

Mounted points, cones and plugs, bench grinding wheels



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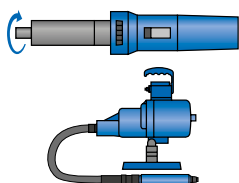
Mounted points, cones and plugs, bench grinding wheels

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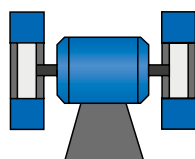
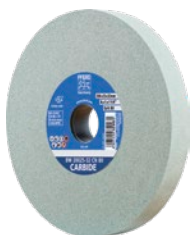
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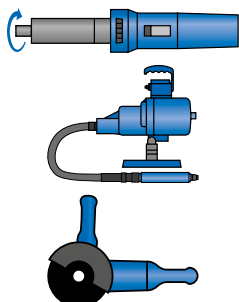


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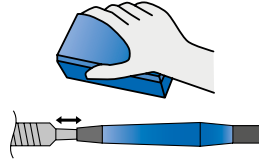


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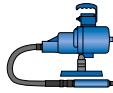


- Dressing stones

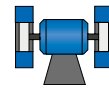
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Straight grinder



Flexible shaft



Bench grinder



Manual filing tool



Manual application

[Visit pferd.com](http://pferd.com)
for more information.



PFERDPRAXIS brochures

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



Mounted points, cones and plugs, bench grinding wheels

General information



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 TOOL-CENTER

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



PFERD packaging

PFERD mounted points in standard industrial packaging are delivered in protective plastic pouches with transparent fronts for easy identification of the shape, color, and grain. These can also be easily displayed on **PFERD** TOOL-CENTER units due to the standard hang-holes. The packaging labels feature easy identification of product features and part number.



PFERD quality

Mounted points, bench grinding wheels, and dressing and finishing stones are developed, manufactured and tested in accordance with the strictest quality requirements.

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

PFERD quality management is certified according to ISO 9001.



Applications of mounted points

- Work on edges (chamfering, rounding)
- Deburring
- Grinding out
- Leveling
- Surface work
- Work on weld seams
- Finishing
- Grouting
- Roughing (RUBBER type)



Mounted point dia. [Inches]	Peripheral speeds [SFPM]							
	1,000	2,000	3,000	4,000	5,000	6,000	7,800	9,800
	Rotational speeds [RPM]							
1/8	30,100	60,200	90,200	120,300	150,400	180,500	240,600	300,800
3/16	20,100	40,100	60,200	80,200	100,300	120,300	160,400	200,500
1/4	15,000	30,100	45,100	60,200	75,200	90,200	120,300	150,400
5/16	12,000	24,100	36,100	48,100	60,200	72,200	96,200	120,300
3/8	10,000	20,100	30,100	40,100	50,100	60,200	80,200	100,300
7/16	8,600	17,200	25,800	34,400	43,000	51,600	68,700	85,900
1/2	7,500	15,000	22,600	30,100	37,600	45,100	60,200	75,200
5/8	6,000	12,000	18,000	24,100	30,100	36,100	48,100	60,200
11/16	5,500	10,900	16,400	21,900	27,300	32,800	43,700	54,700
3/4	5,000	10,000	15,000	20,100	25,100	30,100	40,100	50,100
7/8	4,300	8,600	12,900	17,200	21,500	25,800	34,400	43,000
1	3,800	7,500	11,300	15,000	18,800	22,600	30,100	37,600
1-1/8	3,300	6,700	10,000	13,400	16,700	20,100	26,700	33,400
1-1/4	3,000	6,000	9,000	12,000	15,000	18,000	24,100	30,100
1-3/8	2,700	5,500	8,200	10,900	13,700	16,400	21,900	27,300
1-1/2	2,500	5,000	7,500	10,000	12,500	15,000	20,100	25,100
1-5/8	2,300	4,600	6,900	9,300	11,600	13,900	18,500	23,100
2	1,900	3,800	5,600	7,500	9,400	11,300	15,000	18,800
2-3/4	1,400	2,700	4,100	5,500	6,800	8,200	10,900	13,700

Recommended rotational speed range

Refer to the table for the recommended rotational speed based on the diameter and peripheral speed of your tool. The recommended cutting speeds can be found in the introductory descriptions of the various hardness grades in this catalogue.

Note:

The optimum rotational speeds can be found in the product tables. These have been limited to 150,000 RPM, as conventional power tools do not permit a higher rotational speed.

Example:

Mounted point diameter 1" STEEL
Peripheral speed: 5,000–6,000 SFPM
Rotational speed: 18,800–22,600 RPM



Safety notes

All PFERD mounted points are approved for a maximum operating speed of 9,800 SFPM. The maximum permitted rotational speeds for the various shank lengths and shank diameters are defined in DIN 69170 based on EN 12413. These must be adhered to in order to avoid buckling of the shank during use. Regardless of the shank length, the clamping length (L_3) of the shank must be at least 1/2".

The maximum permitted rotational speed calculated according to ANSI B7.1 is determined by the following factors:

- Shape and dimensions of the mounted point
- Diameter of the steel shank S_d
- Unsupported shank length L_0

Each packaging unit of PFERD mounted points comes with rotational speed specifications for the unsupported shank length (L_0) of that mounted point. Proper concentric accuracy and correct clamping of the power tool must also be ensured.

Tables with the maximum permitted rotational speeds for the entire PFERD mounted point product range are available on request.

Important!
Observe applicable safety codes and accident prevention regulations when working with spindle extensions.



= Wear eye protection!



= Wear hearing protection!



= Wear dust respirators!



= Wear gloves!



= Read the instructions!



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

Dust warning

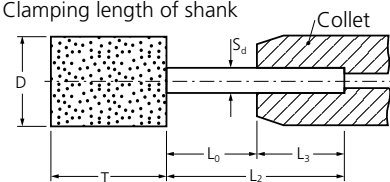
Use of the mounted points in this catalogue may create dust and other particles. To avoid any risk of adverse health effects, the operator must use appropriate protective measures, including a respirator, during and after operation. Refer to our Safety Data Sheet (SDS) for further information regarding the product to be used. Furthermore, additional health hazards may result from dust in the surrounding environment and from dust generated from the workpiece material.

PROTECTIVE MEASURES FOR THE OPERATOR MUST ADDRESS DUST AND OTHER PARTICULATES ARISING FROM ALL SOURCES. Always use our products in a well-ventilated workspace.

Important! Observe applicable safety codes and accident prevention regulations when working with spindle extensions.

Dimensional specifications

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



Mounted points

Quick product selection guide

PFERD offers a very extensive range of vitrified-bonded and resinoid-bonded mounted points. Designed to meet individual grinding application needs, these products come in a broad range of grain types, grit sizes, hardness grades and shapes. The mounted points are manufactured on automated, state-of-the-art production lines to high standards of dimensional accuracy and stability, consistent quality and close tolerances. To select the correct mounted point, the material, main fields of application and specific operating requirements have to be taken into consideration. This overview shows which types (abrasives and bonds) are recommended for the various materials and the tasks at hand.

1 Material group

The various material groups are colour-coded and form the starting point for choosing the most appropriate mounted point.

2 Application

After the material, the application must be selected. This differentiation is necessary in order to find the optimum mounted point and correct bond type. The mounted point bond, hardness and grain mixture have a decisive impact on the abrasive performance, service life and aggressiveness of the products:

1 Material group			Bond ▶
			3 Mounted point type ▶
			Abrasive ▶
			Recom. peripheral speed ▶
			2 Application ▼
Steel, cast steel	Steels up to 370 HV (38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, tempering steels	General use on edge and surface Surface grinding with high stock removal rate Edge grinding with high dimensional stability
	Hardened, heat-treated steels over 370 HV (38 HRC)	Tool steels, tempering steels, alloyed steels	General use on edge and surface Surface grinding with high stock removal rate Edge grinding with high dimensional stability
	Cast steel	Non-alloyed cast steel, low-alloyed cast steel	General use on edge and surface Surface grinding with high stock removal rate Edge grinding with high dimensional stability
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Surface grinding with high stock removal rate Edge grinding with high dimensional stability
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Aluminum alloys, brass, copper, zinc	General use on edge and surface
	Hard non-ferrous metals	Bronze, titanium, titanium alloys, hard aluminum alloys	
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite, with nodular graphite cast iron, white annealed cast iron, black cast iron	Surface grinding with high stock removal rate Edge grinding and grinding out of metal contamination with high dimensional stability
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, rubber, wood	General use on edge and surface

4 Catalogue page ▶











- **General use:** For general use on surfaces and edges, the emphasis is on the balance between abrasive performance and service life.
- **Surface grinding:** In surface grinding, the mounted points are subject to lower loads. The mounted point bond is comparatively soft and has been designed to give high stock removal rates.
- **Edge grinding:** In edge grinding, the mounted points must be dimensionally stable. The mounted point bond is comparatively hard and designed for a long service life.

③ Mounted point type

After determining the application (see column ②), the type is selected in the horizontal row. The "Highly recommended" types are indicated by a black dot (●). Further "Recommended" types are indicated by an open dot (○).

④ Reference to catalogue page

Further information about the hardness grades, mounted point shapes and dimensions, as well as grit sizes, can be found on the corresponding catalogue pages stated in the table.

Resinoid bond		Vitrified bond							
INOX	INOX EDGE	RUBBER	ALU	TOOL STEEL	TOUGH	CAST	STEEL	STEEL EDGE	CAST EDGE
ADW	AN	AH	CN	AW	AWCO	ARN	ADW	AR	CU
									
6,900–9,800 SFPM	6,900–9,800 SFPM	1,000–4,000 SFPM	4,000–7,800 SFPM	6,000–9,800 SFPM	6,000–9,800 SFPM	6,000–9,800 SFPM	6,000–9,800 SFPM	5,000–7,800 SFPM	6,000–9,800 SFPM
							●		
○				○			●	○	
	○						○	●	
							●		
				●	●		○		
					●			○	
○						○	●	○	
	○						○	●	
●	○						○		
○	●							○	
○			●						
●			○		●		○		
○				○	●				
○	○					●		○	○
○	○					○		○	●
		●	○						
22	23	29	25	21	17	26	11	13	27

● = highly recommended

○ = recommended



Mounted points

Technical specifications

W 222 6,3 ADW 30 M 5 V STEEL

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Shapes according to ANSI B74.2

Series W Cylindrical mounted points

Series A/B other shapes

② Dimensions

Series W cylindrical mounted points and series A and B shaped mounted points are specified by a number. For example the number of **W 222** is defined for the dimension **1" x 2"**

③ Shanks

Only the shank diameter is given in the description. The shank length is determined as follows:

Shank diameter 1/8" (3,1 mm) = 1-1/4" shank length

Shank diameter **1/4" (6,3 mm) = 1-1/2"** shank length

④ Abrasives

In general, two grain types are used, with internationally defined descriptions according to ISO 525:

A = Aluminum oxide (Al₂O₃) C = Silicon carbide (SiC)

The following abbreviations are used in order to specify the grain mixtures more precisely, beyond ISO 525:

AD = Aluminum oxide, dark red	AH = Bubble grain aluminum oxide	ADW = Mixture AD + AW
AW = Aluminum oxide, white	CN = Silicon carbide, green	ARN = Mixture AR + AN
AR = Aluminum oxide, pink	CU = Silicon carbide, grey	ADR = Mixture AD + AR
AN = Aluminum oxide, regular	CO = Ceramic oxide grain	AWCO = Mixture AW + CO

⑤ Grit sizes according to ISO 525 and ISO 8486

The grit sizes used in PFERD mounted points are determined by the shape and diameter of the mounted point.

