

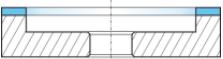
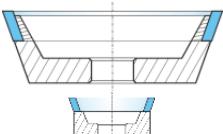
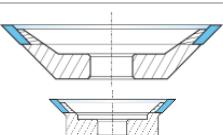
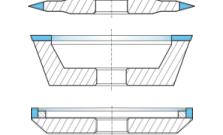
EXTERNAL GRINDING



EXTERNAL GRINDING

Type	Sketch	Details	Stock	Page
		ø 75 - 175 mm, flat and external cylindrical grinding resin ceramic bond, diamond & CBN		2-04
1A1		ø 200 - 400 mm, flat and external cylindrical grinding resin ceramic bond, diamond & CBN		2-05
3A1		ø 75 - 150 mm, creep feed grinding of carbide tools metal hybrid bond SHARK-LINE, diamond		2-06
		ø 75 - 150 mm, creep feed grinding and regrinding of carbide tools resin hybrid bond, diamond		2-07
1V1		ø 75 - 125 mm, flute grinding metal hybrid bond SHARK-LINE, diamond		2-08
1B1		ø 75 - 125 mm, flute grinding resin hybrid bond, diamond		2-09
1A1R		ø 75 - 200 mm, cut-off wheels resin ceramic bond, diamond	stock	2-10
1A8		ø 75 - 200 mm, cut-off wheels resin ceramic bond, CBN	stock	2-11
14E1D		ø 150 + 200 mm, pointed profile wheels for profile grinding, V=30° resin hybrid & metal bond, diamond	stock	2-12
		ø 75 - 250 mm, pointed profile wheels starting from V=10° resin hybrid & metal bond, diamond & CBN		2-13
1E1		ø 40 - 250 mm, pointed wheels, V > 30°		2-14
3E1		ø 40 - 250 mm, pointed wheels, V > 30° resin, metal and hybrid bonds, diamond & CBN		2-14
4B9BJ		ø 150/175/250 mm, wheels for peel grinding		
12BT9J		ø 150/175/250 mm, wheels for peel grinding metal & resin hybrid bonds, diamond & CBN	stock	2-15
4BT9		ø 30 - 150 mm, flat dish wheel resin, metal and hybrid bonds, diamond & CBN		2-16
9A3		ø 175 mm, double cup wheel (Agathon) resin ceramic & bakelite bond, diamond	stock	2-17

EXTERNAL GRINDING

Type	Sketch	Details	Stock	Page
6A2		ø 40 - 200 mm, cylindrical cup wheel resin ceramic bond, diamond & CBN		2-18
6A9		ø 75 - 150 mm, cylindrical cup wheel with thin rim resin ceramic bond, diamond & CBN		2-19
11A2		ø 50 - 200 mm, tapered cup wheel resin ceramic und resin hybrid bond, diamond		2-20
11B2		ø 150 - 250 mm, tapered cup wheel 80° for CNC grinding resin hybrid and metal hybrid bond, diamond		2-21
12A2		ø 75 + 100 + 125 mm, cup wheel for manual grinding machines resin ceramic bond, diamond	stock	2-22
		ø 75 + 100 + 125 mm, cup wheel for manual grinding machines resin ceramic bond, CBN		2-23
11V9		ø 75 - 200 mm, tapered cup wheel 70° for CNC grinding resin hybrid bond, diamond		2-24
11V9 11V2A		ø 30 - 200 mm, tapered cup wheel 70° resin ceramic bond, diamond & CBN		2-25
12V9 12V9A		ø 50 - 150 mm, tapered cup wheel 45° resin ceramic bond, diamond & CBN		2-26
14E1D 11B2 4A9		Wheels on stock for grinding profiled inserts.	stock	2-27

Custom-made tools

We manufacture the optimal grinding wheel for your individual task
within a very short time. It's one of our specialities.

2-28

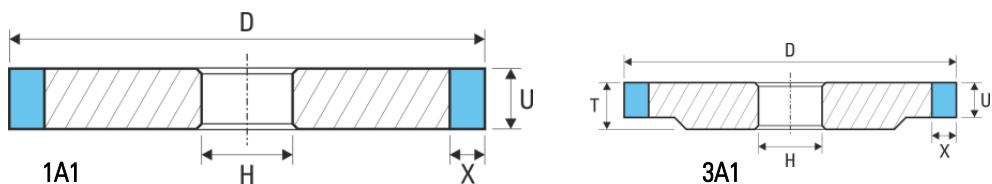
1A1 / 3A1 Diamond / CBN



Wheels for flat and external cylindrical grinding

Resin ceramic bond - ø 75 - 175 mm

Peripheral wheel with our universally applicable resin ceramic bond R220. Negligible grinding pressures and cool grinding. For wet and dry grinding. Optionally available with a body reinforced on one side (type 3A1).



Examples of possible configurations

Abrasive layer			Bore	Conc.	Bond	Grit size	Your notes			
D	U	X	H		Diamond / CBN					
ø 75	2	5	ø 10 / 20	diamond: C 75 CBN: C 60	R220	D 7 - 151 BN 13 - 151				
	3	5								
	5	3								
	8	3								
ø 100	2	5	ø 20							
	5	5								
	8	3								
	10	3								
ø 125	5	5	ø 20							
	10	3								
ø 150	5	5	ø 20							
	10	5								
	15	4								
ø 175	5	3	ø 20							
	10	3								
	15	5								

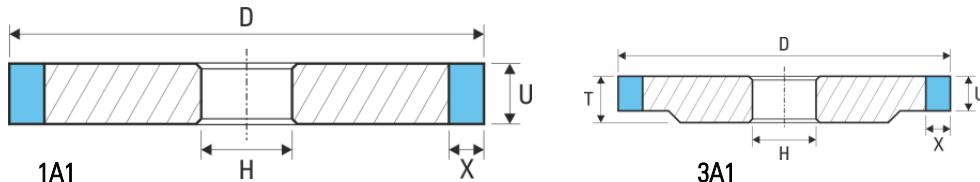
We gladly manufacture other sizes and configurations on request. For thin rims (≤ 3 mm) we prefer to use the bond R210 with a higher edge stability than the bond R220. For diameters $\leq \varnothing 50$ → 3-18.

