# Tungsten carbide burrs with INOX cut Maximum stock removal on stainless steel (INOX)





- Up to 100 % higher stock removal performance when used on stainless steel (INOX) in comparison to conventional cross cut burrs
- High surface qualities
- Comfortable working with reduced vibration and lower noise

for use on stainless steel (INOX)



With the INOX cut, PFERD has developed innovative burrs for work on stainless steel (INOX). The INOX cut is characterized by an extremely high stock removal rate on all austenitic as well as rust-and acid-resistant steels. It creates significantly less vibration than a comparable cross cut. PFERD also offers tungsten carbide burrs with INOX cut with a high-quality HICOAT coating.

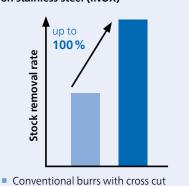
#### Materials that can be worked:

- Stainless steel (INOX)
- Soft titanium alloys (tensile strength < 500 N/mm²)</li>

### **Applications:**

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

# Performance values for applications on stainless steel (INOX)



Tungsten carbide burrs, INOX cut

#### **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:
  - Shank diameter of 3 mm: 75 to 300 watts
  - Shank diameter of 6 mm: from 300 watts
- Please observe the rotational speed recommendations.
- The RPMs shown in the product tables on the product pages are for work on stainless steel (INOX) only.

### **Matching tool drives:**

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

#### Safety note:

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

#### **PFERD**VALUE:

**PFERD**ERGONOMICS recommends burrs with INOX cut as an innovative tool solution for comfortable working with significantly reduced vibration and less noise.







**PFERD**EFFICIENCY recommends burrs with INOX cut for long fatigue-free and resource-saving work with perfect results in a very short period of time.









### **Safety notes:**



= Wear eye protection!



= Wear hearing protection!

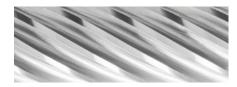


Wearing protective gloves is recommended. Handle the tool drive with both hands.



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

#### **INOX** cut



#### **Advantages:**

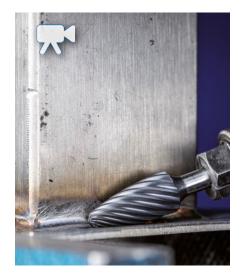
- Outstanding stock removal rate and tool life due to the innovative tooth geometry.
- Achieves high surface qualities through optimum chip formation.
- Prevents heat discolouration in the material due to the reduced heat generation.

# INOX 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.



for use on stainless steel (INOX)



### Recommended rotational speed range [RPM]

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

- **1** Select the material group to be machined.
- **2** Refer to the table for the cutting speed.
- 3 Select the required burr diameter.

**1** The cutting speed range and the burr diameter determine the recommended rotational speed range.



More PFERD tools and information on working with stainless steel (INOX) can be found in our PRAXIS brochure "PFERD tools for use on stainless steel (INOX)" at www.pferd.com.

Material gr	oup		Application	Cut	2 Cutting speed
Stainless steel	Dust and asid resistant stools	Austenitic and	Coarse stock	INOX	450-600 m/min
(INOX)	Rust and acid-resistant steels	ferritic stainless steels	removal	HICOAT HC-FEP	450-750 m/min
Non-ferrous metals Non-ferrous metals	Non forrous motals	Titanium/titanium alloys	Coarse stock	INOX	250-450 m/min
	Non-terrous metals	ritariium/titariium alloys	removal	HICOAT HC-FEP	250-600 m/min

### Example:

TC burr, INOX cut, burr dia 1

burr dia. 12 mm.

Coarse stock removal on stainless steel (INOX). Cutting speed: 450–600 m/min

Rotational speed range: 12,000–16,000 RPM

6		Cutting specific	eeds [m/min]							
Burr dia.	250	450	600	750						
[mm]	Rotational speeds [RPM]									
3	27,000	48,000	64,000	80,000						
4	20,000	36,000	48,000	72,000						
5	16,000	29,000	40,000	48,000						
6	13,000	24,000	32,000	40,000						
8	10,000	18,000	24,000	30,000						
10	8,000	14,000	19,000	24,000						
12	7,000	12,000	16,000	20,000						

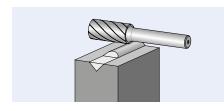


for use on stainless steel (INOX)



# Cylindrical shape ZYA without end cut

Cylindrical burr according to DIN 8032.