In this example, **grit size 30** is used.

⑥ Hardness grades according to ISO 525

Hardness grades are classified using letters in alphabetical order to specify the hardness from soft to hard.

This example concerns a mounted point with **hardness M**.

Hardness grade coding				Property
A	B	C	D	Extremely soft
E	F	G	-	Very soft
H	I	J	K	Soft
L	M	N	O	Medium
P	Q	R	S	Hard
T	U	V	W	Very hard
X	Y	Z	-	Extremely hard

⑦ Structure according to ISO 525

The internationally valid scale for structural density ranges from 1 = dense to 14 = open (porous) structure.

In this example, the structural density is specified by the number **5**.

⑧ Bond according to ISO 525

Bond types are indicated with the following internationally standardized letters:

V = Vitrified bond

B = Resinoid bond

⑨ Material-specific description

The material-specific description indicates the material to be processed.

STEEL = For universal use on steel and cast steel

STEEL EDGE = For edge grinding on steel and cast steel





Mounted points with a shank diameter of 1/8" and 1/4" can be extended with drive spindle extensions. They allow access to hard-to-reach areas. The drive spindle extension is mounted in the collet of the power tool (air grinder or electric grinder), or in the handpiece of the flexible shaft. In some applications, spindle extensions are an economical alternative to customized mounted points with long shanks.

Safety notes:

- For safety reasons, it is not possible to use drive spindle extensions in combination with mounted points that have long shanks.
- For additional safety notes, please refer to catalogue section 9.



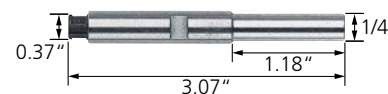
More detailed information and ordering data for drive spindle extensions can be found in catalogue section 9.



= Read the safety notes!

SPV 50-1/8 S1/4 for shank diameter of 1/8"

EDP 95820



SPV 75-1/4 SPG 6 for shank diameter of SPG 6

EDP 95821



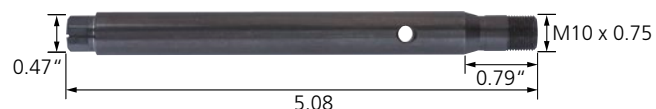
SPV 75-1/4 S3/8 for shank diameter of 3/8"

EDP 95822



SPV 100-1/4 SPG 6 for shank diameter of SPG 6

EDP 95823



SPV 100-1/4 S3/8 for shank diameter of 3/8"

EDP 95824



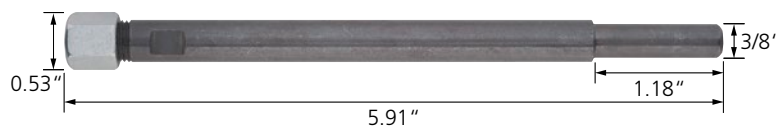
SPV 150-1/8 S1/4 for shank diameter of 1/4"

EDP 95825



SPV 150-1/4 S3/8 for shank diameter of 3/8"

EDP 95826



Mounted points

Products made to order

If you cannot find the solution for your particular application in our extensive catalogue range, we can produce mounted points 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.

Important information for your order

Diameter of mounted point	Minimum order quantity
Smaller than 1-1/4"	1,000
Larger than 1-1/4"	600

Special order mounted points lead time may take between 8 and 10 weeks.



1. We analyze your application.

We will discuss and analyze your application on-site and develop the most economic solution for your specific application.

Contact us for details and to set up an appointment.

2. We develop the solution.

This is based on your needs, application requirements and other criteria. From inspection of raw materials, to the inspection of the final product itself – PFERD always works to the highest quality standards.

The quality of PFERD products is certified according to ISO 9001.

3. Your product is ready for use!

Our flexible production and global logistics network ensure your custom product is delivered on-time and within your budget.

See the quality, performance and economic value of PFERD products for yourself!

Examples of made to order PFERD products



STEEL mounted points

The STEEL type is the most universal bond for machining steel and cast steel. It is extremely well suited to grinding high-speed steel (HSS) molded parts and weld dressing on steel constructions.

Advantages:

- Good grinding performance and stock removal rate in universal use on steel materials.
- High stock removal rate results in increased productivity.
- Recommended for work on both surfaces and edges.

Workpiece materials:

- Steel
- Cast steel

Type:

- Vitrified bond
- Mixture of dark-red and white aluminum oxide

Recommendations for use:

- STEEL mounted points perform best at a peripheral speed of 6,000–9,800 SFPM.

Compatible power tools:

- Flexible shaft drive
- Straight grinder

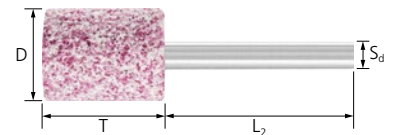
Safety notes:


- The maximum permitted rotational speed relates to the unsupported shank length of 1/2".



STEEL, series W

The cylindrical shape W is ideal for grinding bores, radii and contours.



Shape	D [Inches]	T [Inches]	Grit size and EDP number		Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			30	46				
Shank diameter 1/4" x 1-1/2" [S_d x L₂]								
W 187	1/2	1	-	33694	40,500	40,500	30,000	10
W 189	1/2	2	-	33724	24,000	24,000	18,750	10
W 208	3/4	2	34006	-	18,750	18,750	15,370	10
W 220	1	1	34186	-	25,500	25,500	19,120	10
W 222	1	2	34216	-	15,900	15,900	12,370	10
W 236	1-1/2	1/2	34426	-	22,600	25,470	25,470	5
W 239	1-1/2	2	34471	-	12,750	12,750	9,900	5
W 242	2	1	-	34512	17,200	19,100	15,950	5



Mounted points

For universal use on steel and cast steel




STEEL, series A

Series A mounted points are generally used on larger components. Due to the special shapes of series A mounted points, it is possible to grind in a variety of contours.

The applications range from grinding out slits and grooves in hard-to-reach areas to machining bores and small holes as well as smoothing.

Dimensional specifications:

- D = Mounted point outer diameter
- T = Mounted point width
- S_d = Shank diameter
- L₂ = Shank length

Shape	D [Inches]	T [Inches]	Grit size and EDP number	Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			30				

Shank diameter 1/4" x 1-1/2" [S_d x L₂]

A 1	3/4	2-1/2	31000	19,800	19,800	16,500	10
A 2	1	1-1/4	31010	34,400	38,200	32,620	10
A 3	1	2-3/4	31020	16,100	16,100	13,080	10
A 4	1-1/4	1-1/4	31030	26,900	30,560	24,750	5
A 5	3/4	1-1/8	31040	45,000	45,000	33,750	10
A 11	7/8	2	31060	19,860	19,860	15,100	10
A 12	11/16	1-1/4	31070	48,000	48,000	35,250	10
A 25	1	1	31150	34,400	35,620	27,370	10
A 31	1-3/8	1	31170	24,600	27,780	26,250	10
A 38	1	1	31240	34,400	34,500	26,250	10



STEEL EDGE mounted points

The STEEL EDGE type is ideal for edge grinding and deburring work on steel and cast steel components. Its applications also include grinding of chamfers in preparation for weld seams and grinding of contours.

Advantages:

- Long service life and low wear due to hard, dimensionally stable bond.
- Cost-effective due to high edge stability, even on low-speed power tools.
- Ideal for work on edges.

Workpiece materials:

- Steel
- Cast steel

Type:

- Vitrified bond
- Pink aluminum oxide

Recommendations for use:

- STEEL EDGE mounted points perform best at a peripheral speed of 5,000–7,800 SFPM.

Compatible power tools:

- Flexible shaft drive
- Straight grinder

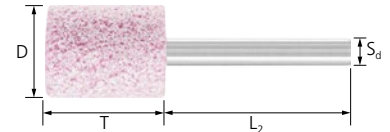
Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 1/2".



STEEL EDGE, series W

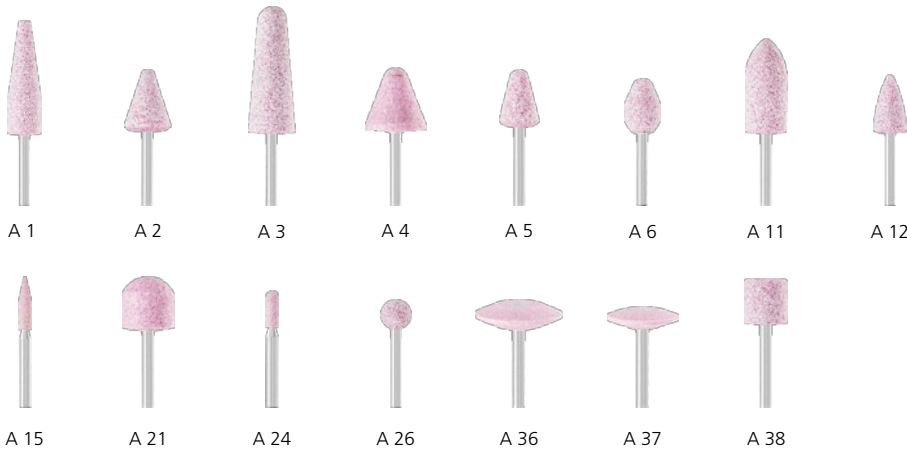
The cylindrical shape W is ideal for grinding bores, radii and contours.



