Inches]	Cross-section [Inches]	Cut and EDP number Bastard (cut 1)	Compatible handle EDP	Included handle EDP	
Without handle					
14	1-3/8 x 11/32	11155	11148	-	5
With handle					
14	1-3/8 x 11/32	11155 H	-	11148	5

(37

Hand

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

PFERDVALUE®:



Length	Cross-section		Cut and EDP number	Compatible		
[Inches]	[Inches]	Bastard (cut 1)	Second (cut 2)	Smooth (cut 3)	handle EDP	
Without handle						
6	5/8 x 5/32	11036	11037	11038	11144	10
8	25/32 x 7/32	11039	11040	11041	11146	10
10	31/32 x 1/4	11042	11043	-	11146	10
12	1-5/32 x 9/32	11045	-	-	11148	5



∏



Length [Inches] Cross-section [Inches] Cut and EDP number Compatible handle EDP Bastard (cut 1) Second (cut 2) Smooth (cut 3)					¥ used wor	ife ped like a knife blade, d on slots and keyways k in die making. Sides thin edge is cut but the	and for acute angle are double cut and
	•			Cut and EDP number	r		
Without heredie	[Inches]	[Inches]	Bastard (cut 1)	Second (cut 2)	Smooth (cut 3)	handle EDP	
without handle	Without handle						
8 27/32 x 3/16 11055 11056 11057 11145 10	8	27/32 x 3/16	11055	11056	11057	11145	10



Long angle lathe

Designed for smooth finish lathe work on either hard or soft metals, this file has the teeth cut on a long angle. Both edges safe (uncut) to permit working next to a shoulder without damage to it. Also used for finish filing of aluminum.

Advantages:

 \blacksquare

Direction of the cut on the front and back side causes the file to move away from the chuck during lathe work, improving safety.

Workpiece materials:

aluminum, hard non-ferrous metal, plastics, steel, cast steel

Applications:

deburring, work on edges

Length	Cross-section	Cut and EDP number	Compatible	
[Inches]	[Inches]	Bastard (cut 1)	handle EDP	
Without handle				
10	31/32 x 1/4	17005	11146	10
12	1-5/32 x 9/32	17006	11148	5





Round

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



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Length	Cross-section	C	ut and EDP numb	er	Compatible	Included	
[Inches]	hes] [Inches] Bastard (cu	Bastard (cut 1)	Second (cut 2)	Smooth (cut 3)	handle EDP	handle EDP	
Without handle							
4	5/32	11061	11062	11063	11143	-	10
6	7/32	11064	11065	11066	11144	-	10
8	5/16	11067	11068	11069	11145	-	10
10	3/8	11070	11071	11072	11145	-	10
12	1/2	11073	11074	11075	11147	-	5
14	5/8	11076	-	-	11147	-	5
With handle							
8	5/16	11067 P	11068 P	11069 P	-	11145	5
10	3/8	11070 P	11071 P	11072 P	-	11145	5
12	1/2	11073 P	-	-	-	11147	5

Square

Handy for use on slots, keyways, rectangular as well as square holes and for surface work. Double cut, it tapers toward the point.

PFERDVALUE®:



Length	Cross-section			Compatible	Included	\square	
[Inches]	[Inches] [Inches]	Bastard (cut 1)	Second (cut 2)	Smooth (cut 3)	handle EDP	handle EDP	
Without handle							
4	5/32	11081	11082	11083	11143	-	10
6	7/32	11084	11085	11086	11144	-	10
8	5/16	11087	11088	11089	11145	-	10
10	3/8	11090	11091	11092	11145	-	10
12	1/2	11093	11094	-	11147	-	5
With handle							
8	5/16	11087 P	11088 <mark>P</mark>	-	-	11145	5
10	3/8	11090 P	11091 P	-	-	11145	5





Three square

Three square files are triangular in cross-section, like tapers, but are double cut and have fairly sharp corners that are slightly set and cut. These files are for general use by machinists for filing internal angles more acute than the right angle.

PFERDVALUE®:



Cross-section C		ut and EDP numb	and EDP number			4-1
nes] [Inches] Bastard (cut	Bastard (cut 1)	Second (cut 2)	Smooth (cut 3)	handle EDP	handle EDP	
15/32	11097	11098	11099	11144	-	10
19/32	11100	11101	11102	11145	-	10
11/16	11103	11104	11105	11147	-	10
19/32	11100 P	11101 P	11102 P	-	11145	5
11/16	11103 P	11104 P	-	-	11147	5
	[Inches] 15/32 19/32 11/16 19/32	Inches] Bastard (cut 1) Bastard (cut 1) 1007 15/32 11097 19/32 11100 11/16 11103 19/32 11100P	Inches] Bastard (cut 1) Second (cut 2) Bastard (cut 1) 1000 1000 15/32 11097 11098 19/32 11100 11101 11/16 11103 11104 19/32 11100P 11101P	Inchesi Bastard (cut 1) Second (cut 2) Smooth (cut 3) 1000 1000 1000 1000 15/32 11007 11098 11099 19/32 11100 11101 11102 11/16 11103 11101 11105 19/32 11100P 11101P 11102P	Inches] Bastard (cut 1) Second (cut 2) Smooth (cut 3) handle EDP 15/32 11097 11098 11099 11144 19/32 11100 11101 11102 11145 11/16 11103 11104 11105 11147 19/32 11100P 11101P 11102P -	Inches] Bastard (cut 1) Second (cut 2) Smooth (cut 3) handle EDP handle EDP 15/32 11097 11098 11099 11144 - 19/32 11100 11101 11102 11145 - 19/32 11100P 11101P 11102P - 11145



deburring, surface work

Without handle				
	4	5/16 x 1/32	17008	10



American pattern files

Machinists files



Machinists file sets in plastic pouch

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

Advantages:

- Suitable for a wide range of applications.
- Available on request with matching plastic pouch to save space when stored.





Length [Inches]	Content (each file with appropriate ergonomic handle)	EDP number	
8	8" hand bastard, square bastard, half round bastard, round bastard, half round wood rasp second cut	16077	1
	8" hand bastard, three square bastard, square bastard, tapered half round bastard, round bastard	16078	1
	8" hand second cut, three square second cut, square second cut, tapered half round second cut, round second cut	16079	1
10	10" hand bastard, three square bastard, square bastard, tapered half round bastard, round bastard	16080	1
	10" hand second cut, three square second cut, square second cut, tapered half round second cut, round second cut	16081	1

DIY file set

These files are specifically designed to meet the needs of DIY users. Its professional quality makes this product very versatile. Due to their high precision and cutting performance, these files meet the highest standards of quality and longevity.



