

MONSTER PERFORMANCE

on any terrain



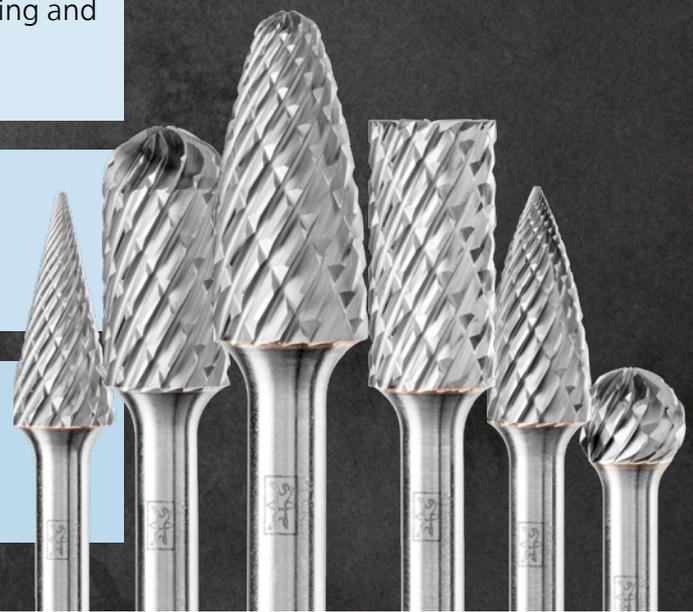
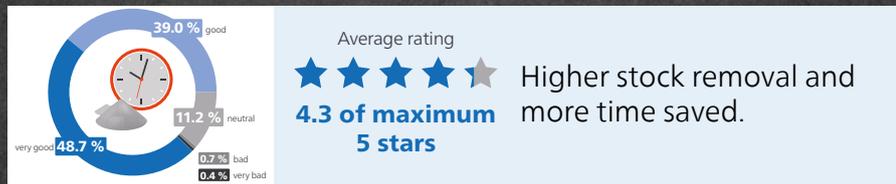
Tungsten carbide burrs with ALLROUND cut

TC burrs ALLROUND cut

Top marks from users throughout Europe

The innovative ALLROUND cut makes you a real expert on any application. Whether it's steel, stainless steel (INOX), cast iron or non-ferrous metals – ALLROUND makes sure you get off to a winning start on all these materials!

More than 1,000 users* located right across Europe have tested our tungsten carbide burrs and can verify that the ALLROUND cut is far superior to conventional cross cuts in many respects.



*Europe-wide online survey (analysis of 1,364 items of feedback from the period 01/10 – 30/11/2021).

Reviews of ALLROUND from Europe:

“It’s great that you can guide it so smoothly! Very precise despite the high stock removal!”
 - Kai M.

“Much faster and quieter and great workmanship.”
 - Tristan B.

“The burrs were recommended to me. I’m very pleased.”
 - Mercedes W.

“I’ve improved my work.”
 - Xavier J.

“The burrs last longer than the tools we would otherwise use.”
 - Davide D.

“They [the burrs] are very durable and keep on going, even on hard materials.”
 - Marcel M.

“They run very smoothly when machining. The lower vibrations are really great, you can definitely notice it.”
 - Hannes V.



Find out everything you need to know about our innovative ALLROUND cut, fascinating application videos and the entire range of tungsten carbide burrs for high-performance applications online at www.pferd.com/allround



One cut – many applications

This practical example shows how the ALLROUND cut can significantly optimise even the most demanding milling work, such as work on fillet welds.

The most common problems when working on fillet welds

Working on fillet welds and narrow contours poses a particular challenge because the use of burrs often results in impacts and chattering.

This places a lot of stress on the tool, leading to premature wear and damage in the form of tooth chipping/breakage. At the same time, the higher vibrations make the grinder more difficult to guide, meaning working is much less comfortable. These problems negatively affect both the work process itself and the results achieved, particularly when milling narrow contours in tight spaces where the grinder needs to be operated with just one hand.



The problem-solvers from PFERD

To eliminate impacts when working on fillet welds and narrow contours, PFERD recommends the use of tungsten carbide burrs in a tree shape with radius end (RBF) design with the STEEL and ALLROUND cuts, mounted on the PGAS 3/380 E-DV and PGAS 3/380 E-HV PFERD air grinders.