Shape	D [Inches]	T [Inches]	Grit size and EDP number					Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			30	46	60	80	100				
Shank diameter 1/8" x 1-1/4" [S_d x L₂]											
W 154	3/16	1/2	-	-	33203	-	-	70,500	70,500	45,600	10
W 163	1/4	1/2	-	-	33338	-	33344	60,000	60,000	38,020	10
W 170	5/16	1/2	-	-	-	33446	-	52,500	52,500	33,000	10
Shank diameter 1/4" x 1-1/2" [S_d x L₂]											
W 179	3/8	1-1/4	-	33575	-	-	-	45,750	45,750	33,750	10
W 187	1/2	1	-	33695	-	-	-	40,500	40,500	30,000	10
W 189	1/2	2	-	33725	-	-	-	24,000	24,000	18,750	10
W 205	3/4	1	33962	-	33968	-	-	34,500	34,500	28,870	10
W 207	3/4	1-1/2	33992	-	-	-	-	24,000	24,000	18,520	10
W 215	1	1/8	-	-	34118	-	-	26,700	38,200	38,200	10
W 220	1	1	34187	-	-	-	-	25,500	25,500	19,120	10
W 221	1	1-1/2	34202	-	-	-	-	19,120	19,120	14,620	10
W 222	1	2	34217	-	34223	-	-	15,900	15,900	12,370	10
W 237	1-1/2	1	34442	-	-	-	-	16,700	22,500	17,620	5
W 238	1-1/2	1-1/2	34457	-	34463	-	-	15,600	15,600	12,000	5
W 239	1-1/2	2	34472	-	-	-	-	12,750	12,750	9,900	5
W 242	2	1	34517	-	34523	-	-	13,400	19,100	15,950	5

Mounted points

For edge grinding on steel and cast steel




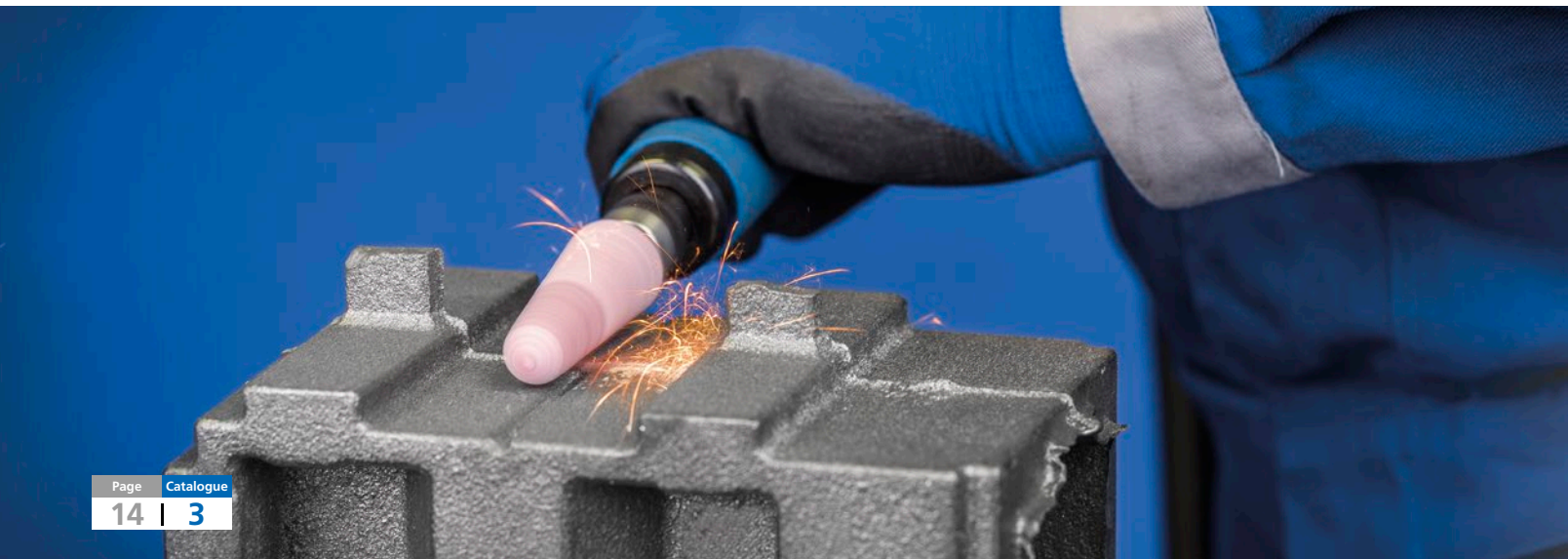
STEEL EDGE, series A

Series A mounted points are generally used on larger components. Due to the special shapes of series A mounted points, it is possible to grind in a variety of contours. The applications range from grinding out slits and grooves in hard-to-reach areas to machining bores and small holes as well as smoothing.

Dimensional specifications:

- D = Mounted point outer diameter
- T = Mounted point width
- S_d = Shank diameter
- L₂ = Shank length

Shape	D [Inches]	T [Inches]	Grit size and EDP number		Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			30	60				
Shank diameter 1/4" x 1-1/2" [S_d x L₂]								
A 1	3/4	2-1/2	31001	-	19,800	19,800	16,500	10
A 2	1	1-1/4	31011	-	26,000	38,200	32,620	10
A 3	1	2-3/4	31021	-	16,100	16,100	13,080	10
A 4	1-1/4	1-1/4	31031	-	21,000	30,560	24,750	5
A 5	3/4	1-1/8	31041	-	35,200	45,000	33,750	10
A 6	3/4	1-1/8	31051	-	35,200	39,000	29,700	10
A 11	7/8	2	31061	-	19,860	19,860	15,100	10
A 12	11/16	1-1/4	31071	-	40,000	48,000	35,250	10
A 15	1/4	1-1/16	-	31104	72,750	72,750	47,620	10
A 21	1	1	31111	-	26,000	34,500	26,250	10
A 24	1/4	3/4	-	31144	76,500	76,500	49,500	10
A 26	5/8	5/8	31161	-	41,800	61,120	46,500	10
A 36	1-5/8	3/8	-	31224	16,000	23,520	23,520	5
A 37	1-1/4	1/4	31234	-	21,000	30,560	30,560	5
A 38	1	1	31241	31244	26,700	34,500	26,250	10



STEEL EDGE, series B

Series B mounted points are generally used on smaller or more delicate components, such as in tool and die construction. Due to the special shapes of series B mounted points, it is possible to grind in a variety of contours. The applications range from grinding out slits and grooves in hard-to-reach areas to machining bores and small holes as well as smoothing.

Dimensional specifications:

- D = Mounted point outer diameter
- T = Mounted point width
- S_d = Shank diameter
- L₂ = Shank length



Shape	D [Inches]	T [Inches]	Grit size and EDP number				Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			46	60	80	100				

Shank diameter 1/8" x 1-1/4" [S_d x L₂]

B 42	1/2	3/4	32310	-	-	-	33,750	33,750	23,250	10
B 43	1/4	5/16	-	-	-	32328	81,370	81,370	51,000	10
B 51	7/16	3/4	-	-	32375	-	45,370	45,370	28,500	10
B 52	3/8	3/4	32380	-	32385	-	45,370	45,370	28,500	10
B 53	5/16	5/8	-	32392	-	-	60,000	60,000	38,020	10
B 54	1/4	1/2	-	-	-	32408	60,000	60,000	38,020	10
B 97	1/8	3/8	-	-	-	32658	105,000	105,000	64,500	10
B 121	1/2	1/2	-	-	32785	-	45,370	45,370	28,500	10
B 122	3/8	3/8	-	-	32795	-	61,650	61,650	37,720	10
B 123	3/16	3/16	-	-	-	32808	104,250	104,250	61,820	10
B 124	1/8	1/8	-	-	-	32818	105,000	105,000	64,500	10
B 125	1/4	1/4	-	-	-	32827	81,370	81,370	51,000	10
B 131	1/2	1/2	-	-	32835	-	34,500	34,500	22,500	10
B 132	3/8	1/2	32840	-	-	-	45,370	45,370	28,500	10
B 135	1/4	1/2	-	-	-	32878	60,000	60,000	38,020	10



Mounted points

For edge grinding on steel and cast steel



23-piece STEEL EDGE mounted point set

STEEL EDGE mounted points with 1/4" shank diameter are noted for their outstanding versatility, dimensional stability and edge-holding properties.

The set contains 23 mounted points of various shapes and sizes.

Contents:

- | | |
|-------------|-------------|
| 5 pcs each: | 3 pcs each: |
| ■ A 1 | ■ W 242 |
| ■ A 3 | |
| ■ A 11 | |
| ■ W 222 | |

Set	Shank diameter S _d [Inches]	Grit size	EDP number	
23 piece	1/4	30	39000	1



50-piece STEEL EDGE mounted point set

This set comprises 1/4" shank STEEL EDGE mounted points, universally recommended for many fine-grinding tasks. It includes the most common shapes and sizes.

Contains 50 mounted points in various shapes and dimensions.

Contents:

- | | |
|-------------|---------|
| 5 pcs each: | ■ A 24 |
| ■ A 1 | ■ A 37 |
| ■ A 4 | ■ W 189 |
| ■ A 12 | ■ W 215 |
| ■ A 15 | ■ W 220 |
| ■ A 21 | |

Set	Shank diameter S _d [Inches]	Grit size	EDP number	
50 piece	1/4	30-60	39005	1



TOUGH mounted points

The TOUGH type is specifically designed for use on titanium materials, nickel-based and cobalt-based alloys, hardened steel components and built-up weld deposits. Its applications include weld dressing on repair welds and reworking on turbine blades during aircraft maintenance and regrinding of repair welds in tool and die-making.

Advantages:

- Cool grinding due to the easily broken-down grain mixture.
- High stock removal rate results in increased productivity.
- The self-sharpening properties of the ceramic oxide grain provide consistent stock removal rates throughout the life of the product.

Workpiece materials:

- Hardened, heat-treated steels over 370 HV
- Titanium alloys
- Titanium
- High-temperature-resistant materials
- Nickel-based and cobalt-based alloys

Type:

- Vitrified bond
- Mixture of ceramic oxide grain and white aluminum oxide

Recommendations for use:

- TOUGH mounted points perform best at a peripheral speed of 6,000–9,800 SFPM.

Compatible power tools:

- Flexible shaft drive
- Straight grinder

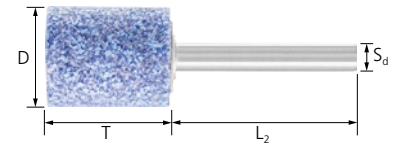
Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 1/2".



TOUGH, series W

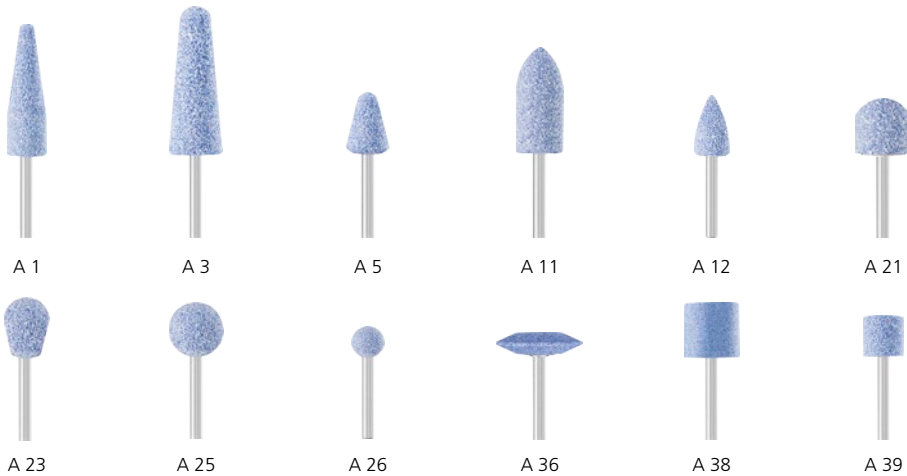
The cylindrical shape is ideal for grinding bores, radii and contours.



