

Application recommendation

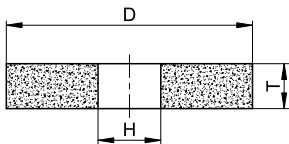
Specification	Aluminum	Non and low-alloyed steels		High-alloyed steels		HSS	INOX	Tungsten carbide	Industrial ceramics	Cast iron	Dry grinding	Wet grinding	Page
		Unhardened	Hardened	Unhardened	Hardened								
SA				●		●					●	●	274, 275
A		●	●								●	●	275
88A, 89A			●	●		●					●	●	273, 274, 276
455A, 765A				●								●	275
52A		●									●	●	275
D								●				●	277, 278, 279, 280, 281, 283
B				●		●						●	281, 282, 283
89A, 454A						●						●	282
55AC, 454A						●							284
C						●		●					283, 284

Precision grinding

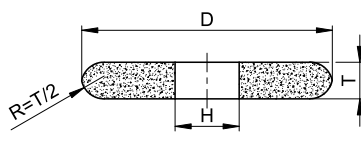
Application tips

⌊ Operating speed: 25–40 m/s

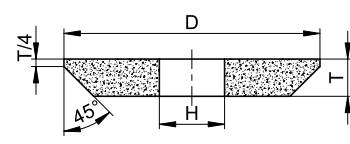
Shapes



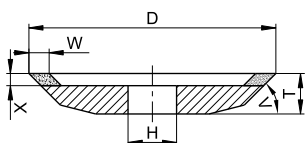
Shape 1



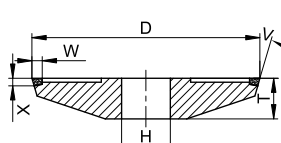
Shape 1F



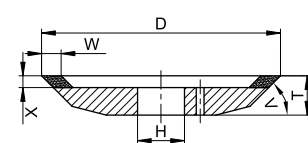
Shape 1C



Shape 4V2



Shape 4B9

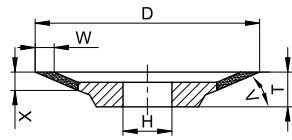


Shape 4V2H

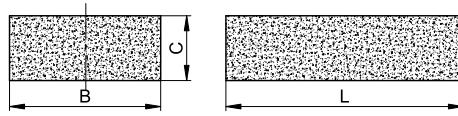
● Extremely suitable

● Limited suitability

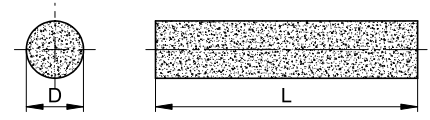




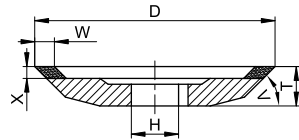
Shape 3V9



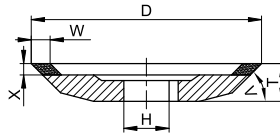
Shape 54SCHP / 90B



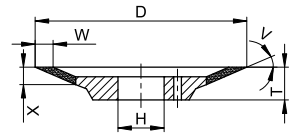
Shape 9030



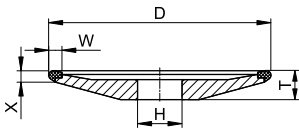
Shape 12V2



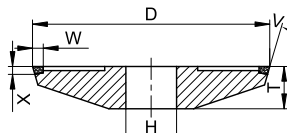
Shape 12V2N



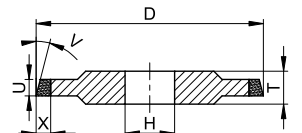
Shape 3V9H



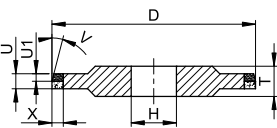
Shape 4C2



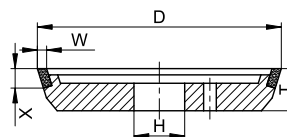
Shape 4B9N



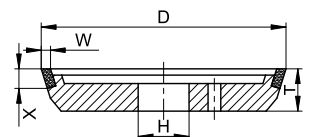
Shape 14B1



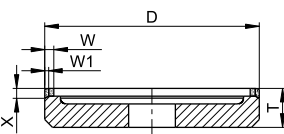
Shape 14M1Z



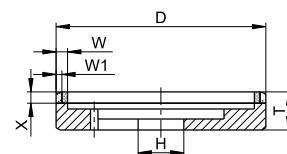
