

Application recommendation



Specification	Aluminum	Non and low-alloyed steels		High-alloyed steels		HSS	INOX	Tungsten carbide	Industrial ceramics	Cast iron	Dry grinding	Wet grinding	Page
		Unhardened	Hardened	Unhardened	Hardened								
89A		●	●	●	●	●						●	206, 207, 208, 209, 212, 213
93A			●		●	●						●	207, 208, 209
F13A			●	●	●	●						●	207, 208
454A, 97A			●		●	●	●					●	210, 211, 212, 213, 214
80A		●	●	●	●		●					●	214
454A				●	●	●	●					●	214
C	●				●	●	●	●	●	●		●	215
B			●		●	●	●					●	216
D								●	●			●	217

Application tips

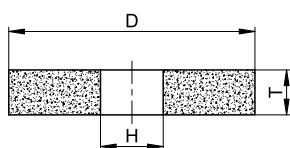
- Recommended operating speed: 20–30 m/s
- Table traverse speed: 10–20 m/min
- Infeed when roughing: 0.01–0.03 mm/stroke
- Infeed when finishing: 0.002–0.004 mm/stroke
- Transverse stroke (contact width in %): 30–40 % of wheel width
- Finishing: 1–3 strokes (without infeed)

Diamond and CBN tool

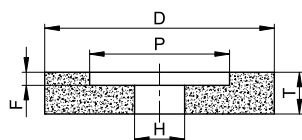
- Table traverse speed: 10–20 m/min
- Transverse stroke/overlap rate: 30–40 % of thickness of diamond section

- Standard value for infeed: 1/10 of grinding grit size (e.g. D126 → infeed 12 μm)
- Recommended cutting speed for CBN grinding wheels for HSS and high-alloyed tool steel is 20–25 m/s
- Recommended cutting speed for diamond grinding wheels for cemented carbide and industrial ceramics is 15–25 m/s
- Concentrically truing and sharpening of wheel before initial use with
 - unhardened structural steel block
 - AV500 dressing device with silicon carbide grinding wheel (see chapter “Dressing and sharpening”, page 310)
- Ensure good coolant supply

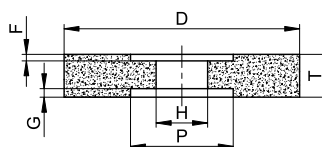
Shapes



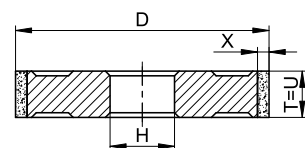
Shape 1



Shape 5



Shape 7



Shape 1A1

- Extremely suitable
- Limited suitability

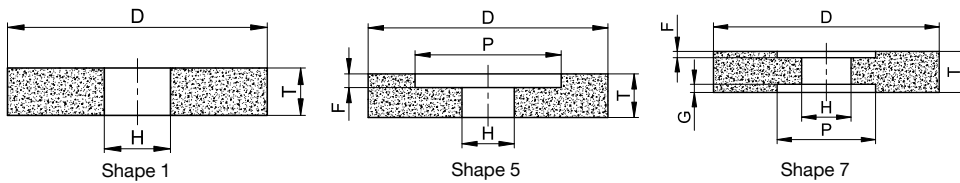
Precision grinding

Reciprocating surface grinding Conventional ceramic For non and low-alloyed steels



Specification	Aluminium	Non and low-alloyed steels		High-alloyed steels		HSS	INOX	Tungsten carbide	Industrial ceramics	Cast iron	Dry grinding	Wet grinding
		Unhardened	Hardened	Unhardened	Hardened							
89A		●	●	●	●	●						●
93A			●		●	●						●
F13A			●	●	●	●						●

Recommended stock type








Reciprocating grinding wheels are primarily used for rough and FINE grinding in machine construction and mould making. The aim is to achieve even and straight workpiece surfaces. Using highly porous grinding wheels and special aluminium oxides leads to an optimum surface result and a high stock removal rate.

Exceptional grinding results are achieved thanks to grade and structure specifications tailored to non and low-alloyed steels.

	Shape	Type no.	DxTxH	PxF	Specification	Comments
	1	566308	205x13x31.75		89A 46 I8A V217	For rough grinding operations
		498701	225x25x51		89A 46 I8A V217	
		331692	250x25x76.2		89A 46 I8A V217	
		351901	300x30x76.2		89A 46 I8A V217	
		936929	300x50x127		89A 46 I8A V217	
		56484	350x50x127		89A 46 I8A V217	
		215986	350x40x127		89A 46 I8A V217	
		302416	355x50x127		89A 46 I8A V217	
		64598	400x50x127		89A 46 I8A V217	
		140088	400x60x127		89A 46 I8A V217	
		295600	400x80x127		89A 46 I8A V217	
		803992	400x40x127		89A 46 I8A V217	
		664544	205x13x31.75		89A 802 J8A V217	For finer surface finishes
		664545	225x25x51		89A 802 J8A V217	
		664546	250x25x51		89A 802 J8A V217	
		664548	250x25x76.2		89A 802 J8A V217	
		664549	300x30x76.2		89A 802 J8A V217	
		664552	300x50x76.2		89A 802 J8A V217	
		666533	350x40x127		89A 802 J8A V217	
		664558	350x50x127		89A 802 J8A V217	