Shape	D [Inches]	T [Inches]	Grit size and EDP number			Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	10	
			46	60	80					
Shank diameter 1/8" x 1-1/4" [S_d x L₂]										
W 154	3/16	1/2	-	30127	30128	70,500	70,500	45,600	10	
W 163	1/4	1/2	-	30131	30132	60,000	60,000	38,020	10	
W 164	1/4	3/4	-	30133	30134	45,900	45,900	30,000	10	
W 170	5/16	1/2	-	30135	30136	52,500	52,500	33,000	10	
W 185	1/2	1/2	-	30145	30146	34,500	34,500	22,500	10	
W 215	1	1/8	-	30165	30168	34,400	38,200	24,900	10	
Shank diameter 1/4" x 1-1/2" [S_d x L₂]										
W 179	3/8	1-1/4	30141	-	30142	45,750	45,750	33,750	10	
W 189	1/2	2	30151	-	30153	24,000	24,000	18,750	10	
W 218	1	1/2	30167	-	30166	35,000	38,200	32,770	10	
W 220	1	1	30169	-	30170	25,500	25,500	19,120	10	
W 222	1	2	30175	-	30176	15,900	15,900	12,370	10	
W 236	1-1/2	1/2	30182	-	30183	22,000	25,470	25,470	10	
W 239	1-1/2	2	30188	-	30189	12,750	12,750	9,900	10	
W 242	2	1	30191	-	30192	17,200	19,100	15,950	10	

Mounted points

For universal use on materials that are tough to machine




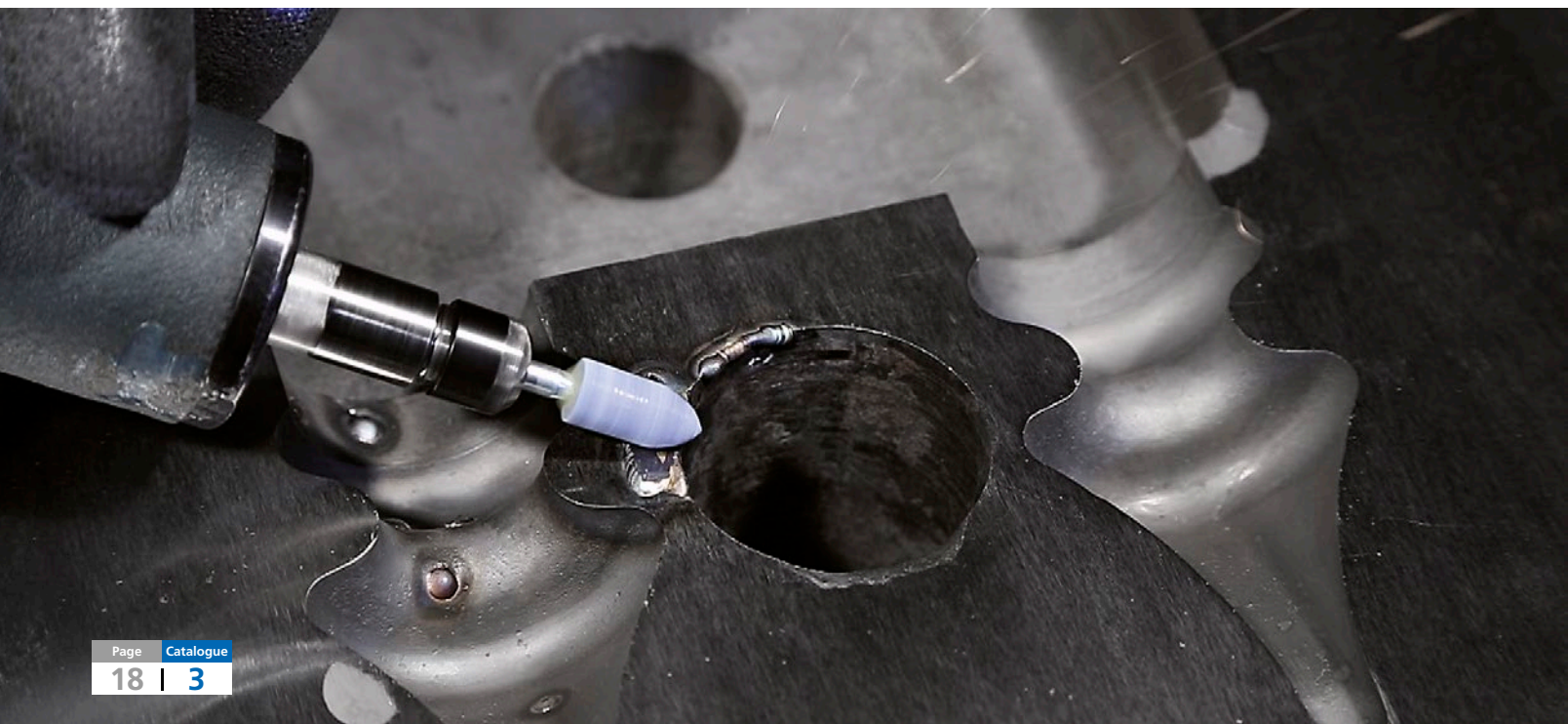
TOUGH, series A

Series A mounted points are generally used on larger components. Due to the special shapes of series A mounted points, it is possible to grind in a variety of contours. The applications range from grinding out slits and grooves in hard-to-reach areas to machining bores and small holes as well as smoothing.

Dimensional specifications:

D = Mounted point outer diameter
 T = Mounted point width
 S_d = Shank diameter
 L_2 = Shank length

Shape	D [Inches]	T [Inches]	Grit size and EDP number		Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			46	80				
Shank diameter 1/4" x 1-1/2" [$S_d \times L_2$]								
A 1	3/4	2-1/2	30000	30001	19,800	19,800	16,500	10
A 3	1	2-3/4	30003	30004	16,100	16,100	13,080	10
A 5	3/4	1-1/8	30006	30007	45,000	45,000	33,750	10
A 11	7/8	2	30010	30011	19,860	19,860	15,100	10
A 12	11/16	1-1/4	30012	30013	48,000	48,000	35,250	10
A 21	1	1	30017	30018	34,400	34,500	26,250	10
A 23	3/4	1	30020	30021	39,370	39,370	30,370	10
A 25	1	1	30022	30023	34,000	35,620	27,370	10
A 26	5/8	5/8	30024	30025	53,700	61,120	46,500	10
A 36	1-5/8	3/8	30031	30032	21,000	23,520	23,520	10
A 38	1	1	30033	30034	34,500	34,500	26,250	10
A 39	3/4	3/4	30035	30036	45,200	47,250	35,250	10




TOUGH, series B

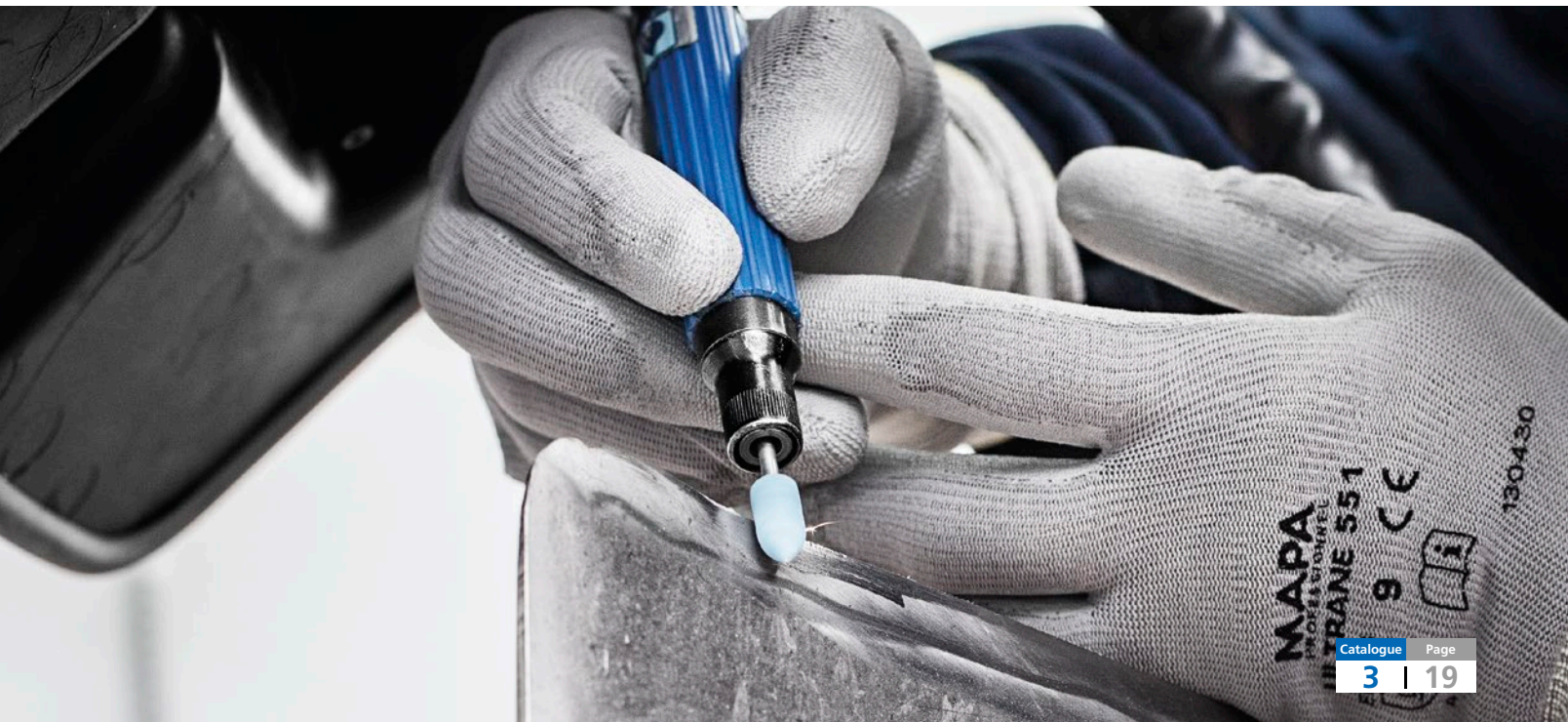
Series B mounted points are generally used on smaller or more delicate components, such as in tool and die construction. Due to the special shapes of series B mounted points, it is possible to grind in a variety of contours. The applications range from grinding out slits and grooves in hard-to-reach areas to machining bores and small holes as well as smoothing.