Shape 11B9H



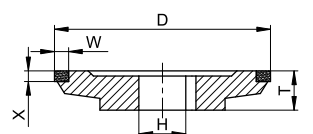
Shape 12A9Z (H)



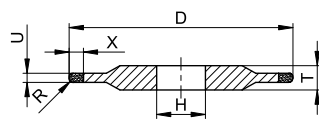
Shape 6A9Z



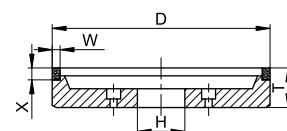
Shape 6A2ZH



Shape 12B9N



Shape 14F1



Shape 6A2B

Precision grinding

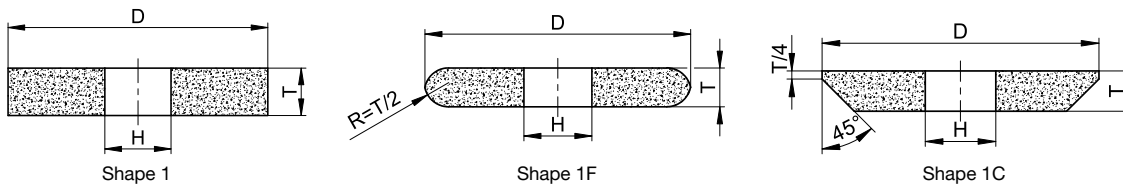
Grinding tools for automatic saw

For circular saws, stellite band and gang saws



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							
SA						●					●	●
A		●	●								●	●
88A, 89A				●		●					●	●
455A, 765A						●						●
52A		●									●	●

Recommended stock type



TYROLIT sells a wide assortment of tools tailored to various grinding machines and tooth pitches. They are suitable for dry and wet grinding for HSS, chrome vanadium and stellite saws.

The products are available with different edge profiles; shape 1, 1F, 1C, in diameters ranging from 150 to 350 mm.

	Shape	Type no.	DxTxH	Specification	Vmax m/s	Comments
	1	18825	150x3x30	88A 80 M5A V217	40	
		55375	150x3x32	88A 80 M5A V217	40	
		9293	150x4x20	88A 80 M5A V217	40	
		291120	150x4x32	88A 80 M5A V217	40	
		719904	150x6x38	88A 60 K5A V217	40	
		490222	150x6x38	88A 80 K5A V217	40	
	1	10265	150x10x32	89A 60 M5A V217	40	
		455124	150x8x32	89A 60 M5A V217	40	
		719906	175x3x51	89A 60 M5A V217	40	
		123222	175x6x51	89A 60 M5A V217	40	
		50845	175x8x51	89A 60 M5A V217	40	
		3085	200x10x20	89A 60 M5A V217	40	
		3091	200x10x32	89A 60 K5A V217	40	
		3092	200x10x32	89A 60 M5 V217	40	
		608080	200x10x32	89A 60 M5A V217	40	
		762445	200x10x32	89A 60 M5A V217 E5	40	Lateral face impregnation
		51494	200x13x32	89A 60 M5A V217	40	
		448603	200x2x32	88A 80 M5A V217	40	
		7318	200x3x32	88A 80 M5 V217	40	