Precision grinding

	Shape	Type no.	DxTxH	PxF	Specification	Comments
	1	666529	400x60x127		89A 802 J8A V217	For finer surface finishes
		666530	400x40x127		89A 802 J8A V217	
		666532	400x50x127		89A 802 J8A V217	
	1	441403	200x20x51		F13A 46 HH11 V	For rough grinding operations
		441401	225x25x51		F13A 46 HH11 V	
		441399	250x25x51		F13A 46 HH11 V	
		469827	250x25x76.2		F13A 46 HH11 V	
		365997	300x30x76.2		F13A 46 HH11 V	
		665267	300x50x76.2		F13A 46 HH11 V	
		665269	300x50x127		F13A 46 HH11 V	
		665282	350x40x127		F13A 46 HH11 V	
		665294	350x50x127		F13A 46 HH11 V	
		665295	400x40x127		F13A 46 HH11 V	
		665296	400x50x127		F13A 46 HH11 V	
	1	664563	225x25x51		93A 46 H8A V217	
		664566	250x25x76.2		93A 46 H8A V217	
		498402	250x25x51		93A 46 H8A V217	
		849597	300x30x76.2		93A 46 H8A V217	
		524016	350x40x127		93A 46 H8A V217	
		357751	355x50x127		93A 46 H8A V217	
		793338	400x60x127		93A 46 H8A V217	
		117241	400x50x127		93A 46 H8A V217	
			5	260141	300x50x76.2	
467466	350x50x127			200x10	89A 46 I8A V217	
548613	400x50x127			200x10	89A 46 I8A V217	
664574	300x50x127			190x10	89A 46 I8A V217	For finer surface finishes
664584	300x50x76.2			155x10	89A 802 J8A V217	
664626	300x50x127			190x10	89A 802 J8A V217	
664632	400x60x127			200x10	89A 802 J8A V217	
	5	664478	300x50x76.2	155x10	F13A 46 HH11 V	For rough grinding operations
		593712	400x50x127	200x10	F13A 46 HH11 V	
		665297	350x50x127	200x10	F13A 46 HH11 V	

Precision grinding



Recommended stock type

	Shape	Type no.	DxTxH	PxF	Specification	Comments
	5	664642	300x50x127	190x10	93A 46 H8A V217	For rough grinding operations
		231513	350x50x127	200x10	93A 46 H8A V217	
		557153	400x50x127	200x10	93A 46 H8A V217	
		664643	400x60x127	200x10	93A 46 H8A V217	
	7	665281	300x50x76.2	155x10/10	89A 46 I8A V217	For rough grinding operations
		665287	350x50x127	200x10/10	89A 46 I8A V217	
		664646	400x80x127	190x15/15	89A 46 I8A V217	
		664647	400x100x127	200x20/30	89A 46 I8A V217	
		664645	400x60x127	200x10/10	89A 46 I8A V217 50	For finer surface finishes
		664648	300x50x76.2	155x10/10	89A 802 J8A V217	
		664656	400x80x127	190x15/15	89A 802 J8A V217	
	7	664506	300x50x76.2	155x10/10	F13A 46 HH11 V	
		665285	350x50x127	200x10/10	F13A 46 HH11 V	
		665278	400x80x127	190x15/15	F13A 46 HH11 V	
	7	109336	300x50x76.2	155x10/10	93A 46 H8A V217	For rough grinding operations
		664657	400x60x127	200x10/10	93A 46 H8A V217	
		664658	400x80x127	190x15/15	93A 46 H8A V217	
	5	34291848	500x100x203.2	300x25	93A 461 I9A V217 P3	

Breadth of product range*

89A	46	I	8	Stock type	89	80	J	8	Stock type
89A	46-100	H-J	5-9	5-6 weeks DT	89A	46-100	H-J	5-9	5-6 weeks DT
93A	46	H	8	Stock type	F13A	46	HH	11	Stock type
93A	46-100	H-J	5-9	5-6 weeks DT	F13A	46-120	FF-HH	11-12	5-6 weeks DT
89A	46	I	8	Stock type	89A	80	J	8	Stock type
89A	46-60	H-J	5-9	5-6 weeks DT	89A	70-100	H-J	5-9	5-6 weeks DT

*For production reasons, the minimum quantity ordered may differ from non-stock types.