Dimensional specifications:

- D = Mounted point outer diameter
- T = Mounted point width
- S_d = Shank diameter
- L₂ = Shank length

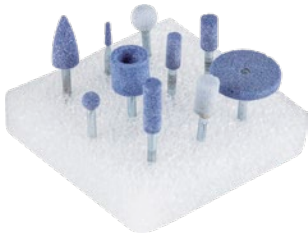
Shape	D [Inches]	T [Inches]	Grit size and EDP number		Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			60	80				
Shank diameter 1/8" x 1-1/4" [S_d x L₂]								
B 42	1/2	3/4	30053	30054	33,750	33,750	23,250	10
B 52	3/8	3/4	30064	30065	45,370	45,370	28,500	10
B 97	1/8	3/8	30082	30083	105,000	105,000	64,500	10
B 122	3/8	3/8	30090	30091	61,650	61,650	37,720	10
B 125	1/4	1/4	30094	30095	81,370	81,370	51,000	10
B 131	1/2	1/2	30096	30097	34,500	34,500	22,500	10



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Mounted points

For universal use on materials that are tough to machine




10 piece mounted point set TOUGH, fine

Contains 10 small mounted points with shank diameter 1/8" in the most common shapes and dimensions for fine work.

Contents:

1 piece each:

- B 52
- B 97
- B 122
- B 125
- B 131
- W 154
- W 163
- W 134
- W 170
- W 215

Set	Shank diameter S_d [Inches]	Grit size and EDP number	
		80	
10 piece	1/8	39002	1




10 piece mounted point set TOUGH, coarse

Contains 10 mounted points with shank diameter 1/4" in the most common shapes and dimensions for rough grinding.

Contents:

1 piece each:

- A 1
- A 3
- A 5
- A 11
- A 36
- A 38
- A 39
- W 189
- W 222
- W 242

Set	Shank diameter S_d [Inches]	Grit size and EDP number	
		46	
10 piece	1/4	39003	1



TOOL STEEL mounted points

The TOOL STEEL type is ideal for surface grinding of hardened steel. Its applications include grinding of heat-treated steel components, titanium and titanium alloy workpieces as well as dressing of hard deposit-welded claddings.

Advantages:

- Easy to break down, sharp-edged aluminum oxide allows high stock removal rates on hardened steel.
- The open structure allows good heat dissipation and cool grinding.

Workpiece materials:

- Hardened, heat-treated steels over 370 HV
- Tool steel
- Titanium
- Titanium alloys

Type:

- Vitrified bond
- White aluminum oxide

Recommendations for use:

- TOOL STEEL mounted points perform best at a peripheral speed of 6,000–9,800 SFPM.

Compatible power tools:

- Flexible shaft drive
- Straight grinder

Ordering notes:

- Further dimensions on request, see page 10.

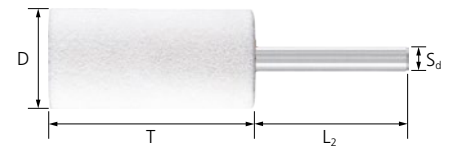
Safety notes:


- The maximum permitted rotational speed relates to the unsupported shank length of 1/2".



TOOL STEEL, series W

The cylindrical shape is ideal for grinding bores, radii and contours.



Shape	D [Inches]	T [Inches]	Grit size and EDP number 60	Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
Shank diameter 1/4" x 1-1/2" [S_d x L₂]							
W 222	1	2	34212	15,900	15,900	12,370	10



Mounted points

For universal use on stainless steel (INOX)

INOX mounted points

INOX mounted points are ideal for surface work on stainless steel (INOX) and for universal use on non-ferrous metals and bronze. These products are used for rough grinding of stainless steel (INOX) castings and grinding of molded parts made of high temperature-resistant alloys.

Advantages:

- Due to cool grinding, ideal for use on temperature-sensitive materials.
- Increased operator comfort due to low-vibration grinding.

Workpiece materials:

- Stainless steel (INOX)
- Bronze
- Hard non-ferrous metals

Type:

- Resinoid bond
- Mixture of dark-red and white aluminum oxide

Recommendations for use:

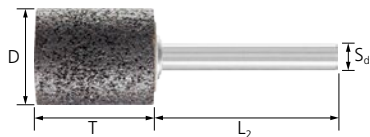
- INOX mounted points perform best at a peripheral speed of 6,900–9,800 SFPM.

Compatible power tools:

- Flexible shaft drive
- Straight grinder


Safety notes:

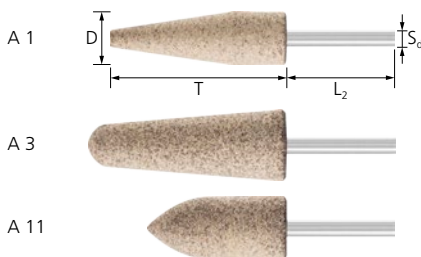
- The maximum permitted rotational speed relates to the unsupported shank length of 1/2".



INOX, series W


The cylindrical shape is ideal for grinding bores, radii and contours.

Shape	D [Inches]	T [Inches]	Grit size and EDP number	Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			30				
Shank diameter 1/4" x 1-1/2" [S_d x L₂]							
W 222	1	2	35382	15,900	15,900	12,370	10
W 236	1-1/2	1/2	35409	22,900	25,470	25,470	5



INOX, series A

Series A mounted points are generally used on larger, stainless steel components, such as in container construction. Due to the special shapes of series A mounted points, it is possible to grind in a variety of contours. The applications range from grinding in hard-to-reach areas to machining bores and small holes as well as smoothing.

Shape	D [Inches]	T [Inches]	Grit size and EDP number	Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			30				
Shank diameter 1/4" x 1-1/2" [S_d x L₂]							
A 1	3/4	2-1/2	35100	19,800	19,800	16,500	10
A 3	1	2-3/4	35104	16,100	16,100	13,080	10
A 11	7/8	2	35112	19,860	19,860	15,100	10

INOX EDGE mounted points

INOX EDGE mounted points are for edge grinding on stainless steel (INOX). Applications include weld dressing on fillet welds on stainless steel components, removing burrs on molded parts made of high-temperature-resistant alloys, removing burrs on stainless steel castings, and grinding chamfers in preparation for welding stainless steel profiles

Advantages:

- Due to cool grinding, ideal for use on temperature-sensitive materials.
- Increased operator comfort due to low-vibration grinding.
- Cost-effective due to high edge stability even on low-speed power tools.
- High dimensional stability on edges.

Workpiece materials:

- Stainless steel (INOX)

Type:

- Resinoid bond
- Regular aluminum oxide

Recommendations for use:

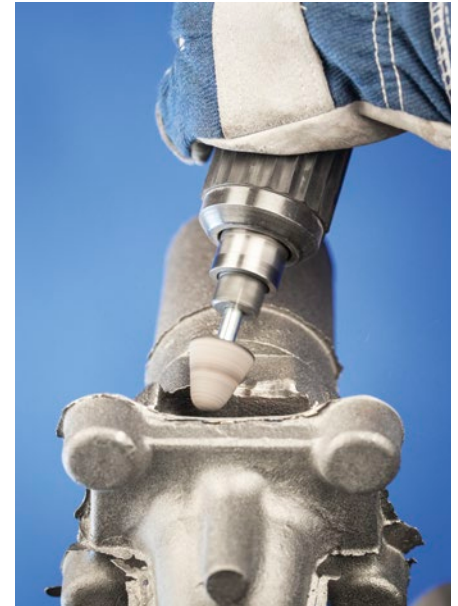
- INOX EDGE mounted points perform best at a peripheral speed of 6,900–9,800 SFPM.

Compatible power tools:

- Flexible shaft drive
- Straight grinder

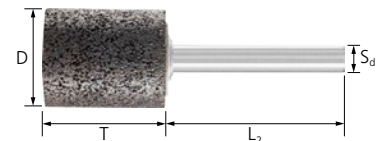
Safety notes:


- The maximum permitted rotational speed relates to the unsupported shank length of 1/2".

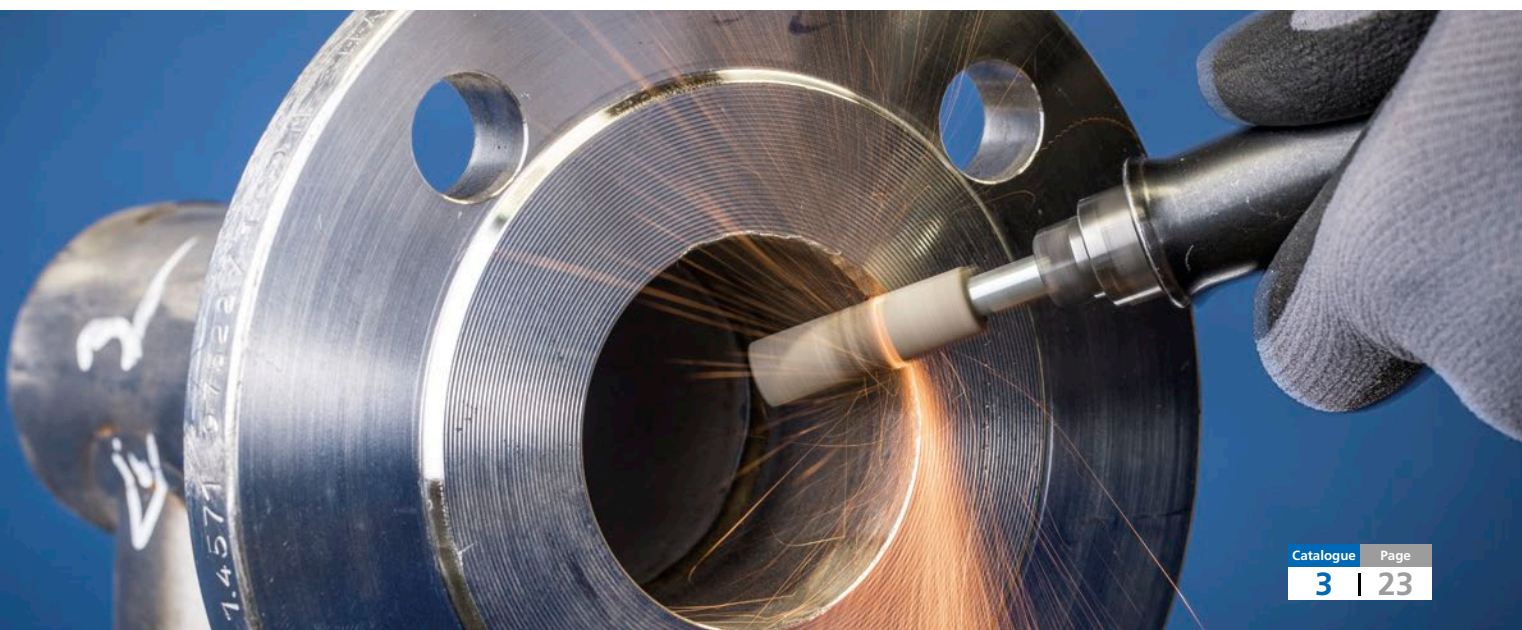


INOX EDGE, series W

The cylindrical shape is ideal for grinding bores, radii and contours.