Recommended stock type


	Shape	Type no.	DxTxH	Specification	Vmax m/s	Comments
	1	3070	200x6x20	89A 60 M5A V217	40	
		110554	200x6x32	89A 60 K5A V217	40	
		7328	200x6x32	89A 60 M5 V217	40	
		107050	200x6x32	89A 60 M5 V227	40	
		3077	200x8x20	89A 60 M5A V217	40	
		525686	200x8x32	89A 60 M5A V217	40	
		3424	250x10x20	89A 60 M5A V217	40	
		461239	250x10x32	89A 60 M5A V217 E5	40	Lateral face impregnation
		33249	250x13x20	89A 60 M5A V217	40	
		719922	250x13x32	89A 60 M5A V217	40	
		28549	200x10x32	89A 60 M5A V217	40	
	1	292129	150x1.5x32	SA 80 L4 VN-M OD	63	
		441301	150x10x32	SA 60 L5 VN-M OD	63	
		123688	150x2.5x32	SA 80 L4 VN-M OD	63	
		935730	150x2x32	SA 80 L4 VN-M OD	63	
		47009	150x3x32	SA 80 L4 VN-M OD	63	
		226295	150x3x32	SA 80 L5 VN-M OD	63	
		47010	150x4x32	SA 80 L4 VN-M OD	63	
		159000	150x4x32	SA 80 L5 VN-M OD	63	
		667182	150x5x32	SA 80 L5 VN-M OD	63	
		946904	150x6x32	SA 60 L5 VN-M OD	63	
		47005	150x6x32	SA 80 L4 VN-M OD	63	
		17256	150x6x38	SA 60 K5 VN-M OD	63	
		441302	150x8x32	SA 60 L5 VN-M OD	63	
		922647	200x1.5x32	SA 80 L4 VN-M OD	63	
		804963	200x1.75x32	SA 80 L4 VN-M OD	63	
		804979	200x10x32	SA 60 L5 VN-M OD	63	
		867603	200x2.5x32	SA 80 L4 VN-M OD	63	
		922857	200x2x32	SA 80 L4 VN-M OD	63	
		804957	200x3.5x32	SA 80 L5 VN-M OD	63	
		922860	200x3x32	SA 80 L5 VN-M OD	63	
		804945	200x4x32	SA 80 L5 VN-M OD	63	
		804993	200x5x32	SA 60 L5 VN-M OD	63	
		805000	200x6x32	SA 60 L5 VN-M OD	63	
		804976	200x8x32	SA 60 L5 VN-M OD	63	
		901252	250x3x32	SA 80 L4 VN-M OD	63	
		901254	250x4x32	SA 80 L4 VN-M OD	63	



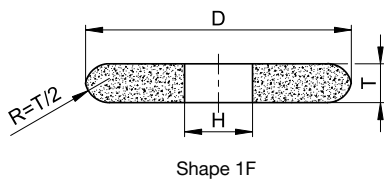
	Shape	Type no.	DxTxH	Specification	Vmax m/s	Comments
	1	901256	250x5x32	SA 60 L5 VN-M OD	63	
		901258	250x6x32	SA 60 L5 VN-M OD	63	
		437634	250x10x32	52A 54 M5A V217 E5	63	Lateral face impregnation
		19117	150x4x20	A 60 N4 B2	50	
	1	237227	250x10x32	M455A 609 M7 B82	63	
		226682	300x10x30	M455A 802 M6 B22	63	
		527875	300x10x32	M455A 609 L7 B82	63	
		241857	300x10x32	M455A 809 K6 B22	63	
		313636	300x10x40	M455A 609 M7 B82	63	
		179959	300x10x40	M455A 80 M6 B22	63	
		223733	300x12x40	M455A 609 M7 B82	63	
		471747	300x12x40	M455A 802 M6 B22	63	
		267138	300x12x40	M455A 809 M6 B22	63	
		485953	300x8x32	M455A 80 M6 B22	63	
		487467	350x10x127	M455A 80 M6 B22	63	
		226679	350x10x127	M455A 802 M6 B22	63	
		226680	350x13x127	M455A 802 M6 B22	63	For stellite band and gang saws
		34340601	250x10x32	765A 609P7B100	63	
		34340604	300x12x40	765A 609P7B100	63	
		34340599	300x8x32	765A 801P6B100	63	
		34340602	300x8x32	765A 609P7B100	63	
		34340594	350x10x127	765A 801P6B100	63	
		34340596	350x10x40	765A 801P6B100	63	
		34340598	350x10x127	765A 801P6B100	63	
		34340603	350x10x127	765A 801P6B100	63	
		34340597	350x10x32	765A 609P6B100	63	
		34340600	350x13x127	765A 801P6B100	63	
1F		150403	200x10x32	M455A 609 M7 B82	63	
		476545	250x12x32	M455A 609 M7 B82	63	
		150402	300x10x32	M455A 609 L7 B82	63	For stellite band and gang saws
		34340579	200x10x32	765A 609P7B100	63	
		34340593	300x10x32	765A 609P7B100	63	
	1F	805007	200x8x32	SA 60 K5 VN-M OD	63	
		805008	200x10x32	SA 60 K5 VN-M OD	63	
		805015	250x13x32	SA 60 K5 VN-M OD	63	
		805017	250x8x32	SA 60 K5 VN-M OD	63	
		805018	250x10x32	SA 60 K5 VN-M OD	63	
		805019	250x12x32	SA 60 K5 VN-M OD	63	
		804983	200x10x32	SA 60 L5 VN-M OD	63	
		804986	200x8x32	SA 60 L5 VN-M OD	63	