Contents:	
The set consists of one	file

each: ■ File rasp (EDP 16053)

Half-round file (EDP 11155) Hobby file (EDP 16053)



Length	Content	EDP	
[Inches]	(each file with appropriate ergonomic handle)	number	
8	8" DIY file set, 3 pcs	16070	1

American pattern files Special files



	C#				three sides and ergono	roughing, single cut 2 on ng and one cut edge. harpening using the e use. :: rk, work on edges,
	Length [Inches]	Cross-section [Inches]	Cut and EDP number Cross 1/single 2		Included handle EDP	ð
With handle						
	8	1 x 5/32	16053 P		11146	5
	G			₩	three sides and ergono	roughing, rasp cut 1 on
					 For roughing and sh same file. Recommended for v Workpiece materials soft non-ferrous metal Applications: deburring, cutting out work on edges PFERDVALUE®: HapticEller 	versatile use. :: , wood, plastics, steel
	Length [Inches]	Cross-section [Inches]	Cut and EDP number Cross 1/rasp 1		 For roughing and sh same file. Recommended for v Workpiece materials soft non-ferrous metal Applications: deburring, cutting out work on edges PFERDVALUE®: 	versatile use. : , wood, plastics, steel
With handle					 For roughing and sh same file. Recommended for v Workpiece materials soft non-ferrous metal Applications: deburring, cutting out work on edges PFERDVALUE®: HapticEller Included 	versatile use. : , wood, plastics, steel





American pattern files

Special files

Farmer's own rotary mower

Rectangular file, tanged, single cut 2 on two sides, with rounded, uncut narrow edges and ergonomic file handle. Often referred to as a lawnmower file.

Advantages:

- Long service life.
- High surface quality with optimum cutting performance.

Workpiece materials:

steel, cast steel

Applications:

deburring, sharpening



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HapticFilter					
	Length	Cross-section	Cut and EDP number	handle CDD	
	[Inches]	[Inches]	Single 2		
With handle					
	8	15/32 x 1/8	17125 P	11146	5

Fitter's file

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

Advantages:

Extremely robust design.

Ideal for versatile use.

Workpiece materials:

aluminum, soft non-ferrous metal, wood, plastics, steel, cast steel

Applications:

deburring, work on edges, surface work, roughing

PFERDVALUE®:



	ngth :hes]	Cross-section [Inches]	Cut and EDP number Radial 1/straight 2	Included handle EDP	
With handle					
	10	15/32 x 1/8	16058	11146	5



American pattern files Key files



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

Advantages:

Ideal for a wide range of delicate and light filing tasks.

Workpiece materials:

- Aluminum
- Copper
- Brass
- Zinc 🖉
- Grey cast ironSteels up to 370 HV (38 HRC)
- Cast steel
- Cast steel



- Deburring
- Surface work
- Work on edges (chamfering, rounding)
- Sharpening
- Finishing

Ordering notes:

PFERD key files are available in industrial packaging without handle or in POP packaging with wooden handle.



Accessories:

PFERD offers a practical quickmounting handle for key files. File tangs are reliably clamped by simply twisting the two halves of the handle. For ordering data and more information about PFERD file handles, see page 52.



Key file set 265 A

Contains an application-oriented selection of key files. Ideal for fine and delicate filing.

Contents:

- Six key files (one file each):
- hand hand
- 🔳 flat
- three square
- square .
- half-round

Advantages:

Suitable for a wide range of delicate and light filing tasks.

Ordering notes:

Supplied with quick-mounting handle no. 210 in a plastic pouch to protect against dirt and damage.



round

handle

quick-mounting



Key file set 265 B

Contains an application-oriented selection of key files. Ideal for fine and delicate filing.

Contents:

Six key files (one file each): hand flat three square square half-round round

Advantages:

Ideal for a wide range of delicate and light filing tasks.

Ordering notes:

Supplied with mounted wooden handles in a plastic pouch to protect against dirt and damage.

Length [Inches]	Cut and EDP number	
[Inches]	Second (cut 2)	
4	17012	1





Key file set 265 K

Contains an application-oriented selection of key files. Ideal for fine and delicate filing.

Contents:

- Six key files (one file each):
- hand
- 🔳 flat
- three square
- square
- half-round round

Advantages:

Ideal for a wide range of delicate and light filing tasks.

Ordering notes:

Supplied with mounted wooden handles in a metal box to protect against dirt and damage.



Length [Inches]	Cut and EDP number Second (cut 2)	
4	17010	1







Chain saw files, round

Round file for manual sharpening of saw chains with precise spiral cut for outstanding sharpness and particularly long service life. For fast, score-free sharpening of saw teeth. In comparison to machine sharpening, these files remove stock sparingly without the thermal strain caused by friction on the metal.

Advantages:

- Classic line: Optimum combination of service life and stock removal rate, aggressive filing for quick sharpening.
- Premium line: Perfect sharpness due to innovative spiral cut, for ensuring a fine tooth surface for maximum cutting performance and a gentler feel to the tool while filing.

Workpiece materials:

steels up to 370 HV (38 HRC)

- Applications:
- sharpening

Ordering notes:

Packaging units of 6 and 60 pieces in a cardboard box.

Length	Diameter	Chain pitch	Line and EDP number		Compatible	
[Inches]	[Inches]	ches] [Inches]	Classic line	Premium line	handle EDP	
8	5/32	1/4	17047	17074	17046	6
	11/64	3/8 LP*	17057	17075	17046	6
	3/16	.325	17038	17076	17046	6
	13/64	3/8	17048	17077	17045, 17046	6
	7/32	3/8, .404	17039	17078	17045, 17046	6
	1/4	1/2	17040	-	17045, 17046	6
	5/16	3/4	17061	-	17045, 17046	6

Always observe the current guidelines and recommendations of the equipment and saw chain manufacturers. * LP = Low Profile

Packing system for PFERD chain saw files



You can find matching ergonomic file handles for PFERD chain saw files on page 51.



PFERD chain saw files are available in convenient 3-piece plastic sleeves. The package helps keep file edges protected during storage and transit to ensure top file performance during use.

Advantages:

- The opening on the front of the packaging makes it easier to remove the files and return them when not in use.
- Classic line: Optimum combination of service life and stock removal rate, aggressive filing for quick sharpening.

Length		Diameter	Chain pitch	Line and EDP number		
	[Inches]	[Inches]	[Inches]	Classic line		
POP packaging						
	8	1/8	1/4 LP*	17129	12	
		5/32	1/4; 3/8 LP*	17136	12	
		3/16	.325	17137	12	
		13/64	3/8	17133	12	
		7/32	3/8; .404	17138	12	

One packaging unit contains four plastic

packs, each containing three files.

Always observe the current guidelines and recommendations of the equipment and saw chain manufacturers. * LP = Low Profile

Chisel bit files

Chisel bit files For servicing and sharpening saw chains with a square gullet. 調査 Advantages: Good stock removal rate. Long service life. The flat type fulfills two functions: it can be used to sharpen the blade and also to reduce the depth gauge. Workpiece materials: steels up to 370 HV (38 HRC) **Applications:** sharpening, edge grinding Cut and EDP number Length **Cross-section** Chain pitch Shape Compatible [Inches] [Inches] [Inches] handle EDP Single cut 2 Without handle 7 11/64 .325 Three square 17081 11146 12 7/64 x 1/2 .325 Flat 17082 11146 12



Ordering notes:





Sharpening files Handles





Wooden handles for chain saw files

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

Advantages:

Optimized filing angle ensures precise, even filing.