Shape	D [Inches]	T [Inches]	Grit size and EDP number		Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			30	46				
Shank diameter 1/4" x 1-1/2" [S_d x L₂]								
W 189	1/2	2	-	35337	24,000	24,000	18,750	10
W 220	1	1	35379	-	25,500	25,500	19,120	5
W 222	1	2	35383	-	15,900	15,900	12,370	10
W 236	1-1/2	1/2	35410	-	22,900	25,470	25,470	5



Mounted points

For edge grinding on stainless steel (INOX)




INOX EDGE, series A

Series A mounted points are generally used on larger, stainless steel components, such as in container construction. Due to the special shapes of series A mounted points, it is possible to grind in a variety of contours. The applications range from grinding in hard-to-reach areas to machining bores and small holes as well as smoothing.

Dimensional specifications:

- D = Mounted point outer diameter
- T = Mounted point width
- S_d = Shank diameter
- L₂ = Shank length

Shape	D [Inches]	T [Inches]	Grit size and EDP number		Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang		
			30	46					
Shank diameter 1/4" x 1-1/2" [S_d x L₂]									
A 1	3/4	2-1/2	35101	-	19,800	19,800	16,500	10	
A 3	1	2-3/4	-	35105	16,100	16,100	13,080	10	
A 4	1-1/4	1-1/4	35107	-	28,600	30,560	24,750	5	
A 5	3/4	1-1/8	35109	-	45,000	45,000	33,750	10	
A 11	7/8	2	35113	-	19,860	19,860	15,100	10	
A 12	11/16	1-1/4	35115	-	48,000	48,000	35,250	10	
A 21	1	1	35123	-	34,500	34,500	26,250	10	
A 38	1	1	-	35149	34,500	34,500	26,250	10	



ALU mounted points

The ALU type is ideal for universal use on aluminum and non-ferrous metals. It is used to remove burrs on cast aluminum parts and for chamfering on aluminum profiles for weld-seam preparation.

Advantages:

- The special impregnation means there is no clogging when working on soft, lubricating or tough materials.
- Good grinding performance and stock removal rate.

Workpiece materials:

- Aluminum
- Copper
- Brass
- Zinc

Type:

- Vitrified bond
- Green silicon carbide

Recommendations for use:

- ALU mounted points perform best at a peripheral speed of 4,000–7,800 SFPM.

Compatible power tools:

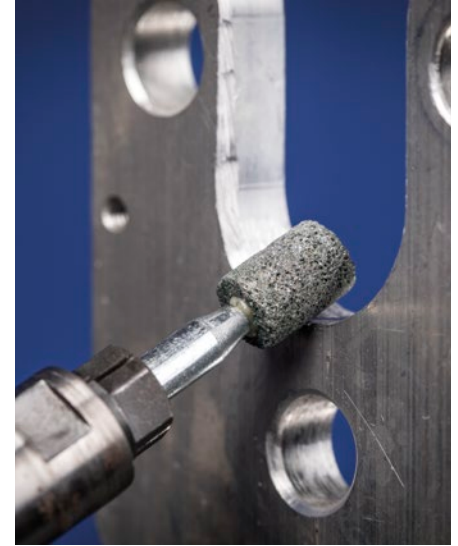
- Flexible shaft drive
- Straight grinder

Ordering notes:

- Further dimensions on request, see page 10.

Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 1/2".

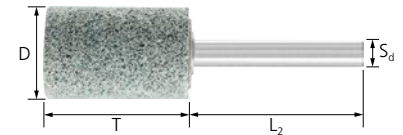



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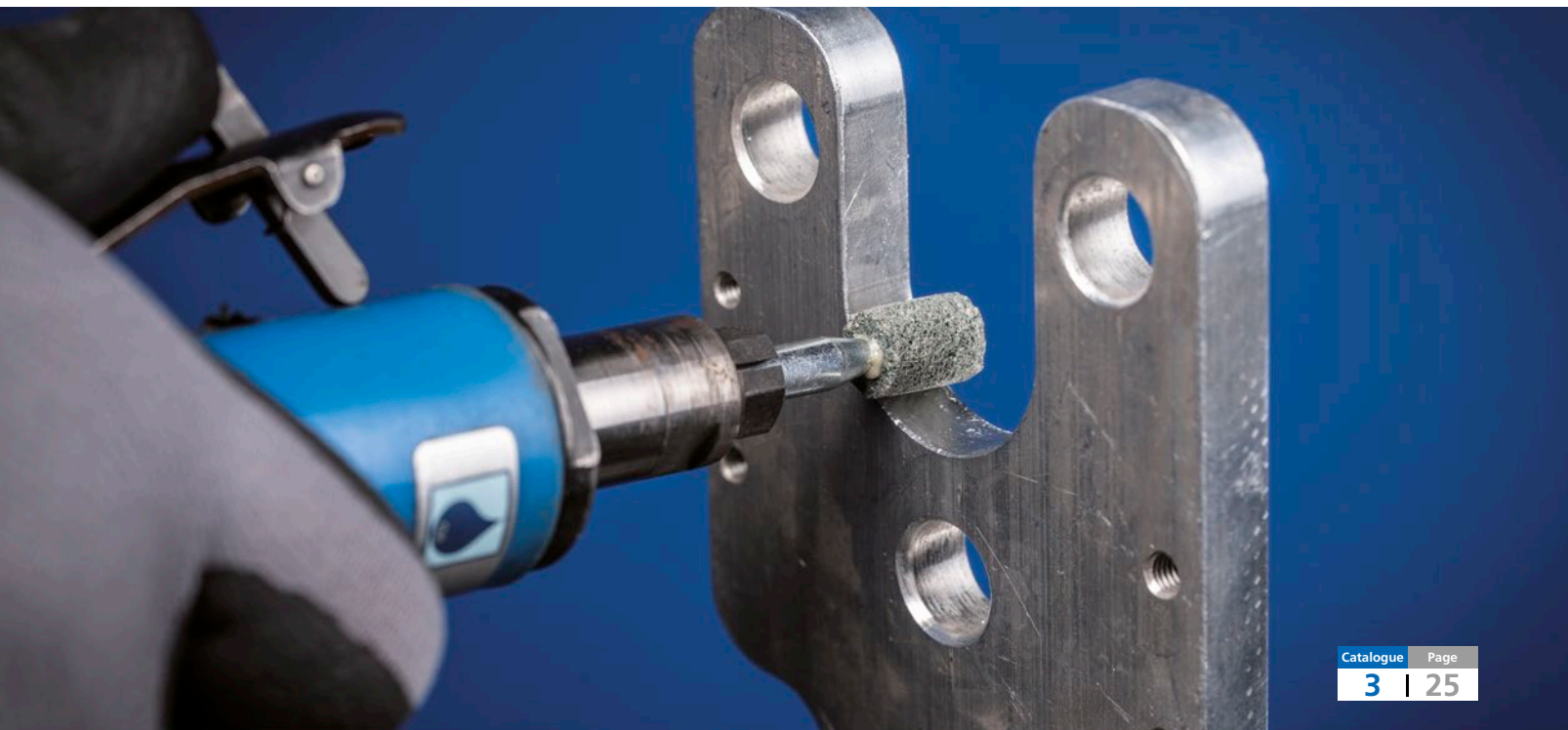


ALU, series W

The cylindrical shape is ideal for grinding bores, radii and contours. It can be made into any desired shape with the aid of a dressing stone.



Shape	D [Inches]	T [Inches]	Grit size and EDP number	Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			80				
Shank diameter 1/4" x 1-1/2" [S_d x L₂]							
W 222	1	2	34214	15,900	15,900	12,370	10



Mounted points

For universal use on grey and nodular cast

CAST mounted points

The CAST type is ideal for surface work on grey and nodular cast iron in combination with high peripheral speeds. Its applications include cleaning of workpieces and grinding out of shrinkage holes.

Advantages:

- Recommended for use on surfaces and edges.
- Good grinding performance and long service life.
- High stock removal rates due to coarse grit size.

Workpiece materials:

- Grey/nodular cast iron (GG/GJL, GGG/GJS)
- Annealed cast iron

Type:

- Vitrified bond
- Mixture of pink aluminum oxide and regular aluminum oxide

Recommendations for use:

- CAST mounted points perform best at a peripheral speed of 6,000–9,800 SFPM.

Compatible power tools:

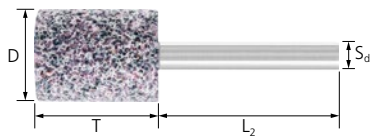
- Flexible shaft drive
- Straight grinder

Ordering notes:

- Further dimensions on request, see page 10.


Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 1/2".



CAST, series W

The cylindrical shape is ideal for grinding bores, radii and contours. It can be made into any desired shape with the aid of a dressing stone.

Shape	D [Inches]	T [Inches]	Grit size and EDP number	Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			30				
Shank diameter 1/4" x 1-1/2" [S_d x L₂]							
W 222	1	2	34215	15,900	15,900	12,370	10



CAST EDGE mounted points

CAST EDGE mounted points are for edge grinding and grinding out sharp burrs, sand inclusions, and scale in grey and nodular cast iron in combination with high cutting speeds.

Advantages:

- Dimensionally stable due to the high bond content.
- Cost-effective due to high edge stability even on low-speed power tools.

Workpiece materials:

- Grey/nodular cast iron (GG/GJL, GGG/GJS)
- Annealed cast iron
- Casting scale with sand contamination and metal contamination

Type:

- Vitrified bond
- Grey silicon carbide

Recommendations for use:

- CAST EDGE mounted points perform best at a peripheral speed of 6,000–9,800 SFPM.

Compatible power tools:

- Flexible shaft drive
- Straight grinder

Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 1/2".

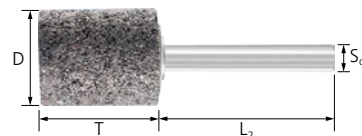



3



CAST EDGE, series W

The cylindrical shape is ideal for grinding bores, radii and contours.