Recommended stock type


	Shape	Type no.	DxTxH	Specification	Vmax m/s	Comments
	1C	161678	250x10x20	88A 60 N4A V217/89A 60 M5A V217	40	Two-layer wheels
		162874	200x12x20	88A 60 N4A V217/89A 60 M5A V217	40	
		172352	175x8x20	88A 60 N4A V217/89A 60 M5A V217	40	
		719918	200x10x20	88A 60 N4A V217/89A 60 M5A V217	40	
		720012	200x10x32	88A 60 N4A V217/89A 60 M5A V217	40	

Grinding tool for chain saw sharpening machines
For steel



With this wheel you receive a precise product that will significantly increase the lifetimes of your chain saws. The profile radius of this product corresponds to half the wheel width and is optimally tailored to the tooth base radius.

This tool is suited to dry grinding with edge profile shape 1F and a 140 mm diameter.

	Shape	Type no.	DxTxH	Specification	Vmax m/s
	1F	740908	140x3.2x12	88A 54 K5A V217	40
		244477	140x4.5x12	88A 54 K5A V217	40
		123716	140x3.8x12	50A 541 K5A V217	40

Resin-bonded diamond grinding wheels for chip surface grinding (tooth-face grinding)
For tungsten carbide



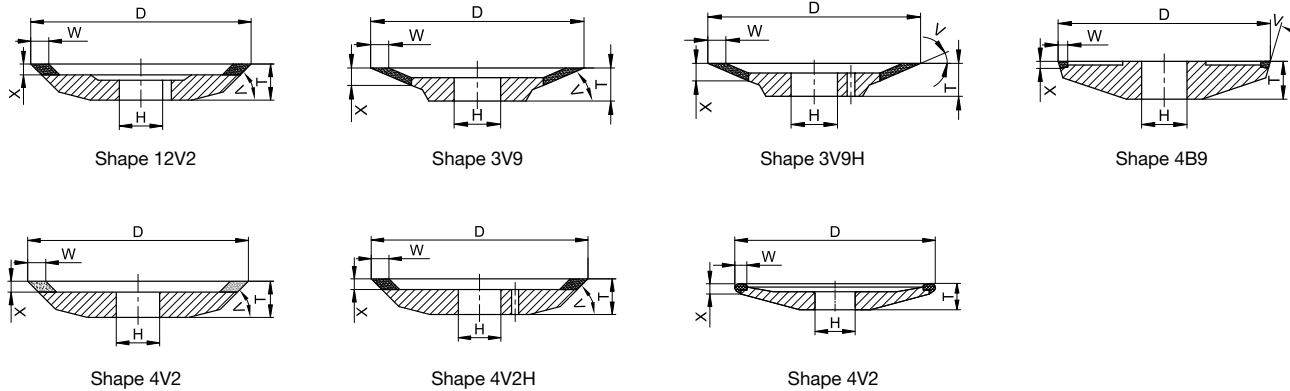
Specifica- tion	Alumin- ium	Non and low-alloyed steels	High-alloyed steels	HSS	INOX	Tungsten carbide	Industrial ceramics	Cast iron	Dry grinding	Wet grinding
		Unhardened Hardened	Unhardened Hardened							
D						●				●