This system solution – comprising a high-performance burr and grinder with elastically mounted spindle – delivered an impressive performance in numerous customer tests, proving its worth as a real problem-solver.

The grinder is easy to guide, which significantly improves comfort – even when operating it with one hand. Narrow contours and corners can also be milled easily. What's more, the grinder's elastically mounted spindle guarantees a longer tool life, especially when using tungsten carbide burrs. This prevents tooth chipping/breakage on the burr and ensures high-quality results in next to no time.



Advantages:

- Impact-free milling when working on fillet welds and tight contours.
- Less damage to the cutting teeth.
- Comfortable to guide, even with one hand.
- High-quality results in next to no time.

Industries:

- Foundries
- Steel construction
- Silo and container construction
- Ship and yacht construction
- Wagon construction

Applications:

- Impact-free work on fillet welds

Safety notes:

- At 35,000 RPM, the rotational speed of the straight grinder is much higher than the recommended 20,000 RPM. However, this is not an issue as the diameter of the tungsten carbide burrs in the tree shape with radius end design tapers sharply towards the tip and this area is used almost exclusively for work on fillet welds.
- Burrs from the Universal Line should not be used at this cutting speed as the higher rotational speed will cause overheating and higher wear.



PFERDVIDEO

Watch the high-performance PFERD problem-solver in a direct comparison with conventional tool solutions and see the benefits for yourself!

Scan the QR code with your mobile device to view the PFERDVIDEO.

Tungsten carbide burrs	Matching tool drives
RBF 1225/6 ALLROUND, EAN 4007220093672 	PGAS 3/380 E-DV, EAN 4007220368312 
RBF 1225/6 ALLROUND HC-FEP, EAN 4007220222065 	
RBF 1225/6 STEEL, EAN 4007220936931 	PGAS 3/380 E-HV, EAN 4007220221433 
RBF 1225/6 STEEL HC-FEP, EAN 4007220221563 	

TC burrs ALLROUND cut

for versatile use



With the innovative ALLROUND cut, PFERD has developed unique burrs for versatile use on key materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron. The ALLROUND cut offers all the benefits of the tried-and-tested 3 PLUS cut, but its stock removal rate is up to 30 % higher for steel. It enables comfortable working with reduced vibration and less noise. They also offer significant time savings and a high economic value. PFERD also offers tungsten carbide burrs with ALLROUND cut with a high-quality HICOAT coating.

Advantages:

- Reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

Materials that can be worked:

- Steel, cast steel
- Stainless steel (INOX)
- Non-ferrous metals
- Cast iron

Applications:

- Milling out
- Levelling
- Deburring
- Cutting out holes
- Surface work
- Work on weld seams

Recommendations for use:

- If possible, use the tools on powerful drives with elastically mounted spindles to avoid vibration.
- For the cost-effective use of burrs, work with higher rotational/cutting speeds. Power recommendation for tool drives: from 300 watts.
- Please observe the rotational speed recommendations.

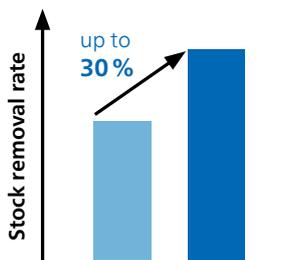
Matching tool drives:

- Flexible shaft drive
- Straight grinder
- Robot
- Machine tools



Learn more about the advantages of using tungsten carbide burrs with ALLROUND cut.

Performance values for applications on steel



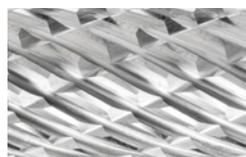
- Conventional burrs with cross cut
- Tungsten carbide burrs, ALLROUND cut

PFERDVALUE:

PFERDERGONOMICS recommends burrs with ALLROUND cut as an innovative tool solution for comfortable working with significantly reduced vibration and less noise.



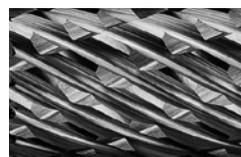
PFERDEFFICIENCY recommends burrs with ALLROUND cut for long fatigue-free and resource-saving work with perfect results in a very short period of time.



ALLROUND cut

Advantages:

- Significantly better stock removal rate than burrs with a conventional cross cut.
- Saves money and time through its very high stock removal rate on key materials.
- Comfortable working with reduced vibration and less noise.