1A1 / 3A1 Diamond / CBN

Wheels for flat and external cylindrical grinding

Resin ceramic bond - ø 200 - 400 mm

Peripheral wheel with bond R220 for external cylindrical grinding (wet and dry) and with bond R268 for flat grinding (preferably only wet). Negligible grinding pressures and cool grinding. Optionally available with a body reinforced on one side (type 3A1).



Examples of possible configurations

Abrasive layer D U X	Bore H	Conc.	Bond	Grit size Diamond / CBN	Your notes
ø 200 10 15	3 / 5				
ø 225 10 15	3 / 5				
ø 250 10 15 20	3 / 5	diamond: C 75 CBN: C 50 - 60	R220 R268	D 7 - 151 BN 13 - 151	
ø 300 15 20	3 / 5				
ø 350 15 20	3 / 5				
ø 400 15 20	3 / 5				

We gladly manufacture other sizes and configurations on request. Tell us about your grinding task and we manufacture the optimal grinding wheel within a very short time.

1A1 / 3A1 Diamond

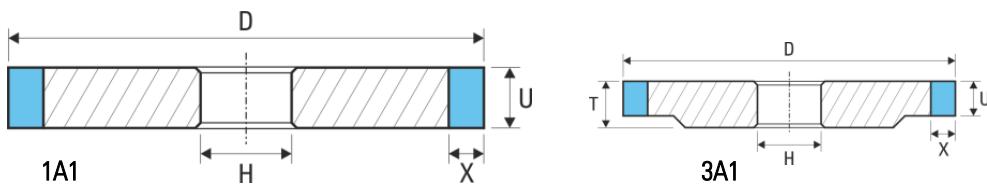
CNC creep feed grinding of carbide tools

Metal hybrid bond SHARKLINE



Our aggressive SHARKLINE with a lot of bite for CNC creep feed grinding. Large depths of cuts, high feeds, small grinding pressure. Wet grinding with oil is recommended. For grinding of flutes, flanks, external surfaces und similar grinding tasks where a lot of material has to be removed. Optionally available with a body reinforced on one side (type 3A1). Can be wire dressed (EDM).

Recommended cutting speed: 14 - 18 m/s.



Examples of possible configurations

Abrasive layer			Bore	Conc.	Bond	Grit size	Your notes
D	U	X	H		Diamond		
ø 75	6 - 12	5 / 8 / 10	ø 20	C 100	M4131.B	D 54	
ø 100	6 - 20	5 / 8 / 10	ø 20				
ø 125	6 - 20	8 / 10 / 15	ø 20				
ø 150	6 - 20	8	ø 20				

We gladly manufacture other sizes and configurations in a short time on request.

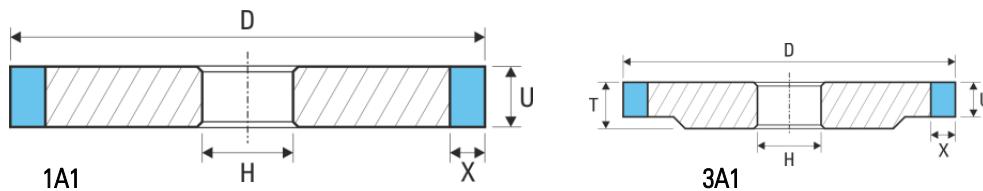
1A1 / 3A1 Diamond

CNC regrinding & creep feed grinding of carbide tools

Resin hybrid bond

For creep feed grinding, but also for regrinding of flutes, flanks, external surfaces and similar grinding tasks. Large depths of cuts, high feeds, small grinding pressure, cool grinding. Optionally available with body reinforced on one side (type 3A1).

Recommended cutting speed:
14 - 18 m/s (creep feed grinding)
22 - 25 m/s (regrinding)



Examples of possible configurations

Abrasive layer	Bore	Conc.	Bond	Grit size	Your notes
D	U	X	H	Diamond	
ø 75	6 — 10	6	ø 20	C 100 R296 D 64	
ø 100	8 — 10 — 12	8	ø 20		
ø 125	10 — 15	8	ø 20		
ø 150	10 — 15 — 20	8	ø 20		

We gladly manufacture other sizes and configurations in a short time on request. For example with a special body so that the abrasive layer can be wire-dressed (EDM).

1V1 / 1B1 Diamond

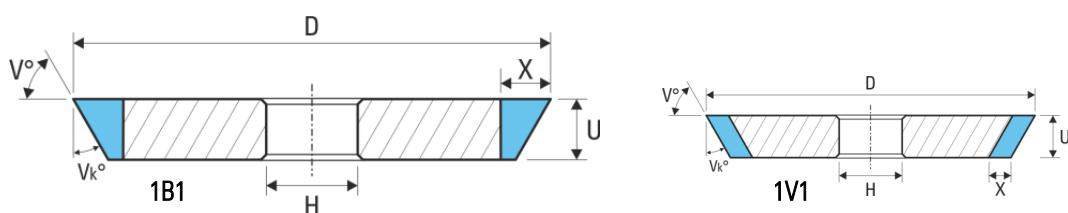
CNC flute grinding of carbide tools

Metal hybrid bond SHARKLINE



Our aggressive SHARKLINE with a lot of bite for CNC creep feed grinding. Large depths of cuts, high feeds, small grinding pressure. Wet grinding with oil is recommended. For grinding of flutes, rake faces, flanks, outer diameters, point thinning and the like on CNC machines. Very high stock removal rates. Can be wire-dressed (EDM).

Recommended cutting speed: 14 - 18 m/s.



Examples of possible configurations

	Abrasive layer			Angle		Bore	Conc.	Bond	Grit size	
	D	U	X	Vk°	V°	H		Diamond		Your notes
1B1	ø 75	6 - 10	5 / 8 / 10	10°	80°	ø 20	C 100	M4131.B	D 54	
		6 - 10	8 / 10	20°	70°					
		6 - 10	10	30°	60°					
	ø 100	6 - 20	8 / 10	10°	80°					
		6 - 15	8 / 10	20°	70°					
		6 - 12	10	30°	60°					
	ø 125	6 - 20	8 / 10 / 15	10°	80°					
		6 - 20	8 / 10 / 15	20°	70°					
		6 - 20	10 / 15	30°	60°					
1V1	6 - 10	15	45°	45°						
	ø 100	6 - 15	5	20°	70°	ø 20	C 100	M4131.B	D 54	
	ø 125	6 - 15	5	20°	70°	ø 20	C 100	M4131.B	D 54	

Other dimensions and configurations available on request (e.g. with reinforced body, type 3B1K).