Precision grinding



Recommended stock type



TYROLIT offers a wide assortment of tools tailored to various grinding machines for narrow and wide tooth pitches due to their adapted diamond section thicknesses and core shapes. This enables you to achieve perfect surface geometries.

This product is available for all standard sharpening machines in 100–200 mm diameters.



	Shape	Type no.	DxTxH	W-X V	Specification	Comments
	12V2	462766	200x13x32	4-2 V30	D 46 C125 B 48 AL	e.g. Vollmer, Biberach
	12V2N	463026	100x10x25	4-2 V30	D 46 C100 B 48 AL	e.g. Vollmer, Dornhan, Widma
		462654	200x14x32	4-2 V30	D 46 C125 B 48 AL	e.g. Akemat
	3V9	563857	125x13x32	2.5-5.5 V70	D 46 C100 B 48 AL	e.g. Vollmer, Biberach
		578936	150x13x32	2.5-5.5 V70	D 46 C100 B 48 AL	e.g. Akemat
	3V9H	580905	200x13x32	2.5-4.4 V70	D 46 C125 B 250 AL	enge Zahnteilung
	4B9	369110	125x11.5x32	2.5-1.2 V15	D 54 C75 B 74 AL	e.g. Vollmer, Biberach
		462788	125x12x32	3-3.8 V15	D 54 C125 B 48 AL	e.g. Vollmer, Biberach, large tooth pitch
		820013	125x12x32	3-1.8 V15	D 126 C75 B 70 AL	e.g. Vollmer, Biberach
		34015955	125x12x32	3-2 V15	D 76 C125 B 250 AL	e.g. Vollmer, Biberach
		665040	125x14x32	3-3.8 V15	D 54 C75 B 70 AL	e.g. Vollmer, Biberach, large tooth pitch
	4V2	462630	150x12x32	4-2 V30	D 76 C125 B 48 AL	e.g. Vollmer, Biberach
		462631	150x12x32	4-2 V30	D 46 C125 B 48 AL	e.g. Vollmer, Biberach
		462630	150x12x32	4-2 V30	D 76 C125 B 48 AL	e.g. Vollmer, Biberach
		462631	150x12x32	4-2 V30	D 46 C125 B 48 AL	e.g. Akemat
	4V2H	462898	160x13x32	4-2 V30	D 76 C125 B 48 AL	e.g. Walter
		379577	200x13x32	4-2 V30	D 46 C125 B 48 AL	e.g. Vollmer, Biberach, Walter
		462760	200x13x32	4-2 V30	D 76 C125 B 48 AL	e.g. Vollmer, Biberach
		379577	200x13x32	4-2 V30	D 46 C125 B 48 AL	e.g. Vollmer, Biberach

