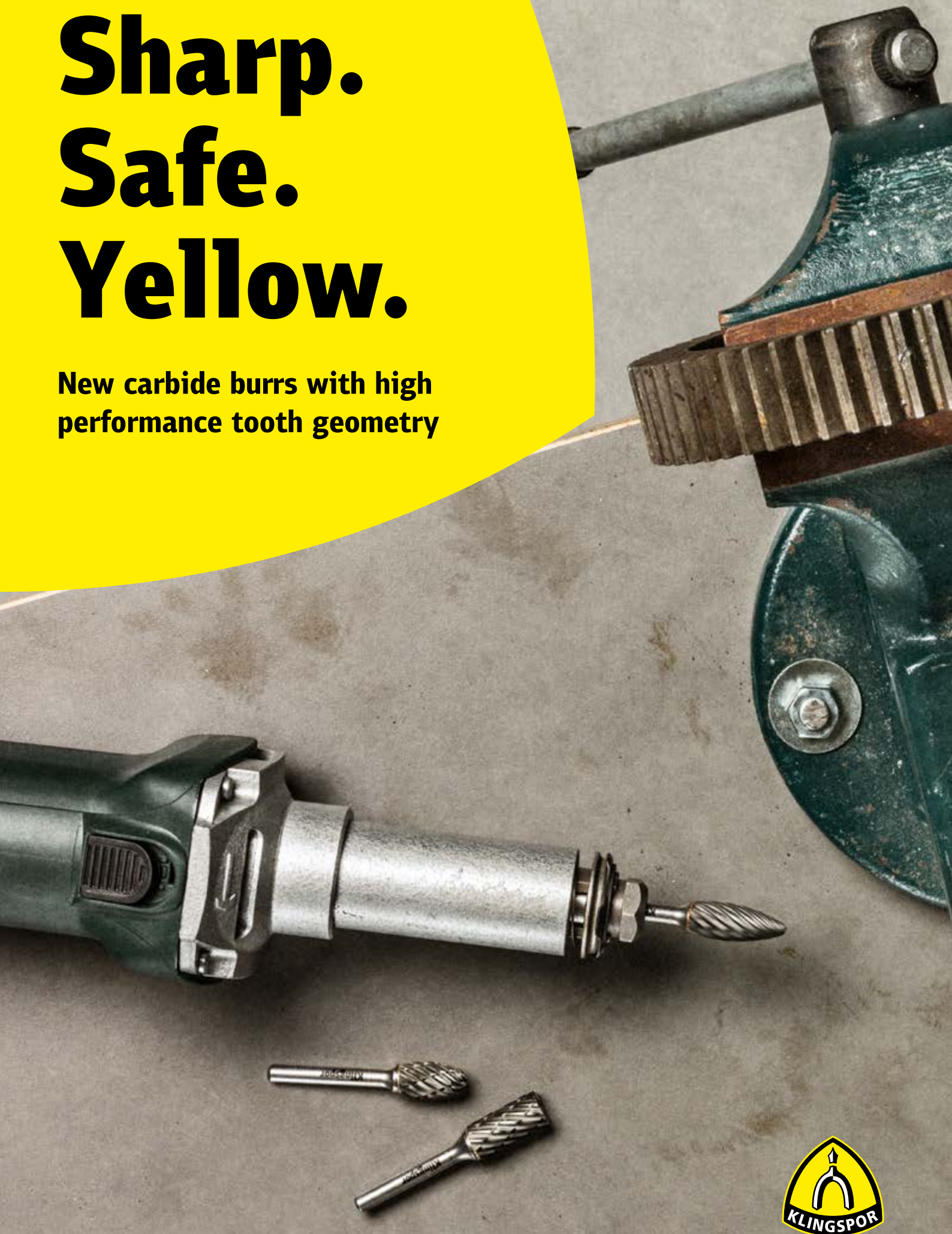


Sharp. Safe. Yellow.