ALLROUND cut with HICOAT coating HC-FEP

Advantages:

- High hardness and wear resistance.
- Effective chip removal through improved anti-adhesion characteristics.
- Very high resistance against thermal load.
- Increased service life.
- Also suitable for use at higher cutting speeds when compared with uncoated burrs.

Safety notes:

The very high stock removal rate can cause discolouration on the shank. This does not constitute a safety risk.



= Wear eye protection!



Wearing protective gloves is recommended. Handle the tool drive with both hands.



= Wear hearing protection!



Observe the recommended rotational speed, especially when using burrs with long shanks!



Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:

- ① Select the material group to be machined.
- ② Select the cut.
- ③ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:

- ④ Select the required burr diameter.
- ⑤ The cutting speed range and the burr diameter determine the recommended rotational speed range.

① Material group		Application	② Cut	③ Cutting speed
Steel, cast steel	Steels up to 1,200 N/mm ² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, alloyed steels	ALLROUND	450–750 m/min
	Hardened, heat-treated steels over 1,200 N/mm ² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel	ALLROUND HC-FEP	450–900 m/min
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	ALLROUND	250–450 m/min
			ALLROUND HC-FEP	250–600 m/min
Non-ferrous metals	Soft non-ferrous metals	Brass, copper, zinc	ALLROUND	450–750 m/min
	Hard non-ferrous metals	Bronze, titanium/titanium alloys, hard aluminium alloys (high Si content)	ALLROUND HC-FEP	450–900 m/min
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	ALLROUND	450–600 m/min
			ALLROUND HC-FEP	450–750 m/min

Example:

TC burr,
ALLROUND cut,
burr dia. 12 mm.
Coarse stock removal on steels
up to 1,200 N/mm².

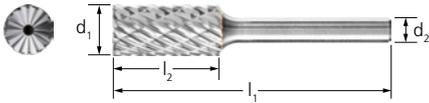
Cutting speed: 450–750 m/min

Rotational speed range:
12,000–20,000 RPM

④ Burr dia. [mm]	⑤ Cutting speeds [m/min]				
	250	450	600	750	900
Rotational speeds [RPM]					
3	27,000	48,000	64,000	80,000	95,000
6	13,000	24,000	32,000	40,000	48,000
8	10,000	18,000	24,000	30,000	36,000
10	8,000	14,000	19,000	24,000	29,000
12	7,000	12,000	16,000	20,000	24,000
16	5,000	9,000	12,000	15,000	18,000

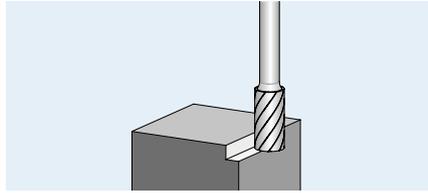
TC burrs ALLROUND cut

for versatile use



Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut.



Ordering notes:

- Please complete the description with the desired cut.

PFERDVALUE:

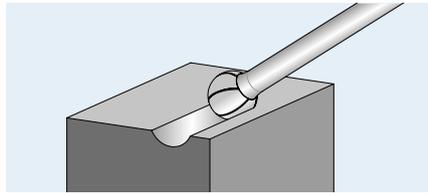


d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	Cut		Description
				ALLROUND 	ALLROUND HC-FEP 	
				EAN 4007220		
Shank dia. 3 mm						
3	13	3	43	391303	-	1 ZYAS 0313/3 ...
6	13	3	43	391310	-	1 ZYAS 0613/3 ...
Shank dia. 6 mm						
6	16	6	55	092866	-	1 ZYAS 0616/6 ...
8	20	6	60	092897	-	1 ZYAS 0820/6 ...
10	20	6	60	092903	221815	1 ZYAS 1020/6 ...
12	25	6	65	092941	221860	1 ZYAS 1225/6 ...
16	25	6	65	092958	-	1 ZYAS 1625/6 ...



Ball shape KUD

Ball-shaped burr according to DIN 8032.



Ordering notes:

- Please complete the description with the desired cut.