Precision grinding





Recommended stock type

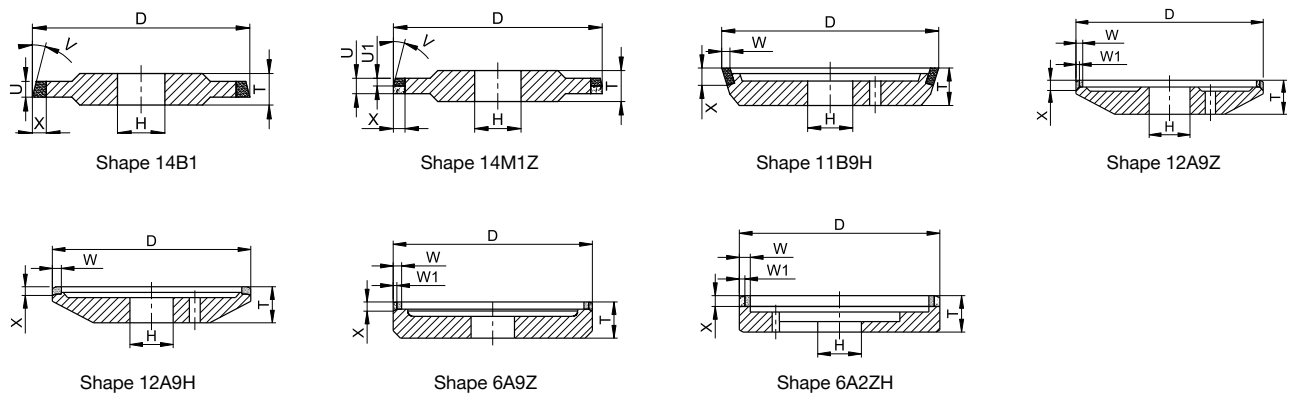
	Shape	Type no.	DxTxH	W-X	Specification	Comments
	4B9H	405549	175x12x50.8	4-2	D 76 C125 B 48 AL	e.g. Vollmer, Dornhan (in set with TN 462829)
	4B9N	632932	100x8x25	3-1.8	D 54 C75 B 70 AL	e.g. Vollmer, Dornhan, Widma
	Shape	Type no.	DxTxH	U/W-X	Specification	
	4C2	482702	150x10x32	2.5/3-1.5	11D 64 C100 B 70 ST	

Resin-bonded diamond grinding wheels for clearance grinding (back grinding)
For tungsten carbide



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







This resin-bonded diamond wheel is available as a cup wheel or peripheral wheel. It is also available as a single or D126/D46 double layer. Double layer wheels achieve an excellent level of cutting quality due to a combination of two grit sizes in a high concentration.

This product is available for all standard sharpening machines in 100–125 mm diameters.



Precision grinding



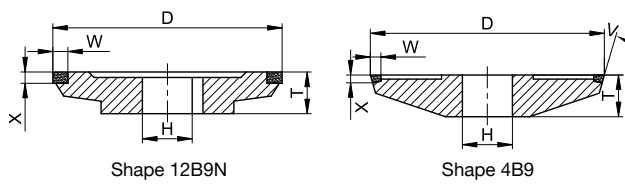
	Shape	Type no.	DxTxH	U-U1-X V	Specification	Comments
	14B1	462503	127x95x8x32	5-8 V15	DE544BS STARTEC-BASIC	e.g. Akemat
	14M1Z	462514	127x8x32	2.5-2.5-6 V15	D 126 C125 B 48 AL/ D 54 100 B48	e.g. Akemat, two-layer wheels
		462889	150x8x32	2.5-2.5-8 V8	D 126 C100 B 48 AL/ D 76 75 B48	e.g. Walter, two-layer wheels
		462891	200x8x32	2.5-2.5-8 V8	D 126 C100 B 48 AL/ D 46 75 B48	e.g. Walter, two-layer wheels
	Shape	Type no.	DxTxH	W-X	Specification	Comments
	11B9H	462756	125x18x32	3-6.5	D 54 C100 B 48 AL	e.g. Vollmer Biberach, driving pin hole
	Shape	Type no.	DxTxH	W-W1-X	Specification	Comments
	12A9Z	286864	125x18x32	5-2.5-6	D 126 C125 B 65 AL/ D 46 100 B65	e.g. Vollmer Biberach, double layer
		390582	125x18x32	5-2.5-6	D 126 C100 B 65 AL/ D 46 75 B65	e.g. Vollmer Biberach, double layer
		387531	125x22x32	5-2.5-6	D 126 C100 B 65 AL/ D 46 75 B65	e.g. Vollmer Biberach, double layer
	12A9H	462757	125x18x32	5-6	DE913BS STARTEC-BASIC	e.g. Vollmer Biberach
	6A9Z	389569	100x20x25	5-2.5-6	D 126 C100 B 42 AL/ D 46 75 B42	e.g. Vollmer Dornhan, double layer
	6A2ZH	462829	125x20x50.8	5-2.5-10	D 126 C100 B 65 AL/ D 46 75 B65	e.g. Vollmer Dornhan, double layer (in set with TN 405549)