Shape	D [Inches]	T [Inches]	Grit size and EDP number 30	Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
Shank diameter 1/4" x 1-1/2" [S_d x L₂]							
W 189	1/2	2	33726	24,000	24,000	18,750	10
W 208	3/4	2	34008	18,750	18,750	15,370	10
W 222	1	2	34218	15,900	15,900	12,370	10



Mounted points

For edge grinding on grey and nodular cast




CAST EDGE, series A

Series A mounted points are generally used on larger components. Due to the special shapes of series A mounted points, it is possible to grind in a variety of contours.

The applications range from grinding out slits and grooves in hard-to-reach areas to machining bores and small holes as well as smoothing.

Dimensional specifications:

D = Mounted point outer diameter
 T = Mounted point width
 S_d = Shank diameter
 L_2 = Shank length

Shape	D [Inches]	T [Inches]	Grit size and EDP number	Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			30				
Shank diameter 1/4" x 1-1/2" [S_d x L_2]							
A 1	3/4	2-1/2	31002	19,800	19,800	16,500	10
A 3	1	2-3/4	31022	16,100	16,100	13,080	10
A 5	3/4	1-1/8	31042	45,000	45,000	33,750	10
A 11	7/8	2	31062	19,860	19,860	15,100	10



RUBBER mounted points

The RUBBER type is specifically designed for universal use on soft materials such as rubber, plastic and wood. The fields of application include removal of burrs on plastic injection-molded parts, trimming of rubber molded parts and molded parts made of polyurethane (PUR), grinding of wooden cores and wooden shapes in model construction workshops and roughing of various adhesive joints (e.g. for repairs on conveyor belts and tires).

Advantages:

- Open structure and large chip spaces due to bubble grain aluminum oxide.
- Machining of temperature-sensitive materials without addition of cooling lubricant due to large chip spaces.
- Excellent grinding performance.

Workpiece materials:

- Elastomers
- Thermoplastics
- Rubber
- Wood

Type:

- Vitrified bond
- Bubble grain aluminum oxide

Recommendations for use:

- RUBBER mounted points perform best at a peripheral speed of 1,000–4,000 SFPM.

Compatible power tools:

- Flexible shaft drive
- Straight grinder

Ordering notes:

- Further dimensions on request, see page 10.

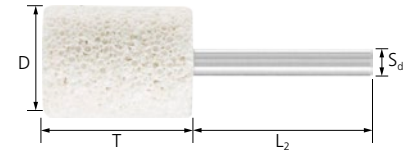
Safety notes:


- The maximum permitted rotational speed relates to the unsupported shank length of 1/2".



RUBBER, series W

The cylindrical shape is ideal for grinding radii and contours, and for deburring work.



Shape	D [Inches]	T [Inches]	Grit size and EDP number	Recom. RPM 1/2" overhang	Max. RPM 1/2" overhang	Max. RPM 1" overhang	
			30				
Shank diameter 1/4" x 1-1/2" [S_d x L₂]							
W 222	1	2	34213	15,900	15,900	12,370	10



Bench grinding wheels

General information

PFERD offers a very wide range of high-quality bench grinding wheels for working with a large variety of materials and for many different applications. Bench grinding wheels are available with different dimensions, grains and abrasives.

Advantages:

- Long service life.
- High dimensional stability.
- High abrasive performance.
- Integrated telescopic bushings for mounting on almost any bench grinder spindle.

Applications:

- Deburring
- Work on edges (chamfering, rounding)
- Sharpening

Recommendations for use:

- Dressing the wheel on a regular basis exposes sharp grain and maintains an even grinding area.
- Constantly adjust the workpiece support to the grinding wheel diameter (gap width max. 1/8").
- All bench wheels are packed with telescoping bushings to accommodate popular machine spindle sizes.
- If a bench grinding wheel starts to show signs of loading, use dressing tool on page 32.

Compatible power tools:

- Bench grinders
- Pedestal grinders

Safety notes:

- The maximum permitted peripheral speed is 6,900 SFPM. The maximum speed is calculated in accordance with ANSI B7.1.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.
- Before clamping, the grinding tool must be ring tested to make sure that it does not have any cracks (undamaged grinding tools give a clear tone).
- Perform the ring test before mounting. An undamaged wheel will give a clear tone.
- **CAUTION:** Smaller spindles frequently run at higher RPMs.



= Wear eye protection!



= Wear hearing protection!



= Wear dust respirators!



= Wear gloves!



= Follow the safety instructions!



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



= Do not use if damaged!

Vitrified bond



UNIVERSAL type

UNIVERSAL type bench grinding wheels are ideal for universal use in the workshop.




Workpiece materials:

steel, cast steel, stainless steel (INOX), cast iron

Type:

Vitrified bond, regular aluminum oxide

D [Inches]	T [Inches]	H [Inches]	Included bushings	Grit size and EDP number					Max. RPM	
				24	36	46	60	80		
6	1/2	1	3/4, 5/8, 1/2	-	-	-	61736	-	4,140	1
	3/4	1	3/4, 5/8, 1/2	61738	61739	61740	61741	61742	4,140	1
	1	1	3/4, 5/8, 1/2	61743	61744	61745	61746	61747	4,140	1
7	1	1	3/4, 5/8, 1/2	61753	61754	61755	61756	61757	3,600	1
8	1	1-1/4	1	61763	61764	61765	61766	61767	3,600	1
10	1	1-1/4	1	61768	61769	61770	61771	61772	2,400	1
	1-1/2	1-1/4	1	61773	61774	-	61776	-	2,400	1
12	2	1-1/2	1-1/4	61778	61779	61780	61781	-	2,070	1
14	2	1-1/2	1-1/4	61782	61783	-	61784	-	1,800	1

Flat (type 1)

CARBIDE type

CARBIDE type bench grinding wheels are used on hard materials, such as for sharpening tungsten carbide tools.

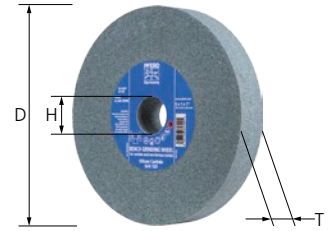



Workpiece materials:

tungsten carbide, hardened, heat-treated steels over 370 HV (38 HRC), steel materials with a hardness over 580 HV (54 HRC), glass

Type:

Vitrified bond, green silicon carbide



D [Inches]	T [Inches]	H [Inches]	Included bushings	Grit size and EDP number			Max. RPM	
				60	80	120		
Flat (type 1)								
6	3/4	1	3/4, 5/8, 1/2	61785	61786	61787	4,140	1
	1	1	3/4, 5/8, 1/2	61788	61789	61790	4,140	1
7	1	1	3/4, 5/8, 1/2	61791	61792	61793	3,600	1
8	1	1-1/4	1	61794	61795	61796	3,600	1
10	1	1-1/4	1	61797	61798	61799	2,400	1

Accessories


Bench wheel bushings

PFERD bench grinder bushings provide a safe method of reducing the wheel arbor to accommodate various spindle sizes. The bushing should be flush on both sides of the wheel, and should not interfere with the flanges.

Recommendation for use:

CAUTION: Smaller spindles frequently run at higher RPMs.



Fits arbor hole H [Inches]	Fits thickness T [Inches]	Bushing I.D. [Inches]	EDP number	
Telescoping				
1	1/2	3/4, 5/8, 1/2	69018	1
	3/4	3/4, 5/8, 1/2	69019	1
	1	3/4, 5/8, 1/2	69011	1
1-1/2	1	1-1/4	69024	1
1-1/4	1	1	69025	1
Standard				
1-1/4	1/4	1	69012	1
		7/8	69014	1
		3/4	69015	1
		5/8	69016	1
		1/2	69017	1

Bench grinding wheels


Dressing tools



Grinding wheel dresser

Ideal accessory for PFERD bench grinding wheels if the wheel is clogged or its shape has changed.


The dressing roller consists of hardened steel discs with U-shaped teeth. Wave washers between the tooth discs make the tooth roller stable and robust. For high peripheral speeds, the dresser has a spindle with an integrated grease fitting to guarantee a long service life.

Overall length [Inches]	Roll width [Inches]	Roll dia. [Inches]	EDP number	Max. wheel diameter [Inches]	Max. wheel thickness [Inches]	
17	1-1/2	1	39110	20	2-1/2	1



Replacement roller

The replaceable roller can be used until the teeth are completely worn.

Roll width [Inches]	Roll dia. [Inches]	EDP number	
1-1/2	1	39114	1



Replacement spindle


The greaseable spindle can be used to replace worn spindles.

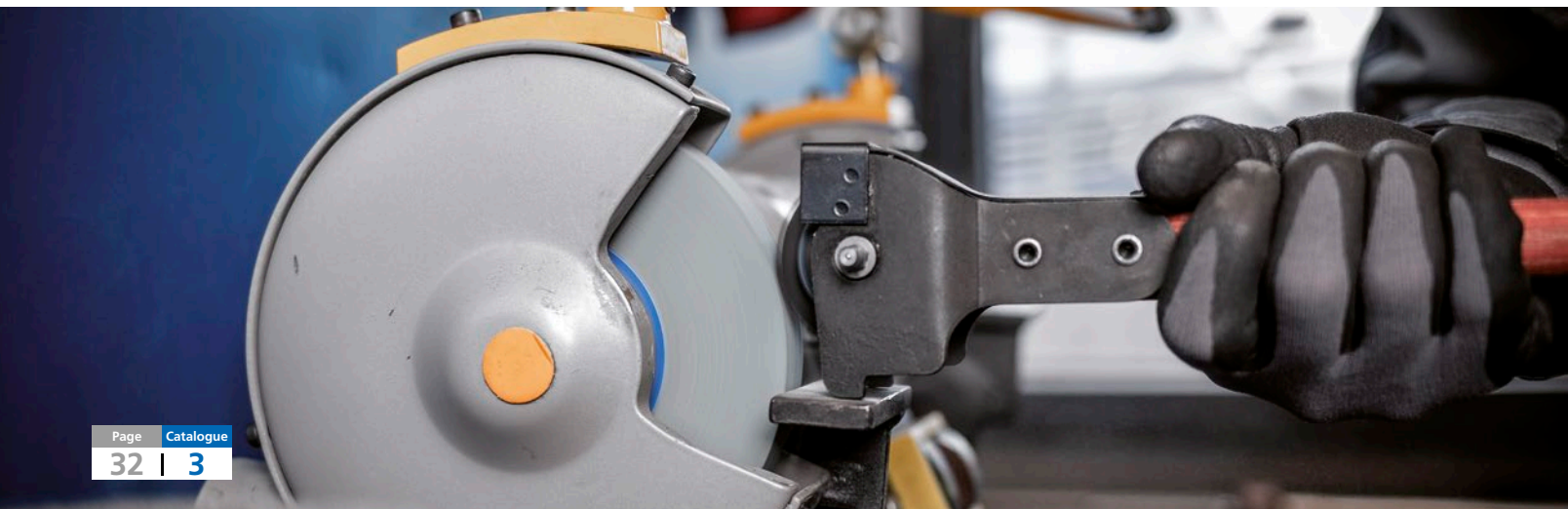
Roll width [Inches]	Axis dia. [Inches]	EDP number	
1-1/2	1/2	39115	1



Grinding wheel dressing rod

The SiC grinding wheel dresser is a low-cost alternative for dressing bench grinding wheels. A stainless steel tube protects the SiC rod from breaking, making the tool more robust.