Туре	Suitable for chain saw file diameter [Inches]	EDP number	
Wood	13/64, 7/32, 1/4, 5/16	17045	100



Plastic handles for chain saw files

Classic PFERD blue plastic file handle features air chambers to reduce hand moisture. Enlarged, ergonomic handle reduces fatigue and improves safety.



PFERDVALUE®:

Туре	Recommended for chain saw file diameter [Inches]	EDP number	
Plastic handle for chain saw files			
Plastic	13/64, 7/32, 1/4, 5/16	17046	10
Filing angle guides			
25° - 30° guide	13/64, 7/32, 1/4, 5/16	17090	10
30° - 35° guide	13/64, 7/32, 1/4, 5/16	17091	10



You can find information on the maintenance and care of a saw chain and repair of other forestry tools in the "PFERD products for forestry" FIELD GUIDE brochure (EDP 819186).



In our pocket guide "Sharpening saw chains" (EDP 819199), we have concisely summarized all the important information that you need for sharpening your saw chains.





Sharpening files CHAIN SHARP

Chain saw sharpeners from PFERD are exceptionally well suited to the manual sharpening of saw chains. Manual sharpening is more economic and much more gentle than machine-based sharpening, and can prolong the service life of the saw chain.

Advantages:

Workpiece materials:

- Flexible use on-site due to compact device design.
- Easy to use and defined sharpening angle.
 Long operating life due to easily replaceable
- Long operating life due to easily replaceable files.
- Precise and uniform sharpening result, even for inexperienced users.
- Steels up to 370 HV (38 HRC)

Applications:

Sharpening



EDP 17299

EDP 17300

EDP 17301 EDP 17303

EDP 17304



The CHAIN SHARP CS-X chain saw sharpener stands out due to its excellent file position, ergonomic shape and easier operation. The device provides a sharpening angle of 30°. The defined depth gauge distance can be found in the table.

Contents:

- The chain saw sharpener consists of:
- One sharpener
- One depth gauge file
- Two Classic line chain saw files

Advantages:

- Turn the device over to change from the right to the left tooth – no conversion work required.
- Optimized shape for precise guidance and optimal sharpening results.
- Improved design makes it easy to replace the files.
- Simultaneously sharpens the saw teeth and adjusts the depth gauge.

Ordering notes:

- PFERD offers five types of the CHAIN SHARP CS-X chain saw sharpener adapted to different chain pitches.
- The sharpener is supplied with detailed operating instructions in a transparent, reusable plastic pouch which protects against damage and dirt.









Sharpening files CHAIN SHARP





CHAIN SHARP CS-MT chain saw sharpeners

The compact CHAIN SHARP CS-MT (MultiTool) sharpening solution combines a chain saw file and a depth gauge file in one ergonomic tool. The defined height of the chain saw file makes sharpening saw teeth easier and prevents the connecting links of the chain from being damaged. The side-mounted depth gauge file allows you to set the depth limit as desired. The gauge provided gives depth spacings of .025" for harder wood or .030" for softer wood.

Contents:

- The chain saw sharpener consists of:
- One sharpener
- One Classic line chain saw file
- One depth limit file
- One ergonomic file handle
- One depth gauge

Advantages:

- Compact sharpener.
- Depth gauge can be individually adjusted.Recommended for all common chain saw
- files.

 Long service life with PFERD files.

Ordering notes:

- Available in four designs for the most common chain pitches.
- The sharpener is supplied with detailed operating instructions in a belt pouch which protects against damage and dirt.

PFERDVALUE®:



Chain saw file dia. [Inches]	Chain pitch [Inches]	Depth gauge distance [Inches]	EDP number	Replacement depth gauge file EDP	
POP packaging					
5/32	3/8 LP*	0.025	17250	17043	1
3/16	.325	0.025	17251	17043	1
13/64	3/8	0.025	17252	17043	1
7/32	.404	0.025	17253	17043	1

* LP = Low Profile





Rectangular file with cut on two sides. Recommended for the CHAIN SHARP CS-X chain saw sharpener.

Advantages:

Stock removal rate is precisely tailored to the depth gauge.

For use with	Length [Inches]	Cross-section [Inches]	Cut and EDP number Second (cut 2)	
All CHAIN SHARP CS-X sizes	8	23/64 x 15/64	17310	10

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Flat chain saw files for depth gauges

Rectangular file, tanged with two round uncut edges and cut on two sides. Flat chain saw files are used to file the depth gauges of saw chains.

Advantages:

Stock removal rate is precisely tailored to the depth gauge.

	Length [Inches]	Cross-section [Inches]	Cut and EDP number Second (cut 2)	Compatible handle EDP	
Without handle	C	F (0 2/22	17042	111.42	10
	6 8	5/8 x 3/32 25/32 x 1/8	17043 17044	11143 11146	10 10



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Sharpening files Mill files





Mill, tapered

Rectangular file, tapered with tang. Cut on four sides.

Applications:

sharpening, deburring, surface work

Length	Cross-section	(Cut and EDP numbe	Compatible	\square	
[Inches]	[Inches]	Bastard (cut 1)	Second (cut 2)	Smooth (cut 3)	handle EDP	
Without handle						
6	19/32 x 7/64	19001	-	19003	11144	10
8	25/32 x 9/64	19004	19005	19006	11146	10
10	31/32 x 11/64	19007	19008	19009	11146	10
12	1-5/32 x 7/32	19010	19011	19012	11148	10



Mill, one round edge Ţ

Rectangular file, tanged, one round and one

straight edge.

Without handle 8 25/32 x 9/64 19017 11146 10	Length [Inches]	Cross-section [Inches]	Cut and EDP number Second (cut 2)	Compatible handle EDP	
8 25/32 x 9/64 19017 11146 10	Without handle				
	8	25/32 x 9/64	19017	11146	10

Cant saw files





Sharpening files Taper saw files

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Triangular files, tapered to the tip with tang. Cut on three sides and three edges.

Advantages:

- Good stock removal rate.
- Long service life.
- Versatile application.

Workpiece materials:

Steels up to 370 HV (38 HRC) Cast steel

Applications:

Sharpening

Ordering notes:

Available in regular, slim, extra slim, and double extra slim versions.