New carbide burrs with high
performance tooth geometry



Klingspor's new high performance carbide burrs





The latest professional burrs for all steel types



The custom-engineered toothing options, Cut 10 for steel and cast steel applications and Cut 11 for processing stainless steel (ferritic, austenitic and martensitic), raise the bar to unprecedented levels in terms of stock removal. The toothing has been optimised for 'rough machining' applications, and compared to standard cross-cut, delivers significantly higher removal rates and much shorter processing times. Optimised for steel or stainless steel, the burr gives exceptional chip removal rates combined with a long service life.

The benefits:

- ▶ minimised clogging
- ▶ reduced built-up edge formation
- ▶ reduced annealing and dis-colouration in stainless steel applications

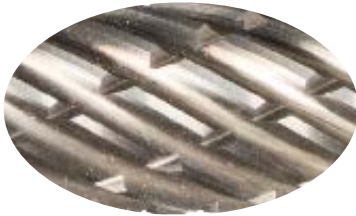
Quality promise

The process applied to manufacture Klingspor carbide burrs involves cutting edge CNC technology and delivers superior quality. The use of premium-grade raw materials and exhaustive inspections guarantee flawless quality. The final products are powerful and dependable precision tools – perfect conditions for producing stellar grinding results.



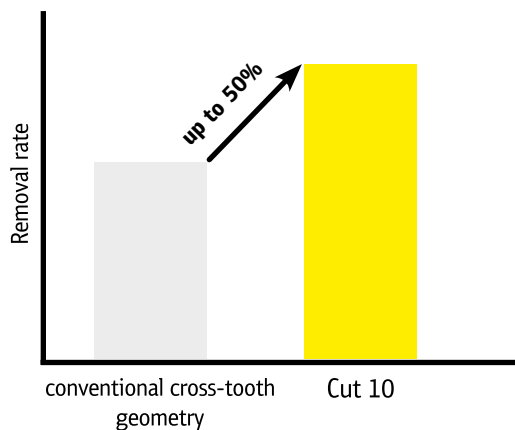
Burrs for steel

Cut 10



Properties and advantages

- ▶ Burr geometry specifically optimised for processing steel and cast steel
- ▶ Up to 50% greater stock removal
- ▶ Longer service life
- ▶ Long chip formation for improved material removal
- ▶ Ultimate safety for the user thanks to 100% quality control



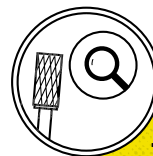
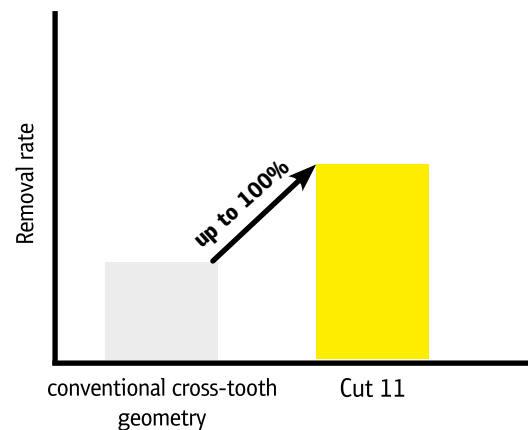
Burrs for stainless steel

Cut 11



Properties and advantages

- ▶ Burr geometry specifically optimised for stainless steel processing
- ▶ Significantly enhanced power
- ▶ Higher cutting performance
- ▶ Less thermal stress on tool and workpiece
- ▶ Exceptional price-performance ratio



Tip for users:

Running the burr too slow can cause the burr to 'jump' in application and increase the wear rate.



Burr shapes

Type			Shape	Cut 10	Page	Cut 11	Page
HF 100 A	(ZYA)		Cylindrical	✓	8	✓	10
HF 100 B	(ZYAS)		Cylindrical with end cut	✓	8		-
HF 100 C	(WRC)		Cylindrical with ball end	✓	8	✓	10
HF 100 D	(KUD)		Ball shape	✓	8	✓	10
HF 100 E	(TRE)		Drop shape	✓	8	✓	10
HF 100 F	(RBF)		Semi-conical shape	✓	9	✓	11
HF 100 G	(SPG)		Pointed arch shape	✓	9	✓	11
HF 100 H			Flame shape	✓	9	✓	11
HF 100 L	(KEL)		Conical shape, round nose	✓	9	✓	11

Recommended speeds

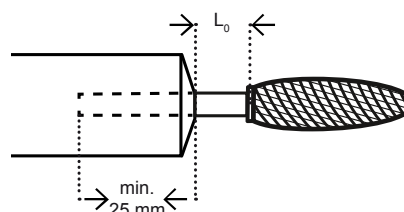
Selecting the right speed range is pivotal to achieving high stock removal rates and a long service life. Listing recommended speed ranges, the table below may serve you as a reference for your particular application.