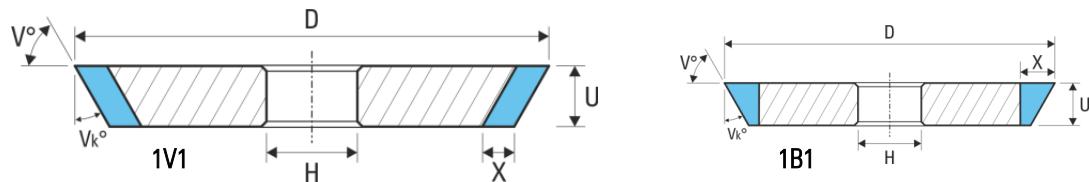
1V1 / 1B1 Diamond

CNC flute grinding of carbide tools

Resin hybrid bond

For creep feed grinding, but also for regrinding of flutes, rake faces, flanks, external surfaces, point thinning and the like on CNC machines. Large depths of cuts, high feeds, small grinding pressures, cool grinding. High stock removal rates.

Recommended cutting speeds:
 14 - 18 m/s (creep feed grinding)
 22 - 25 m/s (regrinding).



Examples of possible configurations

	Abrasive layer			Angle		Bore	Conc.	Bond	Grit size	Your notes
	D	U	X	Vk°	V°	H			Diamond	
1B1	ø 75	10								
	ø 100	10								
	ø 125	10	5	10°	80°	ø 20	C 100	R296	D 64	
1V1	ø 100	15	5	20°	70°	ø 20	C 100	R296	D 64	
				30°	60°					
				45°	45°					
	ø 125	10	5	20°	70°	ø 20	C 100	R296	D 64	
				30°	60°					
				20°	70°					
		15	5	30°	60°					
				45°	45°					

Other dimensions, grit sizes and configurations available on request (e.g. with reinforced body, type 3V1)

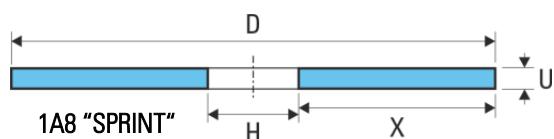
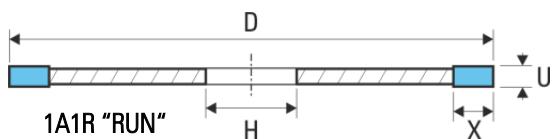
1A1R / 1A8 Diamond

Cut-off wheels RUN & SPRINT

Resin ceramic bond

1A1R "RUN" with steel body is very versatile (e.g. on EWAG WS 11 and on lathes). For wet and dry grinding. Very free-cutting, particular cool grinding, high edge retention.

1A8 "SPRINT" with a continuous abrasive layer cuts even more freely, but retains its edges a little less. Usable on EWAG WS 11.



Stock articles

Type	Abrasive layer			Bore	Conc.	Bon	Grit size	Your notes
	D	U	X					
1A1R "RUN"	ø 75	1,0		ø 10 / 20	C 100	R220	D 107	
	ø 100	1,1		ø 20				
	ø 125	1,2	5	ø 20				
	ø 150	1,3		ø 20				
	ø 200	1,5		ø 20				
1A8 "SPRINT"	ø 75	1,0	32,5	ø 10	C 100	R250	D 107	

Cut-off wheels tailored to your needs available upon request, e.g. metal bonded cut-off wheels with an even thinner wheel thickness. We also offer the fitting set of flasks for the 1A8 "SPRINT".

1A1R / 1A8 CBN

Cut-off wheels RUN & SPRINT

Resin ceramic bond

1A1R "RUN" with steel body is very versatile (e.g. on EWAG WS 11 and on lathes). For wet and dry grinding. Very free-cutting, particular cool grinding, high edge retention.

1A8 "SPRINT" with a continuous abrasive layer cuts even more freely, but retains its edges a little less. Usable on EWAG WS 11.



Stock articles

Type	Abrasive layer			Bore	Conc.	Bon	Grit size	Your notes
	D	U	X					
1A1R "RUN"	Ø 75	1,0		Ø 10 / 20	C 75	R220	BN 107	
	Ø 100	1,1						
	Ø 125	1,2	5					
	Ø 150	1,3						
	Ø 200	1,5						
1A8 "SPRINT"	Ø 75	1,0	32,5	Ø 10	C 75	R240	BN 107	

Cut-off wheels tailored to your needs available upon request (e.g. with a radius at the tip). We also offer the fitting set of flasks for the 1A8 "SPRINT".

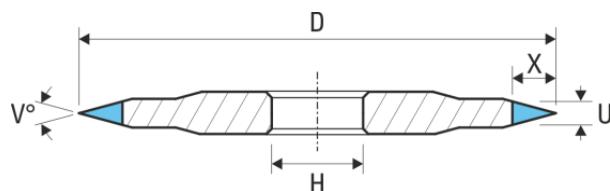
14E1D Diamond

Top Duo - our pointed profile wheels on stock

Resin hybrid and metal bond

With our 14E1D wheels we set the benchmark for pointed profile grinding wheels with which amongst others profiled grooving inserts, cutting inserts, profile cutters, matrixes and dies can be ground. With the combination of two grinding wheels from our stock, one with resin hybrid bond for roughing and one with metal bond for finishing, the large majority of grinding tasks where a pointed profile wheel is needed can be handled easily.

Highest tool life, smallest stable radiiuses, uncompromising quality and consistency.