Slim taper

Length	Cross-section	Cut and EDP number	Compatible	
[Inches]	[Inches]	Second (cut 2)	handle EDP	
Without handle				
4	7/32	17022	11143	10
5	9/32	17023	11143	10
6	11/32	17024	11144	10
7	13/32	17025	11145	10
8	15/32	17026	11145	10

Extra slim taper

Length [Inches]	Cross-section [Inches]	Cut and EDP number Second (cut 2)	Compatible handle EDP	
Without handle				
4	3/16	17027	11143	10
6	9/32	17029	11144	10

Double extra slim taper

Length [Inches]	Cross-section [Inches]	Cut and EDP number Second (cut 2)	Compatible handle EDP	
Without handle				
5	3/16	17032	11143	10
8	5/16	17035	11144	10

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Precision files General information



PFERD precision files meet the most exacting standards of dimensional accuracy, cutting performance and longevity. Compared to machinists files, precision files are smaller, easier to handle, and possess a more precise geometry.

They are employed in jig, fixture and tool making, specifically in the fabrication of molds and dies (e.g., for punching, forming, forging and stamping in volume production environments).

In addition, precision files are needed in assembling and building complex devices and machines to the highest precision standards.



Table of cuts for precision files

Number of teeth per Inch									
Cuts	Swiss cut 00	Swiss cut 0	Swiss cut 1	Swiss cut 2	Swiss cut 4				
Type of file	[Teeth/Inch]	[Teeth/Inch]	[Teeth/Inch]	[Teeth/Inch]	[Teeth/Inch]				
Tang files 4", 6" and 8"	41	51	64	79	117				
Tang files 10″	30	41	51	64	97				
CORINOX [®] files 6" and 8"	41	51	-	79	-				
Needle files	-	64	-	97	142				
CORINOX [®] needle files	-	64	-	97	-				





Precision files Swiss pattern machinists files

Swiss pattern machinists files, tanged

Small, handy files for use on delicate workpieces.

Advantages:

- Small, handy design.
 Recommended for work on small and
- delicate workpieces.

Workpiece materials:

steels up to 370 HV (38 HRC)

Applications:

deburring, surface work, work on edges (chamfering, rounding), fine finishing





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Profile Length Cross-see				Swiss cut and	Compatible			
	[Inches]	[Inches]	00	0	1	2	handle EDP	
Pottance,	4	1/2 x 1/8	12609	12610	12611	12612	11143	12
hand type	6	5/8 x 5/32	12615	12616	12617	12618	11144	12
	8	25/32 x 7/32	12622	12623	12624	12625	11146	12
Pillar, regular	6	1/2 x 5/32	12689	12690	-	12692	11144	12
	8	9/16 x 3/16	12696	12697	-	12699	11146	12
	10	5/8 x 7/32	12702	12703	-	12705	11146	12
Pillar, slim	6	5/16 x 1/8	12724	12725	-	12727	11143	12
	8	3/8 x 3/16	12730	12731	-	12733	11144	12
	10	1/2 x 3/16	12735	12736	-	12737	11144	12
Pillar, extra slim	6	1/4 x 1/8	12747	12748	-	12750	11143	12
	8	5/16 x 1/8	12753	12754	-	12756	11143	12
Warding, flat, thin	6	5/8 x 3/32	-	12894	-	12895	11144	12
Half round	4	1/2 x 1/8	12567	12568	12569	12570	11143	12
	6	5/8 x 3/16	12574	12575	12576	12577	11144	12
	8	7/8 x 1/4	12581	12582	12583	12584	11146	12
	10	1 x 1/4	12587	12588	12589	-	11146	12
Half round, slim	6	1/2 x 1/8	12594	12595	12596	12597	11144	12
Round	4	3/16	-	12785	-	12787	11143	12
	6	1/4	-	12790	12791	12792	11144	12
	8	5/16	-	12797	12798	12799	11145	12
Three square	4	1/4	-	-	12868	12869	11143	12
	6	3/8	-	12873	12874	12875	11144	12
	8	9/16	-	12879	12880	12881	11145	12
Square	6	1/4	-	12848	12849	12850	11144	12
	8	5/16	-	12854	12855	12856	11145	12
Crossing	6	5/8 x 3/16	-	-	-	12542	11144	12
Knife	6	11/16 x 3/16	-	12654	-	12656	11144	12
	8	7/8 x 3/16	-	12659	-	12661	11146	12
Barrette	6	5/8 x 3/16	-	12508	-	12510	11144	12
	8	7/8 x 3/16	-	12512	-	12513	11146	12

Precision files

Swiss pattern CORINOX® machinists files





CORINOX® machinists files

CORINOX[®] machinists files are designed for use on stainless steels and exotic alloys. With a surface hardness of 1,200 HV (Vickers Scale), 70 HRC (Rockwell Scale), these files offer excellent wear resistance and long service life.

Their specially coated surface leaves no corrosive residue on the workpiece and effectively resists loading.

Advantages:

- Extremely wear-resistant and sturdy due to high surface hardness.
- Resistant to loading.

Chips can be easily removed by gently knocking the file against a hard surface.

Workpiece materials:

stainless steel (INOX), high-temperatureresistant materials, hard non-ferrous metal, fibre-reinforced duroplastics (GRP, CRP)

Applications:

deburring, surface work, work on edges (chamfering, rounding), fine finishing

Profile			Swis	s cut and EDP nu	mber	Compatible	\square
[In	[Inches]	[Inches]	00	0	2	handle EDP	
Hand	6	5/8 x 5/32	15100	15101	-	11144	12
	8	25/32 x 7/32	15103	15104	15105	11146	12
	10	31/32 x 1/4	15133	15134	15135	11146	12
Pillar	6	1/2 x 5/32	15106	15107	-	11144	12
	8	9/16 x 7/32	15109	15110	15111	11146	12
Half round	6	9/32 x 5/32	-	15113	-	11144	12
	8	3/4 x 7/32	-	15116	15117	11146	12
Round	8	5/16	-	15122	15123	11145	12
Three square	8	5/8	-	15128	15129	11145	12
Square	6	7/32	-	15131	15132	11144	12



Precision files CORINOX[®] needle files

CORINOX® needle files

CORINOX[®] needle files are designed for ultrafine, intricate stock removal on stainless steels and exotic alloys. With a surface hardness of 1,200 HV (Vickers Scale), 70 HRC (Rockwell Scale), these files offer excellent wear resistance and long service life.

Their specially coated surface leaves no corrosive residue on the workpiece and effectively resists loading.

Advantages:

- Extremely wear-resistant and sturdy due to high surface hardness.
- Resistant to loading.
- Chips can be easily removed by gently knocking the file against a hard surface.
 Can be used with or without needle file
- holders due to textured forged tangs.