Precision grinding



Alternative stock type

Shape	Type no.	DxTxH	PxF	Specification
1	45701	300x30x76.2		87A 36 J7A V217
	96235	350x40x127		87A 36 J7A V217
	12950	400x50x127		87A 36 J7A V217
	33502	250x40x76.2		88A 46 J7A V217
	61571	350x50x127		88A 46 J7 V217
	32963	125x10x25		89A 46 I7 V217
	32965	150x13x32		89A 60 J7 V217
	228819	250x40x76.2		89A 46 J7A V217
	850504	180x13x31.75		89A 60 K5A V217
	5	235262	350x50x127	190x10
235264		400x50x127	200x10	87A 36 J8A V217
123064		400x50x127	200x10	89A 461 I8A V237 P22
369514		350x50x127	190x10	89A 461 I8A V237 P22
658122		400x50x127	190x10	93A 46 I8A V217

Alternative stock type

Shape	Type no.	DxTxH	PxF/G	Specification
7	8749	300x50x76.2	155x10/10	50A 36 J8A V217
	265130	300x50x76.2	154x10/15	88A 36 J7 V217
	641286	300x50x76.2	155x10/10	89A 601 I10A V217
	493780	400x63x127	200x10/10	89A 461 I10A V237
	34211468	400x100x127	190x40/10	89A 462 I8A V55 50
	67472	400x100x127	200x20/35	89A 46 H8A V217
	122991	400x75x127	200x10/20	89A 46 H8A V227
	235260	400x75x127	200x10/20	89A 461 I8A V237 P22
	63824	400x100x152.4	220x15/15	89A 461 I8A V237 P22
	235261	400x75x127	200x10/20	93A 46 I8A V217
	34291849	600x100x304.8 3	90x15/15	93A 461 I8A V237 P3

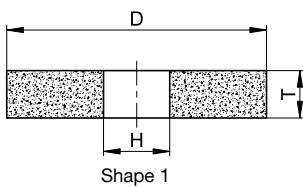
Precision grinding

Reciprocating surface grinding Conventional ceramic For high-alloyed steels and HSS



Specification	Aluminium	Non and low-alloyed steels		High-alloyed steels		HSS	INOX	Tungsten carbide	Industrial ceramics	Cast iron	Dry grinding	Wet grinding
		Unhardened	Hardened	Unhardened	Hardened							
454A, 97A			●			●	●					●

Recommended stock type








This reciprocating grinding wheel can be used universally on all high-alloyed steels and HSS. This is achieved by using special aluminium oxides and mixtures with sintered aluminium oxides combined with special bond systems. Maximum stock removal rates can be achieved with sintered aluminium oxide mixtures such as 454A. The next highest quality line is the resin-bonded VIB STAR CBN wheel from TYROLIT.

	Shape	Type no.	DxTxH	PxF	Specification
	1	34074250	200x13x32		454A 601 J10 V3
		306283	200x20x32		454A 601 J10 V3
		34074562	200x20x51		454A 601 J10 V3
		162057	200x25x76.2		454A 601 J10 V3
		664623	205x13x31.75		454A 602 J10 V3
		487597	225x20x51		454A 601 J10 V3
		664383	225x25x51		454A 602 J10 V3
		664384	250x25x51		454A 602 J10 V3
		664389	250x25x76.2		454A 602 J10 V3
		664390	300x30x76.2		454A 602 J10 V3
		664393	300x50x127		454A 602 J10 V3
		664391	300x50x76.2		454A 602 J10 V3
		494874	350x40x127		454A 602 J10 V3
		664394	350x50x127		454A 602 J10 V3
		664396	400x40x127		454A 602 J10 V3
		664397	400x50x127		454A 602 J10 V3
333396	400x60x127		454A 602 J10 V3		
664398	400x80x127		454A 602 J10 V3		
	1	85536	250x25x51		97A 462 H8A V237
		441342	200x20x51		97A 462 H8A V237
		664401	205x13x31.75		97A 462 H8A V237
		664405	205x13x31.75		97A 801 H8A V237
		228481	225x25x51		97A 462 H8A V237
		664406	225x25x51		97A 801 H8A V237
		664407	250x25x51		97A 801 H8A V237
		248826	250x25x76.2		97A 462 H8A V237
		664409	250x25x76.2		97A 801 H8A V237