Stock articles - Top Duo

Abrasive layer	Angle	Radius	Bore	Conc.	Bond	Grit size	
D	U	X	V	R	H	Diamond	Your notes
ø 150					ø 20	R159 Roughing	D 126
ø 200	4	8	30°	0.15	ø 20 / ø 51		
ø 150					ø 20	M4010 Finishing	D 64
ø 200	2.8	8	30°	0.15	ø 20 / ø 51		

Usable amongst others on HAAS Multigrind, Rollomatic, Schütte, Schneeberger, TTB, EWAG, Walter, Deckel ...

Grinding recommendations for the Top Duo

	Roughing	Finishing
Bond:	R159	M4010
Grit size:	D126	D64
Surface speed:	25 m/s	25 m/s
Feed rate:	20 mm/min	20 mm/min
Depth of cut:	1.0 mm	0.05 - 0.1 mm

Guide values for grinding carbide with 3 - 5 mm thickness on HAAS Multigrind machines with oil.

14E1D Diamond / CBN

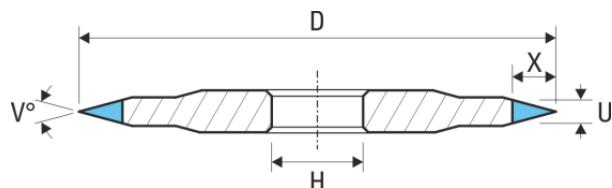
Pointed profile wheels for profile grinding

Resin hybrid and metal bonds

Highest tool life, smallest stable radiiuses, uncompromising quality and consistency define our pointed profile wheels with which amongst others profiled grooving inserts, cutting inserts, profile cutters, matrixes and dies can be ground.

Recommendations for dressing our 14E1D wheels → 1-20.

For open profile geometries (e.g. rake faces on grooving inserts) preference should be given to the very stable 11B2 wheel with an angle of 80° → 2-21 & 2-27.



Examples of possible configurations

Abrasive layer			Angle	Radius	Bore	Conc.	Bond	Grit size	
D	U	X	V	R	H			Diamond / CBN	Your notes
ø 75	2.5	5 / 8							
ø 100	2.8								
ø 125									
ø 150									
ø 175	4	8	30°	0.15	ø 20	C 125	R159 Roughing	D 126 - D 64 BN 126 - BN 64	
ø 200					ø 51				
ø 250									
ø 75	2.5	5 / 8							
ø 100									
ø 125									
ø 150									
ø 175	2.8	8	30°	0.15	ø 20	C 150	M4010 Finishing	D 76 - D 13 BN 76 - BN 21	
ø 200					ø 51				
ø 250									

We also manufacture custom-made wheels (starting from 10° angle, 0.02 mm radius). Also for Cermet.

When using Xing-Dressing on HAAS grinding machines a smaller grit size is recommended, i.e. D64 with the bond R159 and D46 with the bond M4010.

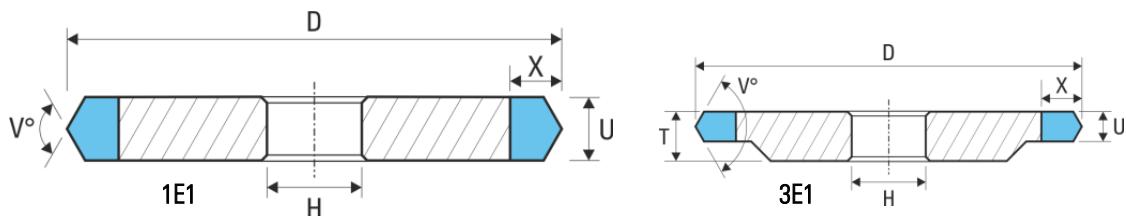
1E1 / 3E1 Diamond / CBN

Pointed grinding wheels

Various bonds

For larger angles ($> 30^\circ$) we manufacture grinding wheels with the type 1E1 or 3E1 (body reinforced on one side) instead of the type 14E1D, which is intended for thin angles.

Available in various bonds and measurements. Describe your grinding task to us and we will make you an offer for a suitable wheel in no time.



Examples of possible configurations

Abrasive layer			Angle	Bore	Conc.	Bond	Grit size	
D	U	X	V°	H		Diamond / CBN		Your notes
ø 40	3	5	60°	ø 10	C100	R210	D 33	
ø 75	5	5	90°	ø 20	C100	M4010	D 54	
ø 100	4	10	32°, R 0.06	ø 20	C60	R100	BN 9	
ø 125	10	8	115°	ø 20	C100	M4101.B	D 64	
ø 150	18	12	92°, R 0.8	ø 20	C100	R296	D 64	

The wheels described above represent only a small selection of grinding wheels that we have already produced. Describe your grinding task, your desired dimensions and we will manufacture the optimally adapted grinding wheel for you.

4B9BJ / 12BT9J Diamond / CBN

Wheels for peel grinding (Rollomatic)

metal and resin hybrid bonds

For peel grinding on Rollomatic machines (NP3, NP5, NP50) we produce wheels that cut freely and retain their edge. ø250 mm roughing wheels in metal bond with an intermediate layer and a steel body. ø150 mm finishing wheels in metal bond, if dimensional stability is required, or in resin hybrid bond, if particular beautiful surfaces are required. For machining carbide, steel or ceramic blanks. ø175 mm also available.



Stock articles

Abrasive layer			Angle	Height	Bore	Conc.	Bond	Grit size	
D	U	X	Vk°	T	H		CBN		Your notes
ø250 4B9BJ	6	8	10°	20	ø 31.75	C150	M4011	BN 126	
ø150 12BT9J	3	5	10° (6° to the middle)	24	ø 31.75	C150	M4011	BN 21	