#### Ordering notes:

Please complete the description with the desired cut.

#### PFERDVALUE:





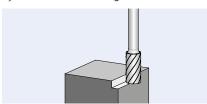




_ d <sub>1</sub>		d <sub>2</sub>	. I <sub>1</sub>	Cı	ut	RPM	$\square$	Description
[mm]	[mm]	[mm]	[mm]	INOX	INOX HC-FEP			
				EAN 40	07220			
Shank dia. 3 mm								
3	13	3	43	930380	-	27,000-64,000	1	ZYA 0313/3
6	13	3	43	930403	-	13,000-32,000	1	ZYA 0613/3
Shank dia. 6 mm								
6	16	6	55	900499	-	13,000-32,000	1	ZYA 0616/6
8	20	6	60	952245	-	10,000-24,000	1	ZYA 0820/6
10	20	6	60	952252	222270	8,000-19,000	1	ZYA 1020/6
12	25	6	65	900505	222256	7,000-16,000	1	ZYA 1225/6

# Cylindrical shape ZYAS with end cut

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



### Ordering notes:

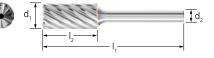
Please complete the description with the desired cut.











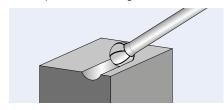
d <sub>1</sub>	l <sub>2</sub>	2 1		RPM		Description		
[mm]	[mm]	[mm]	[mm]	INOX	INOX HC-FEP			
				EAN 40	007220			
Shank dia. 3 mm	ı							
3	13	3	43	034453	-	27,000-64,000	1	ZYAS 0313/3
6	13	3	43	034460	-	13,000-32,000	1	ZYAS 0613/3
Shank dia. 6 mm	1							
6	16	6	55	034477	-	27,000-64,000	1	ZYAS 0616/6
12	25	6	65	034484	222249	7,000-16,000	1	ZYAS 1225/6

for use on stainless steel (INOX)



### **Ball shape KUD**

Ball-shaped burr according to DIN 8032.



#### Ordering notes:

Please complete the description with the desired cut.

#### PFERDVALUE:









$d_{_1}$	$I_2$ $d_2$ $I_1$ Cut		ut	RPM	$\square$	Description		
[mm]	[mm]	[mm]	[mm]	INOX	INOX HC-FEP			
Shank dia. 3 mm				EAN 40	007220			
3	2	3	33	930434	_	27,000-64,000	1	KUD 0302/3
4	3	3	34	034439	-	20,000-48,000	1	KUD 0403/3
5	4	3	35	034446	-	16,000-40,000	1	KUD 0504/3
6	5	3	35	930441	-	13,000-32,000	1	KUD 0605/3
Shank dia. 6 mm	ı							
6	5	6	45	900536	-	13,000-32,000	1	KUD 0605/6
8	7	6	47	952269	-	10,000-24,000	1	KUD 0807/6
10	9	6	49	952276	222348	8,000-19,000	1	KUD 1009/6
12	10	6	51	900543	222362	7,000-16,000	1	KUD 1210/6

### Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032. Combination of cylindrical and ballshaped geometries.



#### Ordering notes:

Please complete the description with the desired cut.

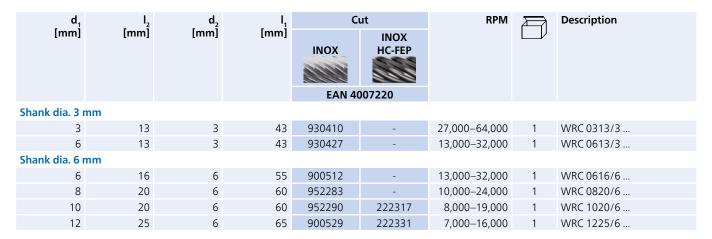












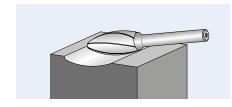


for use on stainless steel (INOX)



# Flame shape B

Flame-shaped burr according to ISO 7755/8.



#### Ordering notes:

Please complete the description with the desired cut.