PFERDVALUE:

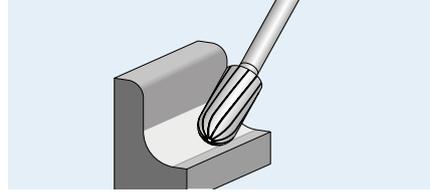


d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	Cut		Description
				ALLROUND 	ALLROUND HC-FEP 	
				EAN 4007220		
Shank dia. 3 mm						
3	2	3	33	391327	-	1 KUD 0302/3 ...
4	3	3	34	391341	-	1 KUD 0403/3 ...
6	5	3	35	391358	-	1 KUD 0605/3 ...
Shank dia. 6 mm						
6	5	6	45	093009	-	1 KUD 0605/6 ...
8	7	6	47	093030	-	1 KUD 0807/6 ...
10	9	6	49	093108	221877	1 KUD 1009/6 ...
12	10	6	51	093115	221907	1 KUD 1210/6 ...
16	14	6	54	093146	-	1 KUD 1614/6 ...



Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032. Combination of cylindrical and ball-shaped geometries.



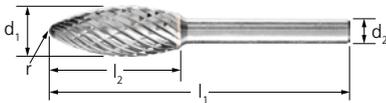
Ordering notes:

- Please complete the description with the desired cut.

PFERDVALUE:

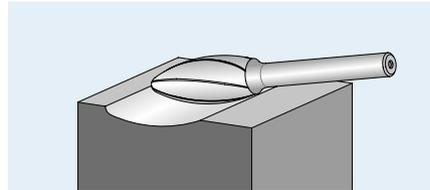


d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	Cut		Box	Description
				ALLROUND 	ALLROUND HC-FEP 		
				EAN 4007220			
Shank dia. 3 mm							
3	13	3	43	391365	-	1	WRC 0313/3 ...
6	13	3	43	391372	-	1	WRC 0613/3 ...
Shank dia. 6 mm							
6	16	6	55	093153	-	1	WRC 0616/6 ...
8	20	6	60	093184	-	1	WRC 0820/6 ...
10	20	6	60	093191	221938	1	WRC 1020/6 ...
12	25	6	65	093221	221945	1	WRC 1225/6 ...
16	25	6	65	093238	-	1	WRC 1625/6 ...



Flame shape B

Flame-shaped burr according to ISO 7755/8.



Ordering notes:

- Please complete the description with the desired cut.

PFERDVALUE:



d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	r [mm]	Cut		Box	Description
					ALLROUND 	ALLROUND HC-FEP 		
				EAN 4007220				
Shank dia. 3 mm								
3	7	3	37	0.8	391464	-	1	B 0307/3 ...
6	13	3	43	1.0	391501	-	1	B 0613/3 ...
Shank dia. 6 mm								
8	20	6	60	1.5	093269	-	1	B 0820/6 ...
10	25	6	65	1.7	093276	221952	1	B 1025/6 ...
12	30	6	70	2.1	093306	221969	1	B 1230/6 ...
16	35	6	75	2.6	093313	-	1	B 1635/6 ...

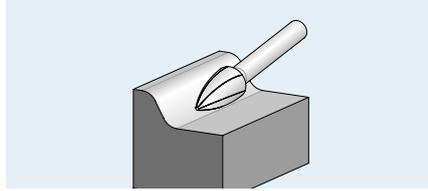
TC burrs ALLROUND cut

for versatile use



Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032, flattened tip.



Ordering notes:

- Please complete the description with the desired cut.

PFERDVALUE:

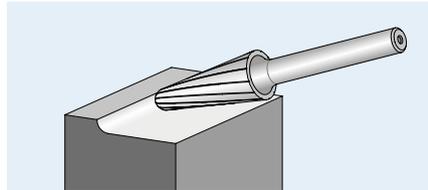


d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	Cut		Description
				ALLROUND 	ALLROUND HC-FEP 	
				EAN 4007220		
Shank dia. 3 mm						
3	7	3	37	391716	-	1 SPG 0307/3 ...
	13	3	43	391723	-	1 SPG 0313/3 ...
6	13	3	43	391730	-	1 SPG 0613/3 ...
Shank dia. 6 mm						
6	18	6	55	093344	-	1 SPG 0618/6 ...
8	20	6	60	093351	-	1 SPG 0820/6 ...
10	20	6	60	093382	221983	1 SPG 1020/6 ...
12	25	6	65	093399	222003	1 SPG 1225/6 ...
16	30	6	70	093436	-	1 SPG 1630/6 ...