Application	Head diameter in mm	Max. perm. speed	Recommended speed range
Steel / cast steel	3	100,000	60,000-80,000
	6	65,000	45,000-60,000
	8	60,000	36,000-48,000
	10	55,000	30,000-40,000
	12	35,000	22,000-32,000
Stainless steel / INOX / corrosion and acid-proof steels	3	100,000	48,000-67,000
	6	65,000	30,000-45,000
	8	60,000	23,000-36,000
	10	55,000	19,000-30,000
	12	35,000	15,000-22,000

The specified speeds apply to an exposed shank length of $L_0 = 10$ mm.

The burr should be clamped into the collet by at least 25 mm.

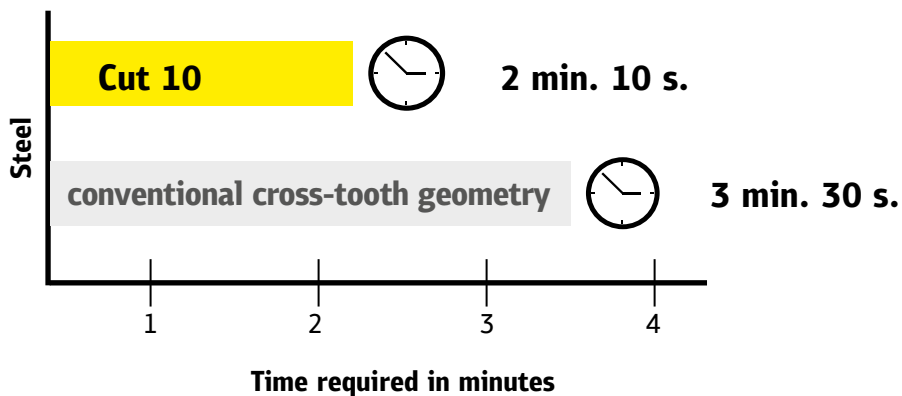
Longer L_0 exposed shank lengths require the speed to be reduced for safety reasons.





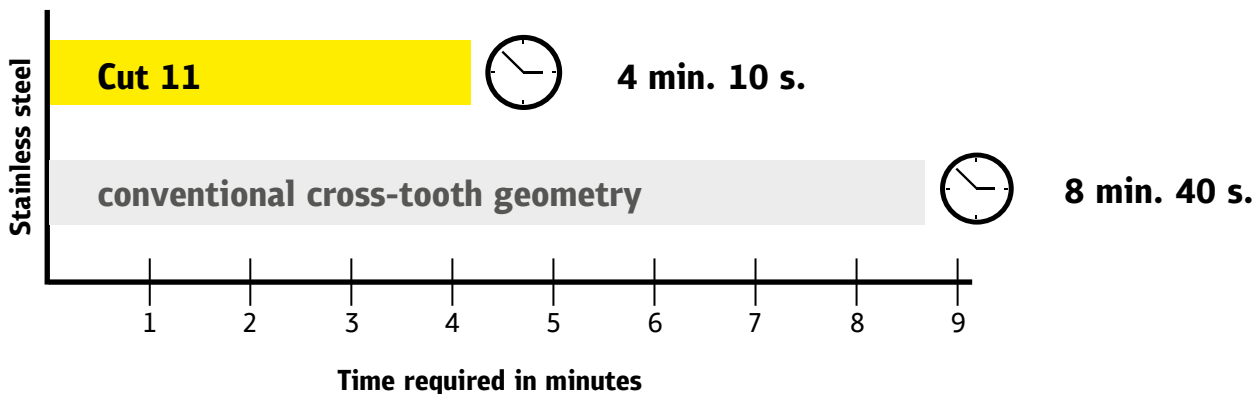
Fast, cost-cutting and economical

Time required to remove 50 g of material



Tip for users:

Impact-free operation extends the service life of your burr.