Examples of possible configurations

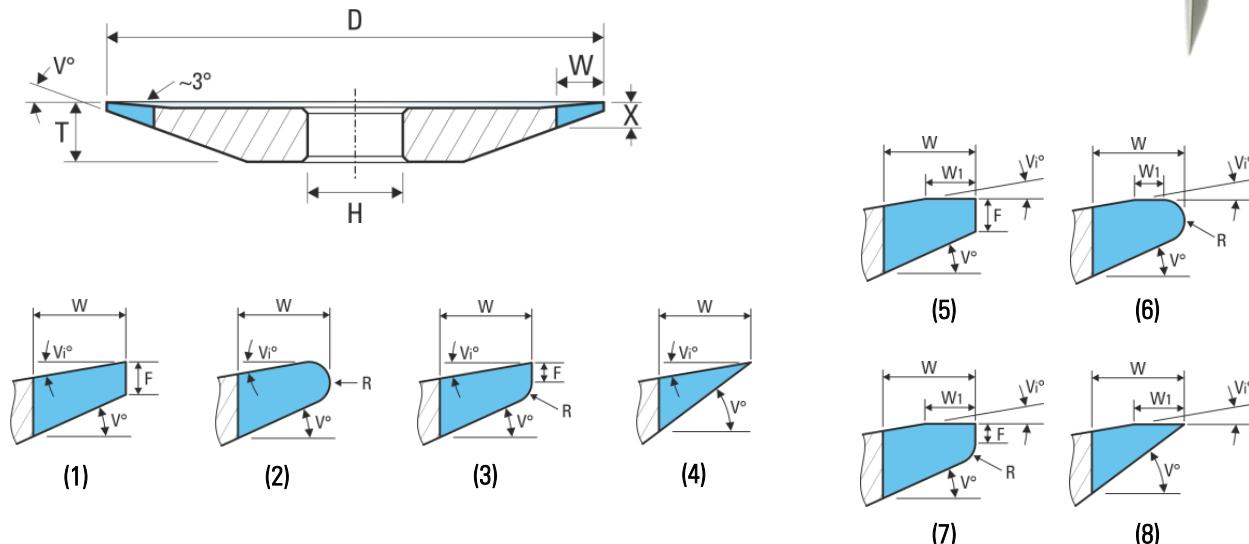
Abrasive layer			Angle	Height	Bore	Conc.	Bond	Grit size	
D	U	X	Vk°	T	H		Diamond / CBN		Your notes
ø250 4B9BJ	6	8	10°	20	ø 51	C125	M4010	D 107	
				24	ø 31.75	C150	M4010	D 91	
ø150 12BT9J	3	5	20° (4° to the middle)	24	ø 31.75	C150	M4011	D 46	
						C125	R297	D 16	

4BT9 Diamond / CBN

Flat dish wheel

Various bonds

For grinding of profiles, threads and similar. Available in different bonds, depending on the application. For example with R210, a universally deployable and cool grinding bond for wet and dry grinding. 4BT9 can have very different profiles (the inner angle V_i° can also be 0° [Type 4B9]).



Examples of possible configurations

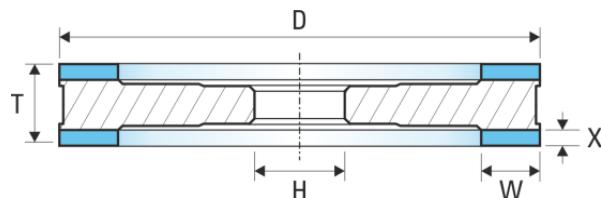
D	W	Abrasive layer		Angle V°	Bore H	Conc.	Bond	Grit size	Diamond / CBN	Your notes
		Type	Profile							
ø 30	5	(2)	R 0.3	20°	ø 10	C90	R210	D 26		
ø 40	5	(5)	F 0.4, W1 2	20°	ø 10	C75	R210	BN 26		
ø 50	5	(4)	sharp	30°	ø 10	C100	R100	D 33		
ø 60	10	(1)	F 1	20°	ø 10	C100	R291	D 91		
ø 75	6	(7)	F 0.3, R 0.3, W1 2	20°	ø 20	C100	R210	D 21		
ø 100	8	(6)	R 0.2, W1 2	20°	ø 31.75	C100	R296	D 64		
ø 125	10	(2)	R 0.5	20°	ø 20	C100	R168	BN 126		
ø 150	8	(8)	sharp, W1 3	20°	ø 20	C110	M4010	D 46		

Other dimensions and configurations available on request. Tell us about your grinding task and we will manufacture the appropriate grinding wheel within a very short time.

9A3 Diamond

Double cup wheel in different bonds

For wet grinding of carbide turning tools on Agathon grinding machines.
With exposed abrasive layer for better accessibility to the turning tool.



Stock articles

Abrasive layer			Height	Bore	Conc.	Bond	Grit size	
D	W	X	T	H			Diamond	Your notes
ø 175	6	2	35	ø 20	C75	R210	D 107	
					C75	Resin ceramic	R210	D 33
					C60		R220	D 21
					C50	Bakelite	B3000	D 16

Other sizes and dimensions available on request, e.g. with a metallic bond that lasts very long.

6A2 Diamond / CBN

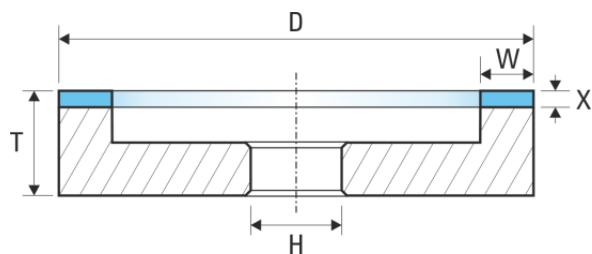
Cylindrical cup wheel

Resin ceramic bond

For tool grinding and other applications. Cool grinding with low grinding pressure.

For wet and dry grinding. To reiterate: a multitude of other bonds are available, incl. wire-dressable bonds (resin ceramic, resin hybrid, metal hybrid and metal bonds).

For larger diameters with a thin rim → 6A9 on page 2-19.



Examples of possible configurations

Abrasive layer			Height	Conc.	Bond	Grit size	Your notes
D	W	X	T-X			Diamond / CBN	
ø 40	2 / 3 / 5		13	C75	R220	D 7 - 151 BN 13 - BN 151	
ø 50	2 / 3 / 5		15				
ø 75	3 / 5		20				
ø 100	6 / 8 / 10		27				
ø 125	6 / 8 / 10	3 / 5	24				
ø 150	6 / 8 / 10		25 / 35				
ø 175	6 / 8 / 10		22				
ø 200	6 / 8 / 10		22				

Other dimensions and configurations available on request (e.g. with CBN). Tell us about your grinding task and we will manufacture the suitable grinding wheel in a very short time.