Precision grinding

	Shape	Type no.	DxTxH	PxF	Specification
	1	664402	300x30x76.2		97A 462 H8A V237
		664410	300x30x76.2		97A 801 H8A V237
		441348	300x50x127		97A 462 H8A V237
		664412	300x50x127		97A 801 H8A V237
		635305	300x50x76.2		97A 462 H8A V237
		311791	300x50x76.2		97A 801 H8A V237
		441350	350x40x127		97A 462 H8A V237
		664419	350x40x127		97A 801 H8A V237
		441351	350x50x127		97A 462 H8A V237
		664420	350x50x127		97A 801 H8A V237
		524159	400x40x127		97A 462 H8A V237
		664423	400x40x127		97A 801 H8A V237
		630054	400x50x127		97A 462 H8A V237
		664426	400x50x127		97A 801 H8A V237
		476380	400x80x127		97A 462 H8A V237
	5	664451	300x50x127	190x10	454A 602 J10 V3
		664452	350x50x127	200x10	454A 602 J10 V3
		664453	400x50x127	200x10	454A 602 J10 V3
		664455	400x60x127	200x10	454A 602 J10 V3
	5	664459	300x50x127	190x10	97A 462 H8A V237
		664456	300x50x76.2	155x10	97A 462 H8A V237
		664465	300x50x76.2	155x10	97A 801 H8A V237
		441352	350x50x127	200x10	97A 462 H8A V237
		664474	350x50x127	200x10	97A 801 H8A V237
		593711	400x50x127	200x10	97A 462 H8A V237
		664476	400x50x127	200x10	97A 801 H8A V237
		664463	400x60x127	200x10	97A 462 H8A V237
664477	400x60x127	200x10	97A 801 H8A V237		
	Shape	Type no.	DxTxH	PxF/G	Specification
 	7	664485	300x50x76.2	155x10/10	454A 602 J10 V3
		664490	400x60x127	200x10/10	454A 602 J10 V3
		664493	400x80x127	190x15/15	454A 602 J10 V3
		359403	300x50x76.2	155x10/10	97A 462 H8A V237
		664498	300x50x76.2	155x10/10	97A 801 H8A V237
		566387	350x50x127	200x10/10	97A 462 H8A V237
		512393	400x80x127	190x15/15	97A 462 H8A V237
		664497	400x60x127	200x10/10	97A 462 H8A V237
		664504	400x80x127	190x15/15	97A 801 H8A V237
		34291850	400x75x127	200x10/20	97A 462 H8A V237
		34291911	450x76x203.2	280x10/20	97A 462 H8A V237

Precision grinding



Breadth of product range*

454A	60	J	10	Stock type	97A	46	H	8	Stock type
454A	46-80	I-K	8-11	5-6 weeks DT	97A	46-100	H-J	5-9	5-6 weeks DT

97A	80	H	8	Stock type
97A	46-100	H-J	5-9	5-6 weeks DT

*For production reasons, the minimum quantity ordered may differ from non-stock types.

Alternative stock type

Shape	Type no.	DxTxH	PxF	Specification
1	305234	180x13x32		454A 120 I5 V3
	34074549	180x13x32		454A 601 J10 V3
	34074261	180x16x32		454A 601 J10 V3
	34074262	180x20x32		454A 601 J10 V3
	180994	200x10x51		454A 601 L5 V3
	494254	200x20x31.75		454A 601 L7G V3
	305260	200x20x32		454A 461 L7G V3
	294602	200x20x51		454A 462 J10 V3
	34162515	200x20x51		454A 462 K12 V3 P2 40
	30271	250x25x76		454A 601 L5 V3 40
	311922	250x25x76		454A 462 J10 V3
	34162514	250x25x76		454A 462 K12 V3 P2 40
	34062640	250x25x76.2		454A 601 K10 V3
	212627	250x25x76.2		454A 601 L7G V3
	305269	300x32x127		454A 462 H5 V3
	305279	350x40x127		454A 462 H5 V3
	305281	350x50x127		454A 462 H5 V3
	305285	400x50x127		454A 462 H5 V3
	314990	180x13x32		89A 60 I7A V237
	344194	180x16x32		89A 46 I7A V237
344195	180x20x32		89A 46 I7A V237	
307001	400x50x127		89A 461 H8A V237 P25	
361668	500x80x203.2		89A 54 H10A V2	
749042	180x16x32		92A 602 H23 V237 W4 32	
749043	200x20x32		92A 602 H23 V237 W4	
713071	250x25x76.2		97A 462 H8A V217	



Precision grinding



Shape	Type no.	DxTxH	PxF	Specification	
1	590725	300x50x127		92A 462 H23 V237 W2	
	577274	300x50x76.2		92A 462 H8A V217	
	359223	350x50x127		92A 462 H8A V217	
	57038	350x50x127		97A 462 I8A V217	
	259325	400x50x127		92A 462 H8A V217	
	733646	400x50x127		97A 462 H8A V217	
	554635	400x50x127		97A 462 J9A V217 P3	
5	494274	180x25x31.75	105x12	454A 601 L7G V3	
	197044	350x50x127	200x10	454A 541 J10 V3 P23	
	293802	400x50x127	190x10	454A 462 J10 V3	
	36579	400x50x127	200x10	454A 601 J10 V3	
	657669	400x50x127	190x10	92A 462 H8A V217	
	280358	300x50x127	190x10	F16A 60 HH11 V	
	12696	350x50x127	190x10	F16A 60 HH12 V	
	110964	350x50x127	190x10	F18A 80 GG11 V	
	12695	400x50x127	200x10	F16A 60 HH12 V	
	92284	400x50x127	200x10	F18A 80 GG11 V	
	7	176979	300x50x76.2	160x10/10	454A 461 K8 V3
		293865	300x50x76.2	155x10/10	454A 462 J10 V3
		232678	400x75x127	215x10/20	454A 541 K13 V3 P23
34273195		450x76x203.2	280x10/20	454 A541 J10 V3	
657667		300x50x76.2	155x10/10	92A 462 H8A V217	
293867		300x50x76.2	155x10/10	F18A 46 HH12 V	
232665		400x100x152.4	220x15/10	F18A 70 GG11 V	
94720		400x75x127	200x10/20	F16A 60 HH12 V	
114648		450x76x203.2	280x10/20	F16A 60 HH12 V 45 A	
34291846		450x76x203.2	280x15/15	89A 461 I8A V237 P22	