Applications

Aerospace • Oil & gas • Foundries • Shipbuilding • Fabrication





The expansive selection of different head shapes allows for an abundance of possible applications on materials

Important notes on application

- ▶ Please make sure that no more than 30% of the tool's circumference is in contact with the workpiece
- ▶ Carbide burs with an extended shank require that the speed be reduced accordingly
- ▶ Use only collet chucks that are free of play to clamp carbide burs securely
- ▶ Make sure the selected burr operates within the permissible speed range
- ▶ Keep the shank and head from developing blue discolouration
- ▶ Low speeds may cause the burr to 'jump' or the cutting edges to fracture
- ▶ Observe the safety pictograms included on the packaging



Wear hearing protection



Follow the safety recommendations



Wear gloves



Wear protective eye gear



Wear a dust mask



Burrs for steel - Cut 10

Product overview

HF 100 A



Properties: Cylindrical burr - designation according to DIN 8032: ZYA

Advantages: Universal usability - particularly well suited for face machining

Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Item number
6.0	18.0	6.0	50.0	334116
8.0	19.0	6.0	64.0	334118
9.6	19.0	6.0	64.0	334120
12.7	25.0	6.0	70.0	334122

HF 100 B



Properties: Cylindrical burr with end cut - designation according to DIN 8032: ZYAS

Advantages: The spur toothing makes the tool an exceptional choice for creating blind holes and processing end faces on inner contours

Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Item number
6.0	18.0	6.0	50.0	334124
8.0	19.0	6.0	64.0	334125
9.6	19.0	6.0	64.0	334131
12.7	25.0	6.0	70.0	334132

HF 100 C



Properties: Cylindrical burr with ball end - designation according to DIN 8032: WRC

Advantages: Universal usability for surfaces, contours and radii

Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Item number
6.0	18.0	6.0	50.0	334133
8.0	19.0	6.0	64.0	334135
9.6	19.0	6.0	64.0	334137
12.7	25.0	6.0	70.0	334140

HF 100 D



Properties: Ball-shaped burr - designation according to DIN 8032: KUD

Advantages: Machining of contours - deburring of drill holes

Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Item number
6.0	4.7	6.0	50.0	334141
8.0	6.0	6.0	52.0	334143
9.6	8.0	6.0	54.0	334146
12.7	11.0	6.0	56.0	334147



Tip for users:

No more than 30% of the tool's circumference should be in contact with the workpiece.



HF 100 E



Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Radius	Item number
12.7	22.0	6.0	67.0	5.1	334149

Properties: Drop-shaped burr - designation according to DIN 8032: TRE

Advantages: Countersinking fillet welds - suitable for machining moulded parts

HF 100 F



Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Radius	Item number
6.0	18.0	6.0	50.0	1.8	334151
8.0	20.0	6.0	65.0	2.2	334153
9.6	19.0	6.0	64.0	2.3	334155
12.7	25.0	6.0	70.0	3	334157

Properties: Semi-circular burr - designation according to DIN 8032: RBF

Advantages: Well suited for machining moulded parts

HF 100 G



Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Item number
6.0	18.0	6.0	50.0	334159
8.0	19.0	6.0	64.0	334161
9.6	19.0	6.0	64.0	334164
12.7	25.0	6.0	70.0	334165

Properties: Pointed arch-shaped burr with flattened tip - designation according to DIN 8032: SPG

Advantages: Ideal for chamfering and deburring drill holes

HF 100 H



Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Radius	Item number
8.0	19.0	6.0	64.0	1.7	334167
12.7	32.0	6.0	77.0	2.5	334169

Properties: Flame-shaped burr - no designation according to DIN 8032

Advantages: Well suited for machining moulded parts

HF 100 L



Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Radius	Angle α	Item number
9.6	30.0	6.0	76.0	1.7	14°	334172
10.0	20.0	6.0	65.0	1.7	14°	on request
12.7	32.0	6.0	77.0	3	14°	334173

Properties: Ball-nosed cone burr - designation according to DIN 8032: KEL

Advantages: Deburring of drill holes

Refer to our current price list for our complete range of carbide burrs.