Conical shape with radius end KEL

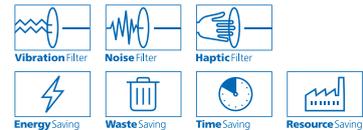
Conical burr with radius end according to DIN 8032.



Ordering notes:

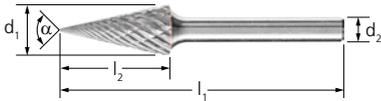
- Please complete the description with the desired cut.

PFERDVALUE:



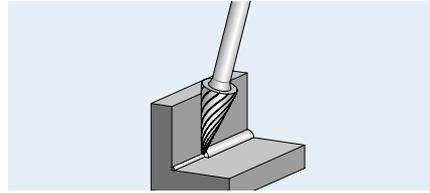
d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	α	r [mm]	Cut		Description
						ALLROUND 	ALLROUND HC-FEP 	
						EAN 4007220		
Shank dia. 6 mm								
8	20	6	60	16°	1.25	093481	-	1 KEL 0820/6 ...
10	20	6	60	14°	2.9	093498	222010	1 KEL 1020/6 ...
12	25	6	65	14°	3.3	093535	222027	1 KEL 1225/6 ...
16	30	6	70	14°	4.8	093542	-	1 KEL 1630/6 ...





Conical pointed shape SKM

Conical pointed burr according to DIN 8032, flattened tip.



Ordering notes:

- Please complete the description with the desired cut.

PFERDVALUE:

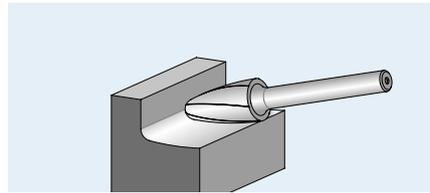


d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	α	Cut		Box	Description
					ALLROUND	ALLROUND HC-FEP		
Shank dia. 3 mm								
3	7	3	37	21°	391747	-	1	SKM 0307/3 ...
	11	3	41	14°	391754	-	1	SKM 0311/3 ...
6	13	3	43	25°	391761	-	1	SKM 0613/3 ...
Shank dia. 6 mm								
6	18	6	55	18°	093696	-	1	SKM 0618/6 ...
8	20	6	60	22°	093702	-	1	SKM 0820/6 ...
10	20	6	60	28°	093719	222072	1	SKM 1020/6 ...
12	25	6	65	26°	093726	222089	1	SKM 1225/6 ...



Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032.



Ordering notes:

- Please complete the description with the desired cut.

PFERDVALUE:



d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	r [mm]	Cut		Box	Description
					ALLROUND	ALLROUND HC-FEP		
Shank dia. 3 mm								
3	7	3	37	0.75	391785	-	1	RBF 0307/3 ...
	13	3	43	0.75	391891	-	1	RBF 0313/3 ...
6	13	3	43	1.5	392010	-	1	RBF 0613/3 ...
Shank dia. 6 mm								
6	18	6	55	1.5	093580	-	1	RBF 0618/6 ...
8	20	6	60	1.2	093641	-	1	RBF 0820/6 ...
10	20	6	60	2.5	093658	222041	1	RBF 1020/6 ...
12	25	6	65	2.5	093672	222065	1	RBF 1225/6 ...
16	30	6	70	3.6	093689	-	1	RBF 1630/6 ...

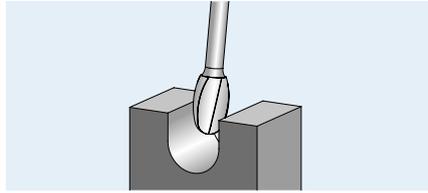
TC burrs ALLROUND cut

for versatile use



Oval shape TRE

Oval burr according to DIN 8032.



Ordering notes:

- Please complete the description with the desired cut.

PFERDVALUE:



d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	r [mm]	Cut		Description
					ALLROUND	ALLROUND HC-FEP	
Shank dia. 3 mm							
3	7	3	37	1.2	392034	-	1 TRE 0307/3 ...
6	10	3	40	2.8	392041	-	1 TRE 0610/3 ...
Shank dia. 6 mm							
6	10	6	50	2.8	093733	-	1 TRE 0610/6 ...
8	13	6	53	3.7	093740	-	1 TRE 0813/6 ...
10	16	6	56	4.0	093757	222096	1 TRE 1016/6 ...
12	20	6	60	5.0	093764	222133	1 TRE 1220/6 ...
16	25	6	65	6.5	093771	-	1 TRE 1625/6 ...