Overall length [Inches]	Diameter [Inches]	EDP number	
10	1	39112	1



PFERD cones and plugs are made of regular aluminum oxide in a high-quality resinoid bond. Because of their hardness, these products are noted for their good stock removal rates and high durability.

Advantages:

- High stock removal rate.
- High edge-holding and dimensional stability.
- Cool grinding properties reduce the thermal load on the workpiece.

Application examples:

- Weld dressing on steel removing excess weld metals.
- Chamfering in preparation of welding operations.
- Grinding in hard-to-reach workpiece areas.
- Removing parting lines and imperfections at casting parts.
- Smoothing rough castings.

Recommendations for use:

- Cones and plugs perform best at the recommended peripheral speed of 6,900–9,800 SFPM.
- Recommended power tools include flexible shafts, electric or air-powered straight grinders and angle grinders.

Safety recommendations:

- The maximum speed is calculated in accordance with ANSI B7.1.
- Never exceed the maximum RPM listed on the label.



= Wear eye protection!



= Wear hearing protection!



= Wear dust respirators!



= Wear gloves!



= Follow the safety instructions!

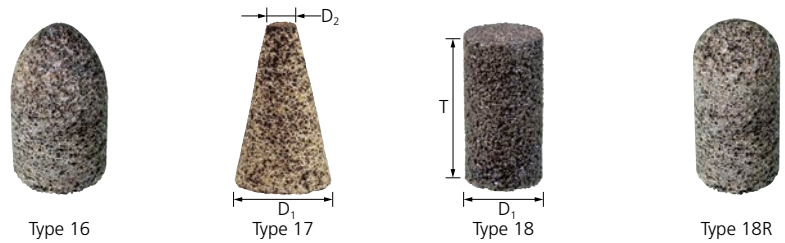



= Read the Safety Data Sheets (SDS) before using any materials!



Cones and plugs

Cones and plugs are used for steel, cast steel and cast iron.



D ₁ [Inches]	D ₂ [Inches]	T [Inches]	Grit size	Thread and EDP number		Recom. RPM	Max. RPM	
				3/8-24	5/8-11			
Curved (type 16)								
1-1/2	-	2-1/2	16	61816	-	24,000	24,100	10
		3	16	-	61820	24,000	24,100	10
1-3/4	-	3	16	-	61826	20,600	20,700	10
2	-	3	16	-	61829	18,100	18,100	10
2-3/4	-	3-1/2	16	-	61837	13,100	13,200	10
3	-	3	16	-	61838	12,000	12,500	10
Tapered (type 17)								
1-1/2	3/8	2-1/2	16	61850	61851	24,000	24,100	10
	1/2	3	16	61854	61855	24,000	24,100	10
2	1/2	3	16	-	61859	14,500	18,100	10
Straight (type 18)								
1	-	2	16	61883	-	36,100	36,200	10
1-1/2	-	2-1/2	16	61884	61885	24,000	24,100	10
		3	16	61888	61889	24,000	24,100	10
2	-	3	16	-	61893	18,100	18,100	10
Straight (type 18R)								
1-1/2	-	2-1/2	16	61927	61928	24,000	24,100	10
		3	16	61931	61932	24,000	24,100	10
2	-	3	16	-	61936	18,100	18,100	10
3	-	3	16	-	61937	12,000	12,500	10

Grinding and polishing stones

General information

PFERD grinding and polishing stones are versatile tools for finish machining on forms in tool and die-making. They are used for step-by-step fine grinding after machining or after electrical discharge machining (EDM) to grind in a brushed finish/polish in the demoulding direction or to prepare for high-gloss polishing with diamond pastes.

Advantages:

- Long service life.
- High dimensional stability.
- High abrasive performance.
- Controlled, even stock removal.
- Fine surface finish.

Applications:

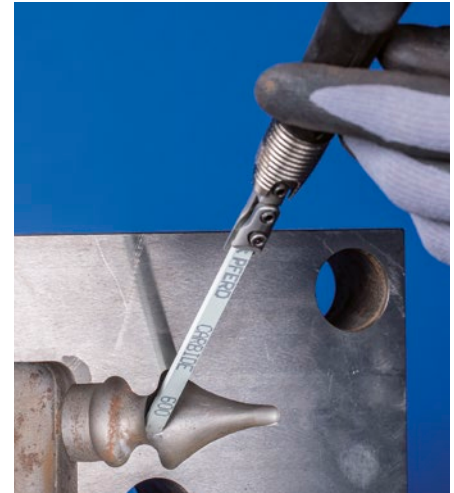
- Surface work
- Polishing
- Rounding
- Finishing
- Step-by-step fine grinding

Recommendations for use:

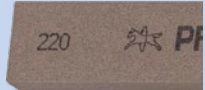
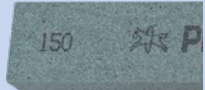
- A quick-mounting handle is recommended in manual applications to make work more ergonomic.
- The use of grinding oils is recommended to achieve a better surface finish.
- Sort the grinding and polishing stones by type to avoid grain being carried over.

Compatible power tools:

- Manual filing machine



Quick product selection guide

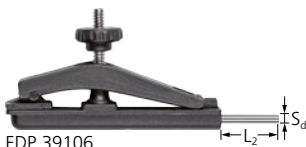
Material group ▼		Type ►	UNIVERSAL	CARBIDE
				
Steel	Steels up to 370 HV (38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, tempering steels	●	○
	Hardened, heat-treated steels over 370 HV (38 HRC)	Tool steels, tempering steels, alloyed steels	○	●
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	●	
Tungsten carbide	–	–		●
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Aluminum alloys, brass, copper, zinc	●	
	Hard non-ferrous metals	Bronze, titanium, titanium alloys, hard aluminum alloys	●	

● = highly recommended

○ = recommended



EDP 39104
EDP 39105



EDP 39106

Holders for grinding and polishing stones

EDP 39104:


Can accommodate two different cross sections.

EDP 39105:

Can accommodate four different cross sections.

EDP 39106:

The arbor for the manual filing machine features stepless adjustment to accommodate all grinding and polishing stones.

Matching cross sections	EDP number	
For manual applications		
1/4" x 1/4", 1/4" x 1/2"	39104	1
1/4" x 1/8", 1/2" x 1/16", 1/2" x 1/8"	39105	1
Manual filing machine shank diameter of 1/8" x 3/4" [S_d x L₂]		
all grinding and polishing stones	39106	1

UNIVERSAL type

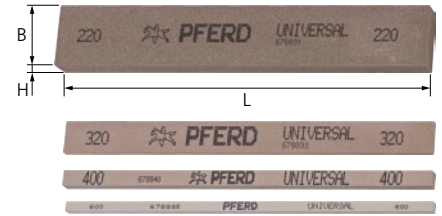
The UNIVERSAL type grinding and polishing stones general purpose hand tools for step-by-step fine grinding in tool and die-making.

Workpiece materials:

Hardened, heat-treated steels over 370 HV (38 HRC), stainless steel (INOX), aluminum, other non-ferrous metals

Type:

Vitrified bond, regular aluminum oxide



B [Inches]	H [Inches]	L [Inches]	Grit size and EDP number				
			220	320	400	600	
Square							
5/32	5/32	6	39050	39056	39062	39068	12
1/4	1/8	6	39051	39057	39063	39069	12
	1/4	6	39052	39058	39064	39070	12
1/2	1/8	6	39053	39059	39065	39071	12
	1/4	6	39054	39060	39066	39072	12
1	1/2	6	39055	39061	39067	39073	6

CARBIDE type

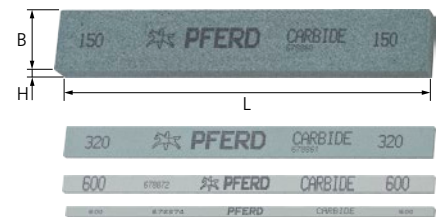
The CARBIDE type soft grinding and polishing stones enable high removal rates without loading on hard materials in tool and die-making.


Workpiece materials:

High-temperature-resistant materials, tungsten carbide, steel materials with a hardness over 580 HV (54 HRC)

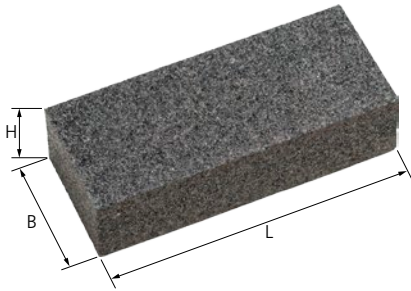
Type:

Vitrified bond, green silicon carbide



B [Inches]	H [Inches]	L [Inches]	Grit size and EDP number					
			150	220	320	400	600	
Square								
5/32	5/32	6	39074	39080	39086	39092	39098	12
1/4	1/8	6	39075	39081	39087	39093	39099	12
	1/4	6	39076	39082	39088	39094	39100	12
1/2	1/8	6	39077	39083	39089	39095	39101	12
	1/4	6	39078	39084	39090	39096	39102	12
1	1/2	6	39079	39085	39091	39097	39103	6





Dressing stones

Dressing stone, small, fine, EDP 39012:

Small dressing stone with finer grain for profiling and dressing of smaller mounted points.

Dressing stone, medium, coarse, EDP 39010:

This medium-large dressing stone in coarser grit (grit 30) is ideal for coarse dressing work. Their anti-slip rubber backing provides a firm grip and protects the support surfaces.


Dressing stone, 2-sided, EDP 39011:

Dressing stone with two different grit sizes:

- Upper side (coarse): Profiling and dressing of large mounted points with coarse bonds and grain
- Underside (fine): Profiling and dressing of mounted points with fine bonds and grain

Dressing stone, large, coarse, EDP 39015:

This large dressing stone in coarser grit (grit 30) is ideal for profiling and dressing larger and coarser mounted points.

Description	L x B x H [Inches]	Grit	EDP number	
Small dressing stones – fine	2-3/4 x 7/8 x 1/2	46	39012	5
Medium dressing stones – coarse	4-3/4 x 2 x 1-1/4	30	39010	5
Medium dressing stones – 2-sided	4-3/4 x 2 x 1-1/4	30-60	39011	5
Large dressing stones – coarse	6 x 1 x 1	30	39015	5

Subject to technical modifications.

06/2019

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