Burrs for stainless steel – Cut 11

Product overview

HF 100 A



Properties: Cylindrical burr - designation according to DIN 8032: ZYA

Advantages: Universal usability - particularly well suited for face machining

Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Item number
3.0	14.0	3.0	38.0	on request
6.0	18.0	6.0	50.0	334117
6.3	12.7	6.0	45.0	on request
8.0	19.0	6.0	64.0	334119
9.6	19.0	6.0	64.0	334121
12.7	25.0	6.0	70.0	334123

HF 100 C



Properties: Cylindrical burr with ball end - designation according to DIN 8032: WRC

Advantages: Universal usability for surfaces, contours and radii

Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Item number
3.0	14.0	3.0	38.0	on request
6.0	18.0	6.0	50.0	334134
6.3	12.7	6.0	45.0	on request
8.0	19.0	6.0	64.0	334136
9.6	19.0	6.0	64.0	334138
12.7	25.0	6.0	70.0	334139

HF 100 D



Properties: Ball-shaped burr - designation according to DIN 8032: KUD

Advantages: Machining of contours - deburring of drill holes

Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Item number
3.0	2.5	3.0	38.0	on request
6.0	4.7	6.0	50.0	334142
6.3	5.0	6.0	38.0	on request
8.0	6.0	6.0	52.0	334144
9.6	8.0	6.0	54.0	334145
12.7	11.0	6.0	56.0	334148

HF 100 E



Properties: Drop-shaped burr - designation according to DIN 8032: TRE

Advantages: Countersinking fillet welds - suitable for machining moulded parts

Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Radius	Item number
8.0	15.0	6.0	60.0	3.8	on request
9.6	16.0	6.0	60.0	3.8	on request
12.7	22.0	6.0	67.0	5.1	334150

HF 100 F



Properties: Semi-circular burr - designation according to DIN 8032: RBF

Advantages: Well suited for machining moulded parts

Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Radius	Item number
3.0	14.0	3.0	38.0	0.7	on request
6.0	18.0	6.0	50.0	1.8	334152
6.3	12.7	6.0	45.0	1.5	on request
8.0	20.0	6.0	65.0	2.2	334154
9.6	19.0	6.0	64.0	2.3	334156
12.7	25.0	6.0	70.0	3	334158



HF 100 G



Properties: Pointed arch-shaped burr with flattened tip - designation according to DIN 8032: SPG

Advantages: Ideal for chamfering and deburring drill holes

Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Item number
6.0	18.0	6.0	50.0	334160
8.0	19.0	6.0	64.0	334162
9.6	19.0	6.0	64.0	334163
12.7	25.0	6.0	70.0	334166

HF 100 H



Properties: Flame-shaped burr - no designation according to DIN 8032

Advantages: Well suited for machining moulded parts

Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Radius	Item number
8.0	19.0	6.0	64.0	1.7	334168
9.6	19.0	6.0	65.0	2.4	on request
12.7	32.0	6.0	77.0	2.5	334170

HF 100 L



Properties: Ball-nosed cone burr - designation according to DIN 8032: KEL

Advantages: Deburring of drill holes

Diameter in mm	Head length in mm	Shank diameter in mm	Total length in mm	Radius	Angle α	Item number
8.0	25.4	6.0	70.0	1.4	14°	334171
10.0	20.0	6.0	65.0	1.7	14°	on request
12.7	32.0	6.0	77.0	3	14°	334174

HF 100 sets

The HF 100 stainless steel set includes the following burrs:

334121	HF100A 9.6x19x6
334138	HF100C 9.6x19x6
334145	HF100D 9.6x8x6
334156	HF100F 9.6x19x6
334204	HF100L 10x20x6

The HF 100 steel set includes the following burrs:

334120	HF100A 9.6x19x6
334137	HF100C 9.6x19x6
334146	HF100D 9.6x8x6
334155	HF100F 9.6x19x6
334172	HF100L 9.6x30x6



Tip for users:

A regularly serviced machine will extend the service life of your carbide burr.

Set	Dimensions in mm	Item number
INOX	70 x 70 x 100	334221
Steel	70 x 70 x 100	on request

Refer to our current price list for our complete range of carbide burrs.

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