Set 1412 ALLROUND

Set 1412 ALLROUND contains five tungsten carbide burrs for versatile use on key materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.

The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools. Five further slots are available for other burrs.

Contents:

- 5 tungsten carbide burrs, shank dia. of 6 mm, ALLROUND cut
- 1 piece each:
 - ZYAS 1225/6 ALLROUND
 - KUD 1210/6 ALLROUND
 - WRC 1225/6 ALLROUND
 - SPG 1225/6 ALLROUND
 - RBF 1225/6 ALLROUND

PFERDVALUE:



Cut	Description
ALLROUND	
ALLROUND	
EAN 4007220	
Shank dia. 6 mm	
133576	1 1412 ALLROUND

Set 1403 ALLROUND



The 1403 ALLROUND set contains three small tungsten carbide burrs for use on key materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.

- Contents:**
 3 small tungsten carbide burrs,
 shank dia. 3 mm, ALLROUND cut
 1 piece each:
- ZYAS 0313/3 ALLROUND
 - WRC 0313/3 ALLROUND
 - RBF 0313/3 ALLROUND

PFERDVALUE:



Cut		Description
ALLROUND 		
EAN 4007220		
Shank dia. 3 mm		
420423	1	1403 ALLROUND

Set 1404 ALLROUND



The 1404 ALLROUND set contains three small tungsten carbide burrs for use on key materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.

- Contents:**
 3 small tungsten carbide burrs,
 shank dia. 3 mm, ALLROUND cut
 1 piece each:
- ZYAS 0613/3 ALLROUND
 - WRC 0613/3 ALLROUND
 - RBF 0613/3 ALLROUND

PFERDVALUE:



Cut		Description
ALLROUND 		
EAN 4007220		
Shank dia. 3 mm		
420430	1	1404 ALLROUND



TC burrs ALLROUND cut

for versatile use



Set 1406 ALLROUND

The 1406 ALLROUND set contains three versatile tungsten carbide burrs for use on key materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.

- Contents:**
 3 tungsten carbide burrs,
 shank dia. 6 mm, ALLROUND cut
 1 piece each:
- ZYAS 0616/6 ALLROUND
 - WRC 0616/6 ALLROUND
 - RBF 0618/6 ALLROUND

PFERDVALUE:

Vibration Filter

Noise Filter

Haptic Filter

Energy Saving

Waste Saving

Time Saving

Resource Saving

Cut		Description
ALLROUND		
 EAN 4007220		
Shank dia. 6 mm		
226698	1	1406 ALLROUND



Set 1414 ALLROUND

The 1414 ALLROUND set contains three versatile tungsten carbide burrs for use on key materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.

- Contents:**
 3 tungsten carbide burrs,
 shank dia. 6 mm, ALLROUND cut
 1 piece each:
- ZYAS 1225/6 ALLROUND
 - WRC 1225/6 ALLROUND
 - RBF 1225/6 ALLROUND

PFERDVALUE:

Vibration Filter

Noise Filter

Haptic Filter

Energy Saving

Waste Saving

Time Saving

Resource Saving

Cut		Description
ALLROUND		
 EAN 4007220		
Shank dia. 6 mm		
226704	1	1414 ALLROUND



Set 1414 ALLROUND HC-FEP

The 1414 ALLROUND HC-FEP set contains three versatile tungsten carbide burrs with high-quality HICOAT coating for use on key materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.

- Contents:**
 3 tungsten carbide burrs,
 shank dia. 6 mm, ALLROUND cut HC-FEP
 1 piece each:
- ZYAS 1225/6 ALLROUND HC-FEP
 - WRC 1225/6 ALLROUND HC-FEP
 - RBF 1225/6 ALLROUND HC-FEP

PFERDVALUE:

Vibration Filter

Noise Filter

Haptic Filter

Energy Saving

Waste Saving

Time Saving

Resource Saving

Cut		Description
ALLROUND HC-FEP		
 EAN 4007220		
Shank dia. 6 mm		
226711	1	1414 ALLROUND HC-FEP

Printed in Germany.

Subject to technical modifications.

09/2023

809 002