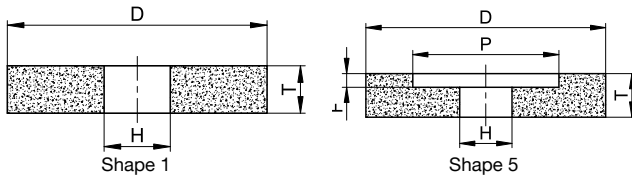
Precision grinding

Reciprocating surface grinding Conventional ceramic For stainless steel



Specification	Aluminium	Non and low-alloyed steels		High-alloyed steels		HSS	INOX	Tungsten carbide	Industrial ceramics	Cast iron	Dry grinding	Wet grinding
		Unhardened	Hardened	Unhardened	Hardened							
80A		●	●	●	●		●					●
454A				●	●	●	●					●

Recommended stock type



Special aluminium oxide and sintered aluminium oxide mixtures are a cost-effective solution for the reciprocating surface grinding of stainless steel/Inox. They offer cool grinding and excellent cutting ability thanks to a special grain shape. A variety of shapes and dimensions mean they can cover the majority of applications.

	Shape	Type no.	DxTxH	PxF/G	Specification
	1	664383	225x25x51		454A 602 J10 V3
		664384	250x25x51		454A 602 J10 V3
		664397	400x50x127		454A 602 J10 V3
	1	27420	400x50x127		80A 54 I9A V217 P23
	5	664447	300x50x76.2	155x10	454A 602 J10 V3
		36579	400x50x127	200x10	454A 601 J10 V3
		657665	400x50x127	190x10	80A 54 I9A V217 P23
	7	10845	300x50x76.2	155x10/10	80A 54 I9A V217 P23

Precision grinding

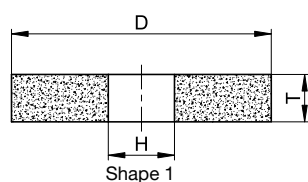
Reciprocating surface grinding Conventional ceramic

For tungsten carbide and cast iron



Specification	Aluminum	Non and low-alloyed steels		High-alloyed steels		HSS	INOX	Tungsten carbide	Industrial ceramics	Cast iron	Dry grinding	Wet grinding
		Unhardened	Hardened	Unhardened	Hardened							
C		●			●	●	●	●	●	●		●

Recommended stock type



The silicon carbide wheel is a cost-effective variant for machining tungsten carbide for secondary applications. It really comes into its own when machining castings and nonferrous metals.

This silicon carbide wheel is a good alternative for working on nitrified workpieces with simple profiles or wear-resistant thermal sprayed alloys, as it can be profiled with Standard diamond dressing tools.

	Shape	Type no.	DxTxH	PxF	Specification	Vmax m/s	
	1	664530	300x40x127		C 801 H8A V18 50	50	
		664531	300x50x127		C 801 H8A V18 50	50	
		664535	400x40x127		C 801 H8A V18 50 A	50	
		664536	400x50x127		C 801 H8A V18 50 A	50	
			36890	300x20x127		C 60 J11 V18	50
			36918	300x40x127		C 60 J11 V18	50
			775149	400x40x203		C 60 J10 V18	50

Breadth of product range*

C	80	H	8	Stock type
C	46-180	F-I	5-8	5-6 weeks DT

*For production reasons, the minimum quantity ordered may differ from non-stock types.

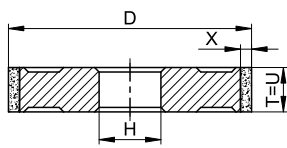
VIB STAR reciprocating surface grinding CBN resin

For high-alloyed steels and HSS



Specifica- tion	Alumin- ium	Non and low-alloyed steels		High-alloyed steels		HSS	INOX	Tungsten carbide	Industrial ceramics	Cast iron	Dry grinding	Wet grinding
		Unhardened Hardened	Unhardened Hardened									
B			●		●	●		●				●

Recommended stock type



Shape 1A1

The VIB STAR reciprocating grinding wheel is equipped with a vibration-reducing core that ensures a consistent and quiet grinding process. The constant self-sharpening effect guarantees consistent power consumption and therefore high economic efficiency. Low wear results in a high level of dimensional accuracy on the workpiece, thereby reducing dimensional inspections to a minimum.