Workpiece materials:

stainless steel (INOX), high-temperatureresistant materials, hard non-ferrous metal, fibre-reinforced duroplastics (GRP, CRP)

Applications:

deburring, surface work, work on edges (chamfering, rounding), fine finishing

Accessories:

Needle file holder plastic EDP 16075 (see page 52)



Needle file holder wood EDP 16076 (see page 52)



Profile	Length	Shank dia.	Swiss cut and	EDP number	
	[Inches]	[Inches]	0	2	
Flat	7	5/32	15201	15203	12
Hand	7	5/32	15211	15213	12
Three square	7	5/32	15221	15223	12
Square	7	5/32	15231	15233	12
Round	7	5/32	15241	15243	12
Half round	7	5/32	15251	15253	12



Z

PFFRD

Precision files

Swiss pattern needle files



Flat	WMM////Site	Simming.		**** *	Needle files
Hand				;;;;; ;	PFERD needle files work on the smalle
Crossing		9779799999999	 and the second state of th	×	geometries, profile
Three square					Advantages: Can be used with handle due to the
Square	*******	innananna.		L	Workpiece mater
Round	(iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii			Q	steels up to 370 H
Knife				\mathbf{V}	Applications: deburring, fine fini
Half round			and the second	<u> </u>	Ordering notes:

are highly recommended for est surfaces, breakthroughs, es and radii.

th or without a needle file he textured forged tang.

rials:

V (38 HRC)

ishing

Ordering notes:

Needle file cuts 00, 1, and 3, which are not listed in the table, are available by special order. Please call for more information.

Accessories:

Needle file holder plastic EDP 16075 (see page 52) Needle file holder wood



EDP 16076 (see page 52) Quick-mounting handle EDP 16174 (see page 52)

Profile	Length		Shank dia.	Swiss cut and EDP number			
	[Inches]	[Inches]	[Inches]	0	2	4	
Flat	5-1/2	13/64 x 3/64	7/64	12011	12050	-	12
	6-1/4	7/32 x 3/64	1/8	12012	12051	-	12
Hand	5-1/2	13/64 x 3/64	7/64	12029	12068	-	12
	6-1/4	7/32 x 3/64	1/8	12030	12069	-	12
Crossing	5-1/2	3/16 x 5/64	7/64	-	12065	-	12
	6-1/4	13/64 x 5/64	1/8	12027	12066	-	12
Three square	5-1/2	11/64	7/64	12008	12047	-	12
	6-1/4	9/64	1/8	12009	12048	-	12
Square	5-1/2	3/32	7/64	12005	12044	-	12
	6-1/4	3/32	1/8	12006	12045	-	12
Round	5-1/2	7/64	7/64	12002	12041	12078	12
	6-1/4	1/8	1/8	12003	12042	12079	12
Knife	5-1/2	7/32 x 1/16	7/64	-	12053	-	12
	6-1/4	15/64 x 5/64	1/8	12015	12054	12091	12
Half round	5-1/2	13/64 x 1/16	7/64	12017	12056	-	12
	6-1/4	7/32 x 5/64	1/8	12018	12057	-	12



12

Needle file sets

6-1/4

12039

Contents:

Contains an application-oriente	ed selection of needle files. Accessories:		Nadelfeilen Sortiment
12 needle files (one file each): ■ flat	Needle file holder plastic EDP 16075 (see page 52)		Assortment of Needle Files Assortment de limes alguite Juego de limas de aguja Assortimente lime ad ago
 hand crossing three square 	Needle file holder wood EDP 16076 (see page 52)	л.	PFERD
square round knife half-round barrette flat with round edges hand with round edges crossing oval	Quick-mounting handle EDP 16174 (see page 52)		25676 160 mm S. Heeb 1
Length [Inches]	Swiss cut and EDP number		pcs.]

12150



Milled tooth files Car body files



Cross section of a file tooth Enlarged 10x



Cross section of a car body file Illustration of convex shape



PFERD car body files – for more than just automotive body work!

They are ideal for any surface work on sheet metal, non-ferrous metals and plastics requiring a particularly smooth and scratch-free finish. The surfaces can be painted immediately after filing. No subsequent polishing is necessary, as the file leaves no scratches. The positive rake angle, the convex shape and the unsurpassed sharpness of the teeth provide outstanding filing performance and an optimum surface quality for professional users of PFERD milled car body files.

Ideal tooth shape

The teeth of the car body files are milled from solid material, using a highly specialized cutting process. Each individual tooth is designed to ensure that the chip rolls up before the rounded tooth face and is found in the large flute. A special finishing treatment produces razor-sharp tooth edges that give these files an outstanding stock removal rate. The car body files are available in five radial cut versions and one cross-cut.

Convex shape prevents scratches

The convex shape means that the cutting area is not flat, but higher in the middle than around the file edges. The height difference is about 1/64". This special cross-section shape prevents the edges of the file from coming into contact with the workpiece during processing, thus preventing scratches.

Workpiece materials:

- Aluminum
- Steels up to 370 HV (38 HRC)

Applications:

- Leveling
- Surface work



Car body files

Car body file blades can be tensioned as desired in the car body file holder and adapted to match the surface contour of the workpiece.

Advantages:

The bending radius of the file can be

- steplessly adjusted via the tensioning system.
 Convex shape of the file prevents unwanted scratches.
- Can be used in a focused manner.
- Razor-sharp tooth edges.

Length [Inches]	Cross-section [Inches]	Cut	Туре	Number of teeth per Inch	EDP number	
12	1-5/32 x 7/32	1	coarse	9	14001	1
		2	medium	10	14002	1
		3	fine	12	14003	1
14	1-11/32 x 15/64	00	special coarse	7	14004	1
	1-11/32 x 7/32	0	extra coarse	8	14005	1
		1	coarse	9	14006	1
		2	medium	10	14007	1
		3	fine	12	14008	1
		5	*extra fine	20	14000	1

* Extra fine cut available in chisel cut file.



Car body files

Adjustable holders for car body files

This ergonomic and particularly lightweight holder permits precise tensioning of car body file blades to match the surface contour of the workpiece.

Advantages:

- The bending radius of the file can be steplessly adjusted via the tensioning system.
- Particularly lightweight plastic design without plasticizer.
- Can be used in a focused manner or over a wide area as the car body file can be used curved as well as straight.
- Enables work with low levels of fatigue due to vibration-damping rubber pad.

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

Car body files, tanged type

File curved in longitudinal and transverse direction (convex), tanged. Cut on one side.

Advantages:

- Convex shape of the file prevents unwanted scratches.
- Can be used in a focused manner.

Applications:

deburring, work on edges (chamfering, rounding)

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







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Milled tooth files

Paint peeler





Paint peeler

The small design of the paint peeler enables work in hard-to-reach areas. It is used for finishing the smallest painted surfaces with the corresponding plastic holder. This plastic holder allows for very fine adjustment of the file using two adjusting screws.

Advantages:

- Convex shape of the file prevents unwanted scratches.
- Precision-cut, razor-sharp teeth provide a
- very high-quality, scratch-free surface finish. Surfaces can be painted or processed
- immediately.
- File blade can be used on both sides.