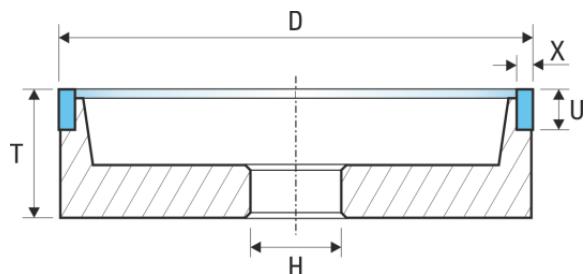
For even smaller diameters (ø 15 - 40 mm) see 11B9 cup wheels in the catalogue section "Internal grinding" → 3-21.

6A9 Diamond / CBN

Cylindrical cup wheel - thin rim

Resin ceramic bond

For tool grinding, face grinding and other applications. Cool grinding. For wet and dry grinding. Suitable for polishing due to the thin rim and our bond allowing for negligible grinding pressure. With internal support body.



Examples of possible configurations

Abrasive layer			Conc.	Bond	Grit size	Your notes
D	X	U			Diamond / CBN	
ø 50			C75	R220	D 7 - D 126	
ø 75					BN 13 - BN 126	
ø 100	2 / 3	6 / 8 / 10				
ø 125						
ø 150						

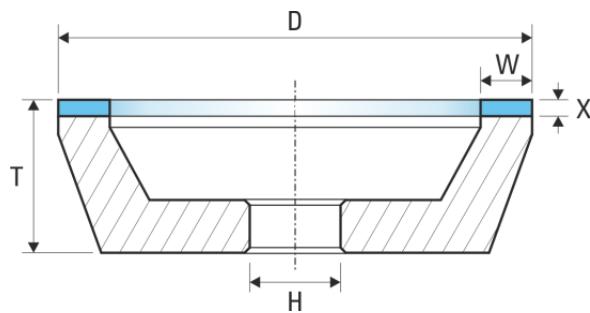
Other dimensions and configurations available on request. Tell us about your grinding task and we will manufacture the suitable grinding wheel in a very short time. For example with the bond R168 which is more adapted for grinding on CNC machines.

11A2 Diamond

Tapered cup wheel

Various bonds

Universally applicable form. The resin ceramic bond R220 has a very broad range of application and is suitable for conventional as well as CNC machines and can be used with or without coolant. The resin hybrid bond R296 as well as the metal hybrid bond M4131.B SHARKLINE are conceived for CNC high performance tool grinding.



Examples of possible configurations

Abrasive layer			Height	Bore	Conc.	Bond	Grit size	
D	W	X	T-X	H			Diamond	Your notes
ø 50	3 / 5		20	ø 20	C75	R220	D 13 - 126	
ø 75	3 / 5		20	ø 20				
ø 100	6 / 8 / 10		27	ø 20				
ø 125	6 / 8 / 10	2 / 3 / 4	24	ø 20				
ø 150	6 / 8 / 10		22 / 35	ø 20				
ø 175	6 / 10 / 15		22 / 40	ø 51				
ø 200	5 / 6 / 10		22 / 32	ø 51				
ø 150			22 / 35	ø 20	C100	R296	D 46, D 64	
ø 200	6 / 8 / 10	5	22 / 32	ø 51				
ø 250			37	ø 51				
ø 150	6	6	22 / 35	ø 20	C100	M4131.B	D 54	

Other dimensions and configurations available on request (e.g. with CBN). Tell us about your grinding task and we will manufacture the suitable grinding wheel in short time.

11B2 Diamond

Tapered cup wheel V80° for CNC grinding

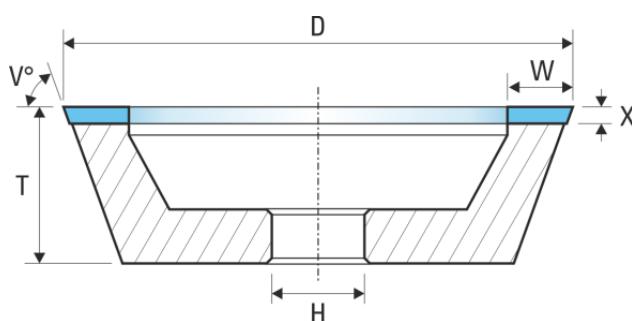
Resin hybrid and metal hybrid bond



Stable tapered cup wheel which can be used at the same time as a profile wheel since open geometries such as rake faces can be ground with its point angle. Compared to 14E1D wheels (→ 2-12), they have a broader point angle and a more massive body which is an advantage when grinding materials that create high grinding pressures and when a lot of material has to be removed.

The resin hybrid bond R296 can be used universally in CNC high performance tool grinding.

The metal hybrid bond M4131.B SHARKLINE is used CNC high performance tool grinding as well but with a focus on very high stock removal rates and low grinding pressures.



Stock articles

Abrasive layer				Height	Bore	Conc.	Bond	Grit size	
D	W	X	V°	T	H		Diamond	Your notes	
ø 200	10	6	80°	38	ø 51	C100	R296	D 64	

Examples of possible configurations

Abrasive layer				Height	Bore	Conc.	Bond	Grit size	
D	W	X	V°	T-X	H		Diamond	Your notes	
ø 150	6 / 8 / 10			24 / 35	ø 20				
ø 200	6 / 8 / 10 / 12	6	80°	22 / 32	ø 51	C100	R296	D 46, D 64	
ø 250	6 / 8 / 10 / 12			37	ø 51				
ø 150	6	6	80°	24 / 35	ø 20	C100	M4131.B	D 54	

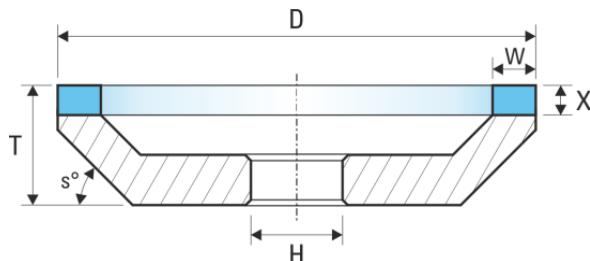
Other dimensions and configurations available on request. Tell us about your grinding task and we will manufacture the suitable grinding wheel in short time.