	Shape	Type no.	DxTxH	PxF	Specification	Vmax m/s
	1A1	914301	200x15x51	15-3	B 126 C50 B VIB-STAR	63
		485142	250x15x51	15-3	B 126 C50 B VIB-STAR	63
		885972	300x20x127	20-3	B 126 C50 B VIB-STAR	63
		394560	300x20x76.2	20-5	B 126 C50 B VIB-STAR	63
		877158	300x20x76.2	20-3	B 126 C50 B VIB-STAR	63
		365327	350x20x127	20-5	B 126 C50 B VIB-STAR	63
		366816	350x20x127	20-3	B 126 C50 B VIB-STAR	63
		874510	350x20x127	20-3	B 126 C75 B VIB-STAR	63
		508495	400x20x127	20-5	B 126 C50 B VIB-STAR	63
		872688	400x20x127	20-3	B 126 C50 B VIB-STAR	63
		473086	400x30x127	30-3	B 126 C50 B VIB-STAR	63

* Please find information on dressing and sharpening from page 310.

Precision grinding

VIB STAR reciprocating surface grinding

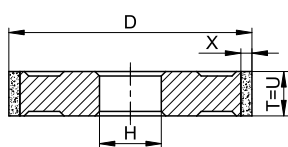
Diamond resin

For tungsten carbide and industrial ceramics



Specification	Aluminum	Non and low-alloyed steels		High-alloyed steels		HSS	INOX	Tungsten carbide	Industrial ceramics	Cast iron	Dry grinding	Wet grinding
		Unhardened	Hardened	Unhardened	Hardened							
D								●	●			●