Resin-bonded diamond grinding wheels for flank machining For tungsten carbide



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									
D								●				●

Recommended stock type



This TYROLIT product is suitable both for repair and production grinding and offers high stock removal rates on tungsten carbide. This is primarily achieved due to a reduced concentration and tailored bond system.

The diamond wheels are available for all standard sharpening machines in 76–100 mm diameters. It is important to note that diameters of 76–80 mm should be used especially for narrow tooth pitches.

	Shape	Type no.	DxTxH	W-X	Specification	Comments
	12B9N	462658	76x14x20	4.5-4	D 91 C50 B 52 AL	e.g. Akemat, Vollmer
		331135	100x14x32	4.5-4	D 64 C75 B 74 AL	e.g. Vollmer
		474564	100x14x20	4.5-4	D 91 C50 B 53 AL	e.g. Vollmer
	4B9	462794	80x10x32	4-5	D 107 C75 B 53 AL	e.g. Vollmer
		328027	100x10x32	5-4	14D 91 C50 B 42 AL	e.g. Vollmer

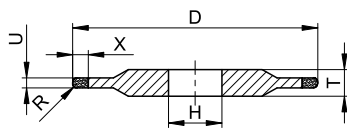
Precision grinding

CBN resin tools for tooth profile grinding For HSS



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							
B						●	●					●

Recommended stock type



Shape 14F1

This TYROLIT product is suitable both for repair and production grinding and offers high stock removal rates on HSS. The CBN tool for tooth profile grinding has been specially designed for wet grinding with emulsion and oil. The CBN tools are available for all standard sharpening machines in 150–200 mm diameters.

	Shape	Type no.	DxTxH	U-X R	Specification	Comments
	14F1	462911	150x20x20	1.3-8.4 R0.65	B 126 C125 B 87 ST	e.g. Schmidt-Tempo ECE
		462914	150x20x20	2-8.4 R1	B 126 C125 B 87 ST	
		462916	150x20x20	2.5-8.4 R1.25	B 151 C125 B 87 ST	
		462918	150x20x20	3-8.4 R1.5	B 151 C125 B 87 ST	
		454693	200x8x32	1.6-8.4 R0.8	B 126 C125 B 87 ST	e.g. Loroch, Rekord, Schmidt-Tempo
		462924	200x8x32	1.3-8.4 R0.65	B 126 C125 B 87 ST	
		462928	200x8x32	2-8.4 R1	B 126 C125 B 87 ST	
		462932	200x8x32	2.5-8.4 R1.25	B 151 C125 B 87 ST	
		462937	200x8x32	3-12.5 R1.5	B 151 C125 B 87 ST	

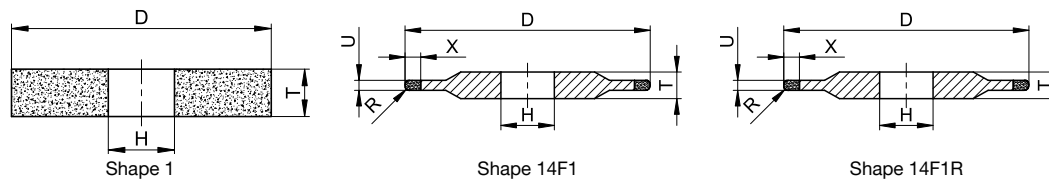
Precision grinding

Vitrified-bonded and CBN resin-bonded profile grinding wheels For tungsten carbide 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							
89A, 455A						●						●
D								●				●
B						●					●	●

Recommended stock type



For profile grinding of HSS you can use aluminium oxide or CBN wheels. Tungsten carbide should however only be ground using diamond. For pre-grinding we recommend using grit size 54 in aluminium oxide and sintered aluminium oxide mixture.