12A2 Diamond

Cup wheel for manual tool grinding machines

Resin ceramic bond

Tapered cup wheel with 45° body for EWAG, Deckel, Hügi, Dero and other machines with universally applicable bond. For wet and dry grinding. Negligible grinding pressure and thus cool grinding.



Stock articles (type EWAG)

Abrasive layer			Height	Bore	Conc.	Bond	Grit size	
D	W	X	T	H			Diamond	Your notes
$\varnothing 75$	3	4	24	$\varnothing 20$	C75	R220	D 126	
							D 76	
							D 46	
							D 33	
							D 21	

Examples of possible configurations (type Deckel/Dero)

Abrasive layer			Height	Bore	Conc.	Bond	Grit size	
D	W	X	T-X	H			Diamond	Your notes
$\varnothing 75$	3 / 5	4	20	$\varnothing 20$	C75	R220	D 5 - 151	
$\varnothing 100$	6 / 8 / 10	2 / 3	23	$\varnothing 20$				
$\varnothing 125$	10	2	23	$\varnothing 20$				

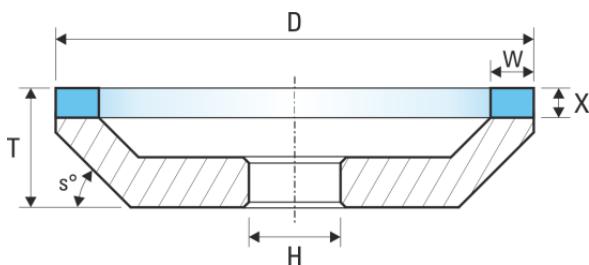
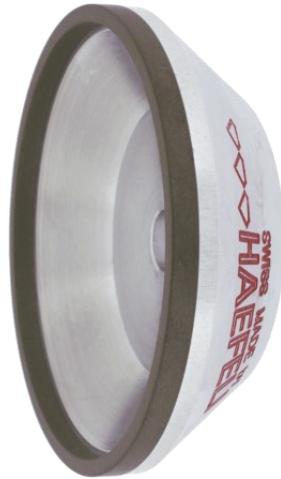
Other dimensions and configurations available on request. Tell us about your grinding task and we will manufacture a custom-made grinding wheel in a very short time.

12A2 CBN

Cup wheel for manual tool grinding machines

Resin ceramic bond

Tapered cup wheel with 45° body for EWAG, Deckel, Hügi Dero and other machines with universally applicable bond. For wet and dry grinding. Negligible grinding pressure and thus cool grinding.



Examples of possible configurations

Abrasive layer			Height	Bore	Conc.	Bond	Grit size	
D	W	X	T-X	H		CBN		Your notes
ø 75	3 / 5	4	20	ø 20	C75	R220	BN 13 - 151	
ø 100	6 / 8 / 10	2 / 3	23	ø 20				
ø 125	10	2	23	ø 20				

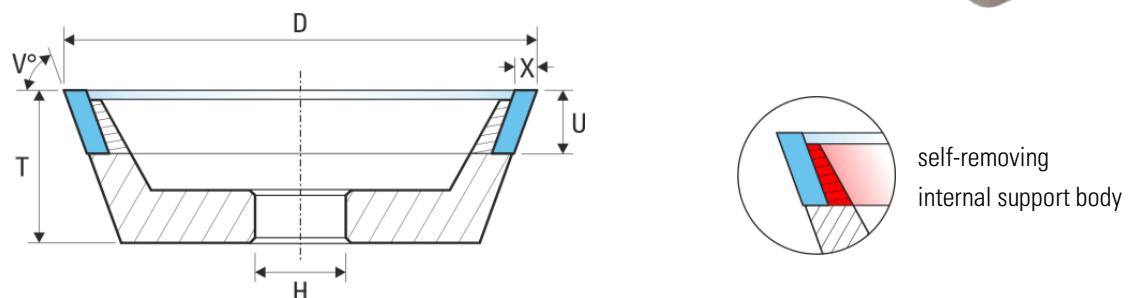
Other dimensions and configurations available on request. Tell us about your grinding task and we will manufacture the suitable grinding wheel in a very short time.

11V9 Diamond

70° cup wheel - CNC grinding

Resin hybrid bond

Cup wheels with bond R296 are adapted for high performance grinding with high stock removal rates on CNC machines (only for grinding with oil). Cup wheels with bond R260 retain their edges very well.



Stock article

Abrasive layer			Angle	Height	Bore	Conc.	Bond	Grit size	
D	X	U		T	H		Diamond	Your notes	
ø 100	3	10	70°	35	ø 20	C100	R296	D 64	

Examples of possible configurations

Abrasive layer			Angle	Height	Bore	Conc.	Bond	Grit size	
D	X	U		T	H		Diamond	Your notes	
ø 75	3 / (2)			30	ø 20				
ø 100	3 / (2)			35	ø 20				
ø 125	3 / (2)	10	70°	40	ø 20	C100	R296	D 64	
ø 150	3 / (2)			35	ø 20				
ø 200	3			44	ø 51				
ø 100	3	10	70°	35	ø 20	C125	R260	D 64	

Other dimensions and configurations available on request. Tell us about your grinding task and we will manufacture the suitable grinding wheel in a very short time.

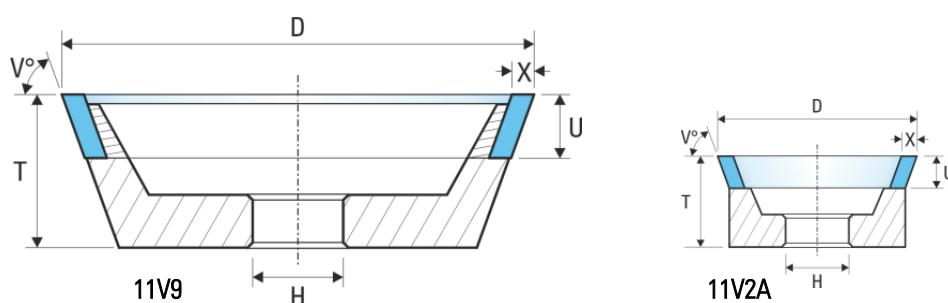
11V9 / 11V2A Diamond / CBN

70° cup wheel

Resin ceramic bond

Cup wheels for conventional grinding, wet or dry. 11V2A for precision mechanics and the watch making industry. 11V9 particularly for tool grinding.