Industry:

car, car body and trailer construction, furniture manufacture

Workpiece materials:

aluminum, steels up to 370 HV (38 HRC)

Length [Inches]	Cross section [Inches]	Cut and EDP number Smooth (cut 3)				
Paint peeler						
2	1-1/2 x 3/16	14014	1			
Replacement file for paint peelers						
2	1-1/2 x 3/16	14015	10			

Edge sharpener

EDP 13025	Rectangul and for de bar and sa Advantag The spe	burring on the bars of chain w chain. Increases cutting pr	saws. Regular maintenance ex ecision and safety. Workpiece mate control aluminum, grey c	Workpiece materials: aluminum, grey cast iron, steels up to 370 HV			
EDP 13026	chamfe	r file on the workpiece. cellent for sharpening ski edg	Applications:	(38 HRC) Applications: work on edges, chamfering, deburring			
Length C [Inches]	ross-section [Inches]	Cut and EDP number Second (cut 2)	Replacement file EDP				
Edge sharpener							
4-1/2	1-1/4 x 1/4	13025	13026	1			
Replacement file for edge sharpener							
4-1/2	1-1/4 x 1/4	13026	-	10			




Milled tooth files

Babbitt files

Milled tooth files from PFERD are highly recommended for coarse stock removal on soft materials such as lead babbitts. The highly abrasive milled tooth geometry with large flutes prevents loading.

Advantages:

- Very aggressive.
- No loading due to the large flutes.

Recommendations for use:

- Choose cut 1 with 8 teeth per inch for coarse stock removal.
- Choose cut 2 with 11 teeth per inch for medium stock removal.

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Workpiece materials:

- Aluminum
- Grey cast iron
- Steels up to 370 HV (38 HRC)
- Cast steel
- Copper
- Brass

Applications:

- Leveling
- Deburring
- Surface work
- Work on edges (chamfering, rounding)



Babbitt, flat

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Rectangular file with cuts on three sides. Version with tang. Straight cut with chip breaker on the flat sides, straight cut on the high edge. Suitable for filing rectangular geometries.

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



Babbitt, half round, hollow

Half-round file, hollow and tapered. Version with tang. With chip breaker on the half-round side, straight cut on one side. Ideal for work on radii and for filing of half-round shapes.

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



PFERD quality rasps which are ideal for coarse stock removal of wood.

Advantages:

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High stock removal rate.Good chip removal.

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Workpiece materials:

Wood

Applications:

- Deburring
- Surface work
- Chamfering
- Work on edges (chamfering, rounding)

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Wood rasps, hand

Rectangular file with cut on three sides, flat sides with rasp cut, one edge with file cut, one edge uncut. Version with tang.

Length	Cross-section	Cut and EI	OP number	Compatible		
[Inches]	[Inches]	Bastard (cut 1)	Second (cut 2)	handle EDP		
Without handle						
8	25/32 x 13/64	-	15003	11146	10	
10	1 x 1/4	15004	15005	11146	10	





Wood rasps, half round

Half-round file, tapered with rasp cut on two sides. Version with tang.

Length	Cross-section	Cut and EDP number		Compatible	
[Inches]	[Inches]	Bastard (cut 1)	Second (cut 2)	handle EDP	
Without handle					
8	25/32 x 15/64	15008	15009	11146	10
10	31/32 x 9/32	15011	15012	11146	10
12	1-5/32 x 11/32	15014	-	11148	5



Wood rasps, round

Round file, tapered with circumferential rasp cut. Version with tang. Suitable for work on radii and for filing profiles with inner radii.

Length [Inches]	Cross-section [Inches]	Cut and EDP number Second (cut 2)	Compatible handle EDP	
Without handle				
8	5/16	15016	11145	10
10	3/8	15017	11145	10





Rasps Files for horses

Hoof plane

Rectangular file, tanged and cut on four sides. One side fine, one side rough. Ideal for straightening the hoof surface, for finishing the hoof wall, for filing the toes and for work on the hoof nails after undercutting.

Advantages:

- Long service life.
- Very good surface quality.
- Saves on labour and reduces the strain on the back.
- Comfortable filing for humans, and easy on the animal.

Workpiece materials:

wood, horn

Recommendations for use:

The PFERD hoof plane file can be used with commercial file handles in the corresponding sizes.

PFERDVALUE®:



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

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Horse rasp, tanged type

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

Advantages:

Very robust.

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







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Needle rasp set

Contains an application-oriented selection of needle rasps for work in hard-to-reach areas.

Contents:

- Six needle rasps (one file each):
- 🔳 flat
- hand
- three square
- square round
- half-round
- Advantages:
- Can be used with or without a file handle due to the textured forged shanks.

Workpiece materials:

wood, soft stones, plastics, horn

Applications:

deburring, surface work, work on edges, chamfering, rounding

Ordering notes:

Supplied in a clear, durable plastic pouch to protect against dirt and damage.

Length	Contents	Cut and EDP number	
[Inches]	[pcs.]	Second (cut 2)	
5-1/2	6	15065	1





Hand deburrer Hand deburrer

Hand deburrer

Hand deburrer for efficient deburring, chamfering and reworking of different materials and contours. Hard-to-reach areas, bores, inner and outer diameters, thread and grooves can be worked on effortlessly by hand.

Available products:

- Three deburring blades for work on steel, aluminum, non-ferrous metals, cast iron, plastics and other soft materials.
- One mini blade for general work on the smallest geometries made of various materials.
- Two rotatable deburring countersinks for general work on bores made of various materials.

Advantages:

- Three different, easily changeable tungsten carbide deburrers (blades, mini-blades and countersinks).
- Easy to control and use with the special holder.
- Outstanding adjustment to the workpiece contours.
- The pivot-mounted adapter system makes handling and changing the deburrer very easy.
- Ergonomic file handle protects hands against sharp edges and prevents the tool from rolling away.





Shank dia [Inches]	Max. width [Inches]	Use for	EDP number	
Holder for hand deburrer				
-	-	all types	19500	1
Deburring blades				
1/8	1/8	steel, aluminum	19510	10
	1/8	plastics, other soft materials	19512	10
	1/8	non-ferrous metals, cast iron	19514	10
Mini-blade				
1/8	1/16	general use	19520	1
Deburring countersink				
1/8	3/8	general use	19530	1
	5/8	general use	19532	1







Used in many industries

The use of efficient products for work on surfaces and cutting materials is an important factor for ensuring profitability in many processes and industries.

For many materials and applications, products with super-hard abrasives like diamond or CBN (cubic boron nitride) abrasives provide a cost-effective alternative to conventional products.

With their high hardness, they have a particularly long service life and are an established problemsolver in many industries: Tool and mold construction

Tool industry

- Automotive industry and suppliers
- Energy industry
- Foundries (grey and nodular cast iron)
- Ceramic industry
- Plastics processing (GRP/CRP)
- Machine and plant construction
- Medical equipment



PFERD quality

PFERD diamond products are developed, manufactured and tested in accordance with the strictest quality requirements. Research and development, our in-house and plant construction, and the continuous testing to quality and safety standards in our internal laboratories all guarantee high PFERD quality.

PFERD guality management is certified according to ISO 9001.



Associations

PFERD is an active member of the Federation of European Producers of Abrasives (FEPA) and the Organization for the Safety of Abrasives (oSa). The national and international activities of those associations include the areas of safety, standardization, classification and quality assurance.