Grit size 100 should be used for finish grinding and fine profiles, or alternatively B151 in CBN. Finer grit sizes are usually used for tungsten carbide.

Recommended stock type

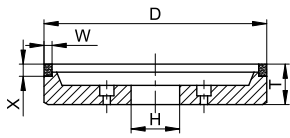
	Shape	Type no.	DxTxH	U-X R	Specification	Comments
	1	30806	225x5x60		89A 54 I5A V53	
		102804	225x5x60		89A 100 H5 V111	
	1	619872	225x5x60		455A 541 L6 V3 50	Weinig Rondamat for HSS tools
		14F1	463137	200x10x31.75	4-7 R2	B 151 C75 B 53 AL
	14F1R	665983	200x10x20	4-7 R2	DE913BS STARTEC-BASIC	Weinig Rondamat for HM tools
		462926	200x10x60	3-5 R1.5	DE643BS STARTEC-BASIC	
		462939	200x5x60	4-7 R2	DE913BS STARTEC-BASIC	
		462943	200x5x60	2-7 R1	DE463BS STARTEC-BASIC	

Resin tool for regrinding planer knives For tungsten carbide 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							
D								●				●
B						●					●	●

Recommended stock type



Shape 6A2B

These resin tools are cup wheels with special mounting holes for Weing Rondamats. Planer knives can be reground using wet or dry grinding. To achieve the required cutting quality, grain B107 is used for HSS and grain D76 for tungsten carbide.

	Shape	Type no.	DxTxH	WxX	Specification	Comments
	6A2B	34480	125x18x20	3-4	B 107 C50 B 74 AL	Weing Rondamat (clearance surface/back grinding)
		590433	125x18x20	3-4	D 76 C75 B 52 AL	

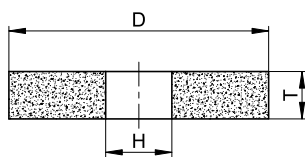
Precision grinding

Elastic tool for effect grinding For 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							
C		●	●	●	●	●						●

Recommended stock type



Shape 1

The TYROLIT elastic tool has been specially developed for effect grinding in production or repair. When soldering on tungsten carbide teeth, discolouration to the workpiece occurs; this can be removed quickly. Elastic wheels with silicon carbide are also used for cleaning and touching up used saw blades. Effect grinding is also frequently used on saw blades.






Elastic tool for effect grinding

For steel



	Shape	Type no.	DxTxH	Specification
	1	401616	250x25x32	C 46-BE19 F
		491888	250x25x32	C 46-BE16

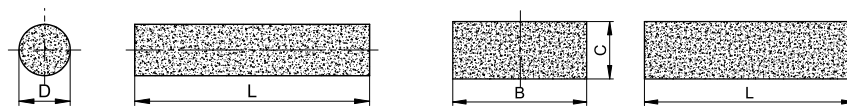
Vitrified-bonded and resin-bonded jointing stones

For tungsten carbide 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									
55AC, 454A						●						
C						●		●				

Recommended stock type




Shape 9030

Shape 90B | 54SCHP

To achieve the highest planing quality, micro-size planer heads are levelled with jointing stones. Products from TYROLIT achieve optimum dressing effects.

It is possible to level HSS and tungsten carbide planer knives with this product.

	Shape	Type no.	BxCxL	Specification
	54SCH	351654	20x15x60	C 320-55 V18
	9030	775476	12x32	C 280 J5 V18
	54SCHP	917288	60x15x160	454A 500 D2 B22
	90B	34020398	60x15x160	55AC 500 D4 B22