#### PFERDVALUE:

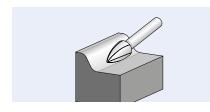




_ d <sub>1</sub>	. I <sub>2</sub>	$I_2$ $d_2$ $I_1$ $r$ Cut		ut	RPM		Description			
[mm]	[mm]	[mm]	[mm]	[mm]	INOX	INOX HC-FEP				
					EAN 40	007220				
Shank dia. 6	mm									
8	20	6	60	1.5	952306	-	10,000-24,000	1	B 0820/6	
10	25	6	65	1.7	952313	222287	8,000-19,000	1	B 1025/6	
12	30	6	70	2.1	930502	222294	7,000-16,000	1	B 1230/6	

# Pointed tree shape SPG

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



#### Ordering notes:

Please complete the description with the desired cut.













$d_1$	l <sub>2</sub>	$d_2$	l <sub>1</sub>	C	ut	RPM	$\square$	Description	
[mm]	[mm]	[mm]	[mm]	INOX	INOX HC-FEP				
Shank dia. 3 mm				LAN TO	707220				
3	7	3	37	034491	-	27,000-64,000	1	SPG 0307/3	
	13	3	43	034507	-	27,000-64,000	1	SPG 0313/3	
6	13	3	43	034514	-	13,000-32,000	1	SPG 0613/3	
Shank dia. 6 mm									
6	18	6	55	936948	-	13,000-32,000	1	SPG 0618/6	
8	20	6	60	952320	-	10,000-24,000	1	SPG 0820/6	
10	20	6	60	952337	222409	8,000-19,000	1	SPG 1020/6	
12	25	6	65	936894	222430	7,000-16,000	1	SPG 1225/6	

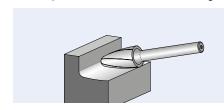


for use on stainless steel (INOX)



# 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:







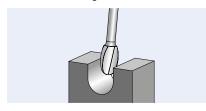




$d_{_1}$	ا	d <sub>2</sub>	. I <sub>1</sub>	r	Ci	ut	RPM	$\square$	Description	
[mm]	[mm]	[mm]	[mm]	[mm]	INOX	INOX HC-FEP				
					EAN 40	07220				
Shank dia. 3 r	nm									
3	13	3	43	0.75	930472	-	27,000-64,000	1	RBF 0313/3	
6	13	3	43	1.5	930489	-	13,000-32,000	1	RBF 0613/3	
Shank dia. 6 r	nm									
6	18	6	55	1.5	900550	-	13,000-32,000	1	RBF 0618/6	
8	20	6	60	1.2	952344	-	10,000-24,000	1	RBF 0820/6	
10	20	6	60	2.5	952351	222386	8,000-19,000	1	RBF 1020/6	
12	25	6	65	2.5	900567	222393	7,000-16,000	1	RBF 1225/6	

# **Oval shape TRE**

Oval burr according to DIN 8032.



### Ordering notes:

Please complete the description with the desired cut.



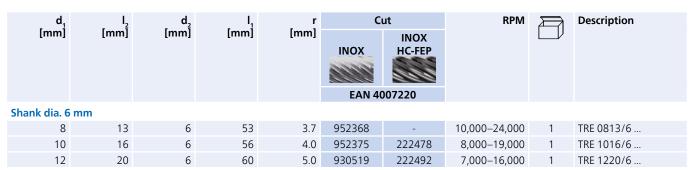










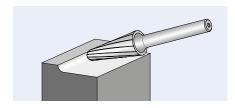




for use on stainless steel (INOX)

# 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.











d, [mm]	<sub>2</sub> [mm]	d <sub>2</sub> [mm]	l, [mm]	α	r [mm]	INOX	INOX HC-FEP	RPM		Description
Shank dia.	6 mm									
8	20	6	60	16°	1.25	952382	-	10,000-24,000	1	KEL 0820/6
10	20	6	60	14°	2.9	952399	222454	8,000-19,000	1	KEL 1020/6
12	30	6	70	14°	2.6	930496	222461	7,000-16,000	1	KEL 1230/6

#### **Set 1912 INOX**

Set 1912 INOX contains five tungsten carbide burrs for processing stainless steel (INOX) in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and

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 diameter of 6 mm, INOX cut 1 piece each:

- ZYA 1225/6 INOX
- KUD 1210/6 INOX
- WRC 1225/6 INOX
- RBF 1225/6 INOX
- SPG 1225/6 INOX

# PFERDVALUE:





















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1912 INOX