Additional diamond tools in the PFERD product range

COMBIDISC[®] diamond abrasive discs:

COMBIDISC[®] is a comprehensive range of quick-change discs for work on surfaces. COMBIDISC[®] diamond abrasive discs are ideal for work on wear-resistant coatings and hard facings made from tungsten carbide, chromium carbide, titanium carbide, etc.

Further information and ordering data can be found in catalogue section 4.



Diamond products Abrasives, materials



Super-hard abrasives

Diamond and CBN form the group of superhard abrasives.

Diamond is the hardest naturally occurring solid. It consists of pure carbon in a crystalline structure. For grinding products, the diamonds used are generally synthetic, produced at very high temperatures under high pressure. The properties of the abrasive can be optimized for the subsequent application of the product.

CBN (cubic boron nitride) is the second-hardest solid known. It consists of boron and nitrogen in a crystalline structure.

For work on certain materials, diamond and CBN products are an economic alternative to tools with conventional abrasives such as aluminum oxide and silicon carbide. Diamond and CBN grain is much harder and its cutting edges are very resistant to blunting. Diamond and CBN tools therefore enjoy a very long service life.



Materials

Diamond and CBN abrasives are used when materials cannot be machined with conventional abrasives such as aluminum oxide or silicon carbide. They also provide a more economical solution for many applications.

Due to high chemical wear, rotating diamond tools are not suitable for work on steel. CBN tools are used for these applications. The two abrasives complement each other ideally. In the adjacent overview, you will find various materials associated with the abrasives.

Using the colour coding system, the abrasive can be identified immediately.



- Duroplastics, in particular with glass or carbon fibre reinforcement (GRP and CRP) Ferrite (magnetic material)
- Glass
- Graphite and synthetic carbon
- Grey and nodular cast iron
- Tungsten carbide
- Nickel- or titanium-based superalloys Technical ceramics
- Wear-resistant coatings (powder metal alloys and hardfacing alloys)

CBN = red



- Case-hardened steels
- Roller-bearing and ball-bearing steels Tool steels
- Other hardened steel materials with a hardness from approx. 580 HV (54 HRC)

For information on diamond products made to order see page 46.



Diamond products Grit sizes



Grit sizes

The grit size data for diamond and CBN products relates to the average grit diameter in [μ m]. Thus, the higher the number specified in the grit designation, the coarser the grit size. A coarse grit size increases stock removal and the surface roughness of the workpiece.

Selecting the optimum grit size depends on the intended application, the material to be machined, the power tool drive employed and a wide range of other factors. As a general rule, the harder the material to be worked and the finer the desired surface roughness, the finer the selected grit size should be.

Grit sizes	Grit design ISO 6106 (FEI	Equivalent US mesh number/inch	
	Diamond	CBN	US Mesh Size
Micro-grit	D 25/D 30	-	-
	D 46	B 46	325/400
Very fine	D 54	B 54	270/325
	D 64	B 64	230/270
$\begin{array}{c} 0 \\ $	D 76	B 76	200/230
	D 91	B 91	170/200
Ĺ <u> </u>	D 107	B 107	140/170
Smaller	D 126	B 126	120/140
	D 151	B 151	100/120
a	D 181	B 181	80/100
Grit size	D 213	B 213	70/80
Ū	D 251	-	60/70
	-	B 252	60/80
Larger	D 301	B 301	50/60
	D 357	B 357	45/50
$A^{\vee}A$	D 427	B 427	40/50
	D 502	-	35/45
AVD	D 602	-	30/40
\checkmark	D 711	-	25/30
Very coarse	D 852	-	20/30
	D 1001	-	16/20





	Electroplated bond	Resinoid and metal bond
be	Barrow Barr	
Bond type		
	Metal blank	
Product construction	The main characteristic of electroplated products is the monolayer coating with diamond or CBN grit. The coating is provided by the fixation of abrasive grit onto a metal blank via an electrochemically deposited nickel layer. The nickel layer thickness is around half of the grit diameter used.	The abrasive coating of resinoid-bonded diamond and CBN products consists of abrasive grit, bond and fillers. The bond is tightly pressed, i.e. it has no pores. The metal bond is closely related to the resinoid bond. It is characterized by a higher grit retention strength and dimensional stability when compared to the resinoid bond.
Produc		
ges	 Shorter work time due to the coating type Reduction in unproductive idle times because dressing and profiling are not required Reduction in tool costs due to the monolayer coating and the 	 Resinoid bond: The characteristics of the resinoid bond can be optimally adjusted to the application Easy to dress
Advantag	 possibility of recoating Individual product profiles Constant product geometry due to the monolayer coating 	Metal bond: High dimensional stability and wear resistance
S	Electroplated tools are problem solvers for work on various materials, such as particularly hard or abrasive materials. Among other things, the characteristics of the electrochemically coated products can be adapted to the application through the solution of the art class.	Resinoid-bonded diamond and CBN grinding discs are often used for grinding, i.e. sharpening tungsten carbide or HSS tools, as well as in other production grinding processes.
Applications	to the application through the selection of the grit sizes. Electroplated diamond and CBN products are used for both wet and dry grinding.	Metal-bonded products are used for grinding glass and industrial ceramics.
App	-, , , ,	Resinoid and metal-bonded diamond and CBN products are used for both wet and dry grinding, according to the product specification.
	Pages 48-51	on request

Diamond products

Products made to order





PFERD specializes in consultancy for and the production of customer-specific electroplated diamond and CBN products.

Almost all tool blank geometries can be coated with various grit sizes. The electroplated bond also enables economic production of small lot sizes. Because of the diverse possibilities, our production can respond to individual customer requirements with a high degree of flexibility.

Our technical advisers will be happy to visit you on-site to develop individual product solutions for your applications.

Contact us at pferd.com and arrange an appointment with our experienced sales

Get the best possible advice for super-hard solutions!

	representatives and technical specialists.
1. We analyze your	If you already have precise ideas about the desired product, you can provide us with a technical drawing or a dimensioned sketch and information on the desired abrasives and grit sizes.
application.	Our employees will analyse your application with you on-site and develop the most economic individual tool solution for you, after which you will receive a formal quotation. Three production variants are possible:

Complete production

From design and construction, through manufacture of the tool blank (steel, stainless steel or brass) and its coating with diamond or CBN grit, to the balancing of the finished product, PFERD offers you all the production steps from a single source. This guarantees you the highest level of quality, flexibility and on-time delivery.

2. We develop the solution.

Coating

Steel, stainless steel or brass blanks provided by the customer can also be coated with diamond or CBN grit. Close cooperation at an early stage is recommended.

Recoating

PFERD offers recoating of blunt tools with steel or stainless steel blanks as an economic alternative to replacement production. Tools with brass blanks cannot be recoated.