Recommended stock type



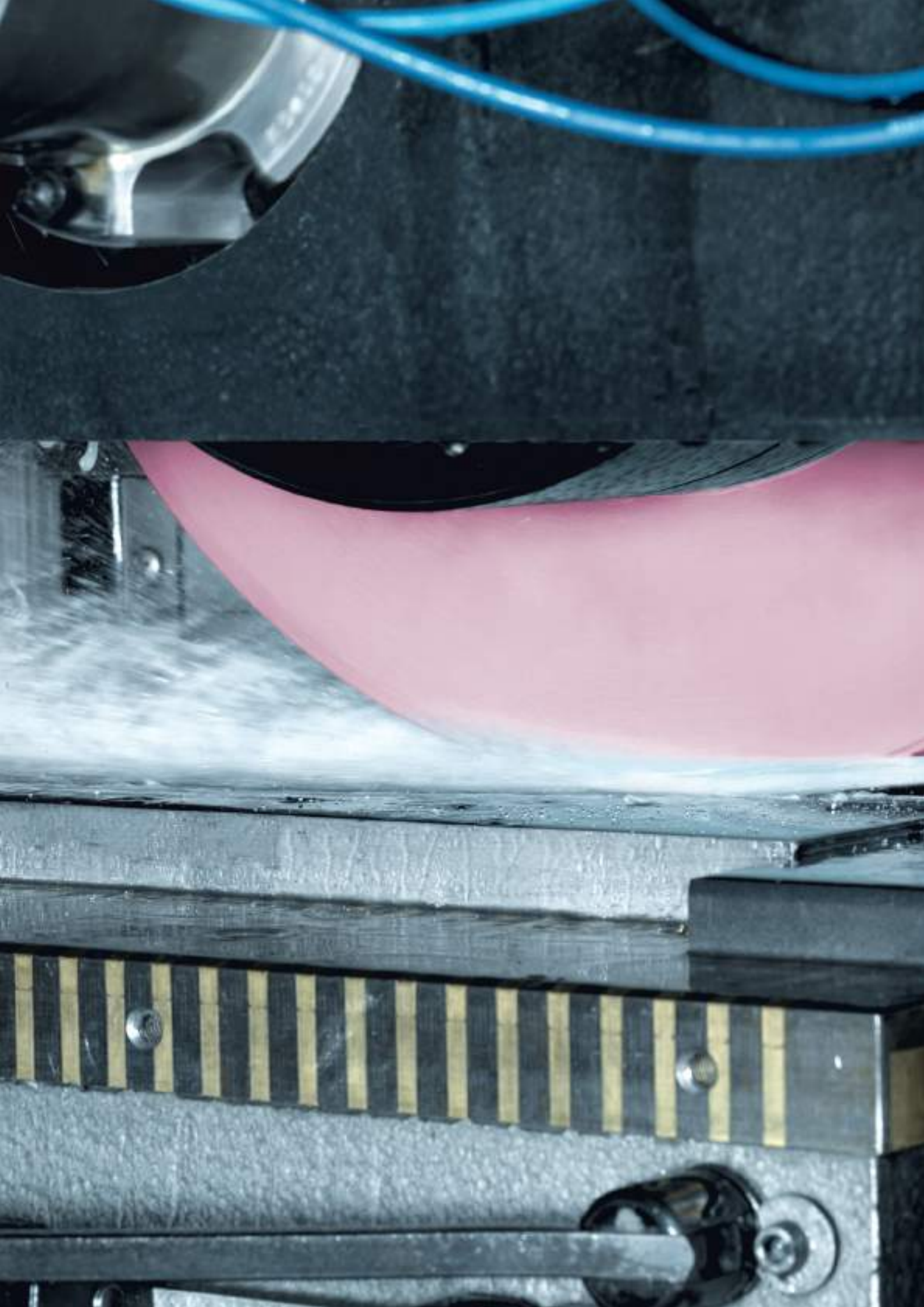
Shape 1A1

The resin-bonded diamond wheel with VIB STAR core is a particularly cost-effective solution for machining tungsten carbide. Low wear and a high level of dimensional accuracy are achieved by a constant self-sharpening effect.

The high stock removal rate of synthetic diamond in resinoid bonds provides a significant advantage over less expensive silicon carbide grinding wheels.

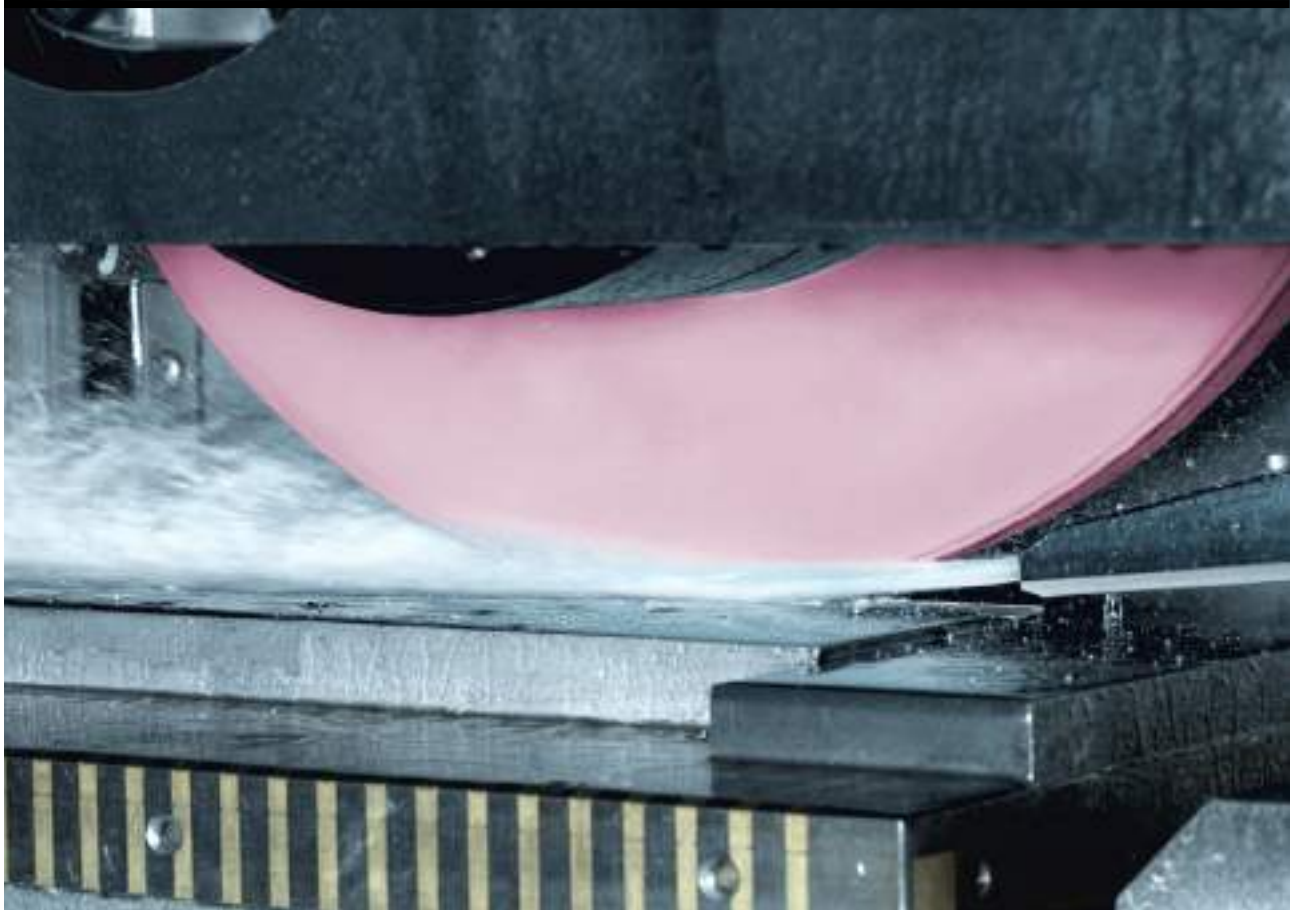
	Shape	Type no.	DxTxH	PxF	Specification	Vmax m/s
	1A1	914284	200x10x51	10-3	D 126 C75 B VIB-STAR	63
		872702	250x15x51	15-3	D 126 C75 B VIB-STAR	63
		907436	300x15x127	15-3	D 126 C75 B VIB-STAR	63
		914288	300x20x127	20-3	D 126 C75 B VIB-STAR	63
		897485	300x20x76.2	20-3	D 126 C75 B VIB-STAR	63
		924298	350x20x127	20-3	D 126 C75 B VIB-STAR	63
		914293	400x20x127	20-3	D 126 C75 B VIB-STAR	63

* Please find information on dressing and sharpening from page 310.



A close-up photograph of a grinding process. A blue hose is visible in the upper left corner. A metal workpiece is being ground, with a bright white spark zone at the point of contact. The background is dark and out of focus.

4.3 Profile surface grinding **Profile surface grinding tool**



Profile surface grinding

In the profile surface grinding process, pre-defined profiles are ground into the material. In order to achieve this, it is important to apply a “negative profile” through dressing of the wheel. As a system supplier, TYROLIT offers not only suitable grinding wheels, but also an appropriate dresser for this purpose.

The precise profile surface grinding tools underlie an optimal quality assurance system and are produced using the most modern manufacturing technology and production

facilities. We are therefore always able to comply with the requirements of our customers. TYROLIT produces this tool with a highly porous structure and special

aluminium oxides. This enables us to offer you optimum profile retention with minimum dressing diamond wear.

Application recommendation

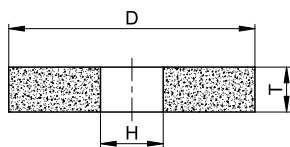


Specification	Aluminium	Non and low-alloyed steels		High-alloyed steels		HSS	INOX	Tungsten carbide	Industrial ceramics	Cast iron	Dry grinding	Wet grinding	Page
		Unhardened Hardened	Unhardened Hardened										
80A		●	●	●	●		●					●	222, 223
C (nitriding-steel)					●	●	●	●	●			●	222

Application tips

- Recommended operating speed: 25–30 m/s
- Infeed: 0.003–0.1 mm/stroke
- Traverse speed: 10–20 m/min
- Ensure good coolant supply
- For optimised dressing, see page 310 to 319

Shapes



Shape 1

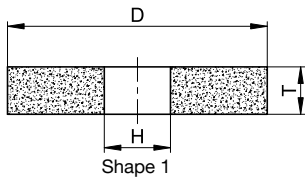
- Extremely suitable
- Limited suitability

Profile surface grinding Conventional ceramic For high-alloyed steels



Specification	Aluminium	Non and low-alloyed steels		High-alloyed steels		HSS	INOX	Tungsten carbide	Industrial ceramics	Cast iron	Dry grinding	Wet grinding
		Unhardened	Hardened	Unhardened	Hardened							
80A		●	●	●	●		●					●
C (Nitriding steel)					●	●	●	●	●			●

Recommended stock type



For conventional ceramic profile surface grinding applications we offer wheels with special aluminium oxides and a highly porous structure. They are available in grit sizes 80 and 120 for pendulum grinding and in silicon carbide in grit size C180 for creep feed grinding. Aluminiumminium oxide wheels in shape 9 are primarily available in standard profiles. Shape 7 offers optimum edge retention due to a durable bond.

	Shape	Type no.	DxTxH	Specification
	1	927194	250x16x51	80A 1202 J9A V17 P8
		148656	250x20x51	80A 1202 J9A V17 P8
		163110	225x25x51	80A 802 J9A V17 P25
	1	326166	300x15x76	88A 1202 J8A V17 P8
		337183*	250x20x51	C 180 F8A V18 P8

* For nitriding steel.

Breadth of product range*

C	180	F	8	Stock type
C	120-180	F	8	5-6 weeks DT

*For production reasons, the minimum quantity ordered may differ from non-stock types.



Precision grinding

**Alternative stock type**

Shape	Type no.	DxTxH	Specification
1	876590	180x10x32	80A 1209 I7G V112
	876610	180x13x32	80A 1209 I7G V112
	876616	180x6x32	80A 1209 I7G V112
	876613	180x8x32	80A 1209 I7G V112
	876619	200x10x32	80A 1209 I7G V112
	876611	200x13x32	80A 1209 I7G V112
	876618	180x10x32	80A 809 J7G V111
	876591	180x13x32	80A 809 J7G V111
	688752	200x10x32	80A 809 J7G V111