	See the guality, performance and economic value of PFERD products for yourself!
Your product is ready for use!	If desired, your personal sales representative and a technical adviser will set up all the process parameters together with you.
	Our flexible production and global logistics network ensure that you receive your new product on time and within your budget.





Diamond products Products made to order























Diamond files General information



Diamond files are ideal for tasks where conventional files fail due to the hardness of the workpiece material. They also provide a more economical solution for many applications.

Recommendations for use:

Apply only slight pressure to the file, especially in workpiece edge areas.

- Loaded diamond files can be cleaned in kerosene or anti-static plastic cleaner with a file brush. Alternatively, ultrasonic cleaning is also possible. Often it will suffice to knock the file against a hard object.
- Avoid contact with grease when using these files!

Note:

Diamond files are also used for processing hardened steel. The working temperatures are so low that no chemical wear occurs. This allows the higher hardness of the diamond grain to be exploited for a longer service life.



Diamond flexible files



Flexible diamond files

Flexible diamond files adapt perfectly to workpiece surfaces. Due to their flexibility, they can be used in convex and concave contours with small radii.

Recommendations for use:

Only use files up to a bending radius of 5/8".

Lengt		5 51	G			
[Inche] [Inches]		D 76 fine 200/230	D 126 medium 120/140	D 181 coarse 80/100	
6-1/	2 1/64 x 9/16	single-sided	04090	04091	04092	5



Diamond semi-flexible files

These semi-flexible diamond files are exceptionally well suited to work on larger surfaces. Convex and concave contours can be worked on with relatively little effort.

Length		Coating type	Grit size and	Grit size and EDP number		
[Inches]	[Inches]		D 64 fine 230/270	D 126 coarse 120/140		
6-5/8	1-3/16 x 1/32	complete	04100	04102	1	
14	1-3/8 x 3/64	complete	04103	04101	1	



Diamond files Diamond needle files

Diamond needle files

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

Diamond needle files in extra slim design are ideal for work on deep-set and narrow contours.

Accessories:

Needle file holder plastic EDP 16075 (see page 52) Needle file holder wood



Hand

 Hand with rounded edges
 Image: Second seco

Quick-mounting handle EDP 16174 (see page 52)

EDP 16076 (see page 52)

Profile	Overall	Coating		Shank dia.	Grit s	ize and EDP nu	ımber	
	length [Inches]	length [Inches]	[Inches]	[Inches]	D 91 fine 170/200	D 126 medium 120/140	D 181 coarse 80/100	
Hand	5-1/2	2-3/4	7/32 x 1/16	1/8	04027	04014	04001	1
Hand with rounded edges	5-1/2	2-3/4	7/32 x 1/16	1/8	04028	04015	-	1
Flat	5-1/2	2-3/4	7/32 x 1/16	1/8	04029	04016	04003	1
Three square	5-1/2	2-3/4	9/64	1/8	04030	04017	04004	1
Square	5-1/2	2-3/4	7/64	1/8	04031	04018	04005	1
Half-round	5-1/2	2-3/4	7/32 x 1/16	1/8	04032	04019	04006	1
Round	5-1/2	2-3/4	1/8	1/8	04033	04020	04007	1
Knife	5-1/2	2-3/4	13/64 x 1/16	1/8	04034	04021	04008	1
Feather edge	5-1/2	2-3/4	13/64 x 7/64	1/8	04035	04022	-	1
Crossing oval	5-1/2	2-3/4	13/64 x 3/32	1/8	04036	04023	-	1
Barrette	5-1/2	2-3/4	13/64 x 5/64	1/8	04037	04024	-	1

Diamond needle file sets

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

Contents : 1 piece each: hand three square square half-round round		DP 16174 Needle file EDP 16075 Needle file	es: nting handle (see page 52) holder plastic (see page 52) holder wood (see page 52)			
Overall length	Coating length	Shank dia.	Gr	it size and EDP numb	per	
[Inches]	[Inches]	[Inches]	D 91 fine 170/200	D 126 medium 120/140	D 181 coarse 80/100	
5-1/2	2-3/4	1/8	04038	04025	04012	1

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Diamond machinists files



Diamond machinists files

PFERDVALUE®:

Ideal for use on hardened steels and hard metal components such as cutting, punching, press/ extrusion and profiling dies, as well as for filing workpieces made of glass, ceramics, and fibrereinforced plastics.







File handles and accessories

File handles

Ergonomic file handles

Ergonomic file handles for comfortable and safe work.

Advantages:

- Protects hands against sharp edges and corners.
- Ergonomic shape with optimized haptics.
- Files do not roll away.
- Soft plastic on the outside with a hard, stable inner part.
- Without plasticizer.

EDP 11143 EDP 11144	I	
EDP 11145 EDP 11146	I	
EDP 11148	I	
EDP 11147		

Suitable for file length [Inches]	Overall length [Inches]	EDP number	Suitable for		
4, 6	4-1/4	11143	key files	10	
		11144	all tangs	10	
8, 10	4-1/2	4-1/2	11145	profiles three square, square, round, special profiles	10
		11146	profiles hand, flat, half-round	10	
12, 14	4-1/2	11148	profiles three square, square, round, special profiles	10	
		11147	profiles hand, flat, half-round	10	

PFERDVALUE®:

Plastic file handles

Plastic file handles for good guidance and power transmission.

Advantages:

- Wide collar guarantees fatigue-free work and increases safety.
- Good force transmission and control of the file.
- Air chambers help absorb hand moisture.
- File handle made from sturdy plastic.

Contains no plasticizers.

Ordering notes:	
Available in four different types to	
accommodate most tanged files.	



Compatible for file length [Inches]	Overall length [Inches]	EDP number	Suitable for			
4, 6	3-1/2	11130	key files	10		
				11131	all tangs	10
8, 10	4-1/4	11132	all tangs	10		
12, 14	5-25/32	11133	all tangs	10		



File handles and accessories

File handles



				mounting type files, diamond needle files and smaller ma	achinists and precision	
		 Advantages: Reliably clamps the file tangs into the handle by simply twisting the two halves of the handle. 				
Compatible for file length [Inches]	Suitable for tang diameter [Inches]	Overall length [Inches]	EDP number	Description		
5-1/2, 6-1/4, 7, 8	7/64, 1/8, 5/32	3-1/2	16174	Quick mounting plastic handle	10	



Needle file holder

Quick-mounting handles for needle files with 1/8 - 11/64" tang diameter.

Advantages:

Handy and lightweight.Available in two materials.

Compatible for file length [Inches]	Overall length [Inches]	EDP number	Description	
5-1/2, 6-1/4, 7	4	16075	Needle file holder plastic	10
	3-5/8	16076	Needle file holder wood	10

File cards



File card and brush

The file brush is for easy cleaning of clogged files. Comes with a robust handle made from wood and wear-resistant steel wire.

	Advantages: Easy cleaning. Long service life.	Applications: cleaning	
Length [Inches]	EDP number	Description	
9-1/8	17146	File card	5
9-1/8	17147	File card and brush	5