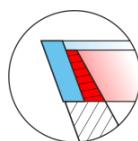
11V9 feature our special self-removing internal bond support body that can be ground off along the way or easily set back with a hard object. No turning required.



Examples of possible configurations

	Abrasive layer			Angle V°	Height T	Bore H	Conc.	Bond	Grit size Diamond / CBN	Your notes
	D	X	U							
11V2A	ø 30			70°	20	ø 8 / ø 10	C75	R220	D 9 - D 126 BN 13 - BN 126	
	ø 40	1.7	5							
	ø 50	2	8	70°	25	ø 10	C75	R220	D 9 - D 126 BN 13 - BN 126	
	ø 75	3 / (2)			30	ø 20				
	ø 100	3 / (2)			35	ø 20				
	ø 125	3 / (2)	10		40	ø 20				
	ø 150	3			35	ø 20				
	ø 200	3			44	ø 51				

Other dimensions and configurations available on request. Tell us about your grinding task and we will manufacture the suitable grinding wheel in a very short time.



self-removing
internal support body

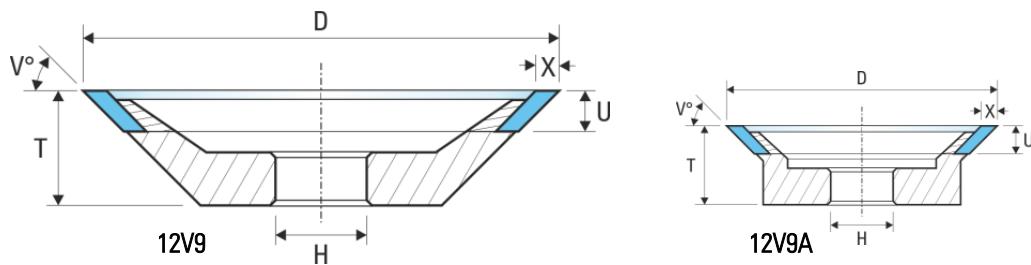
12V9 / 12V9A Diamond / CBN

45° cup wheel

Resin ceramic bond

Cup wheels with the versatile bond R220 are particularly suited for conventional grinding. For wet and dry grinding. Cool grinding thanks to negligible grinding pressure. For high performance grinding available with more suitable bonds. 12V9A for precision mechanics and for the watch making industry, 12V9 especially for tool grinding.

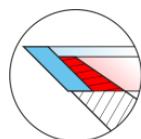
12V9 feature our special self-removing internal bond support body that can be ground off along the way or easily set back with a hard object. No turning required.



Examples of possible configurations

	Abrasive layer			Angle	Height	Bore	Conc.	Bond	Grit size	Your notes
	D	X	U						Diamond / CBN	
12V9A	ø 50			45°	18	ø 10	C75	R220	D 9 - D 126 BN 13 - BN 126	
	—	2	6		24	ø 20				
12V9	ø 100	2		45°	22	ø 20	C75	R220	D 9 - D 126 BN 13 - BN 126	
	ø 125	2			25	ø 20				
	—	10								
	ø 150	2	3		30	ø 20				

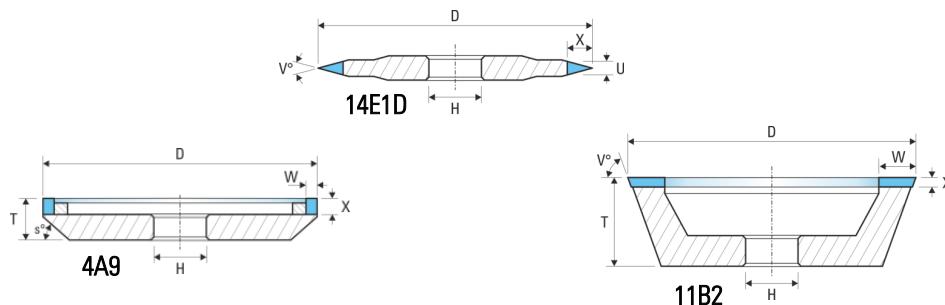
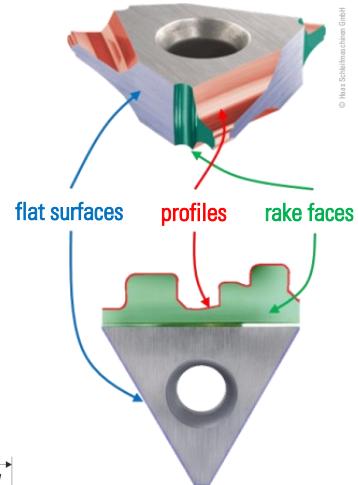
Other dimensions and configurations available on request. Tell us about your grinding task and we will manufacture the suitable grinding wheel in a very short time.



self-removing
internal support body

Grinding of profiled inserts

On this page you find grinding wheels that we have on stock for grinding profiled inserts - be it on HAAS Multigrind or on other high tech grinding machines.



Stock articles 14E1D - for profile grinding

Abrasive layer				Angle	Radius	Bore	Conc.	Bond	Grit size	
D	U	X	V	R	H			Diamond	Your notes	
Ø 150	4	8	30°	0.15	Ø 20	Ø 20 / Ø 51	C 125	R159	D 126	
Ø 200								Roughing		
Ø 150	2.8	8	30°	0.15	Ø 20	Ø 20 / Ø 51	C 150	M4010	D 64	
Ø 200								Finishing		

For more information and other dimensions → 2-12. Bore Ø 20 for Xing-Dressing on Haas Multigrind.

Stock articles 11B2 - for flat surface & rake face grinding

Abrasive layer				Angle	Bore	Conc.	Bond	Grit size	
D	W	X	V°	T	H		Diamond	Your notes	
Ø 200	10	6	80°	38	Ø 51	C100	R296	D 64	

For different dimensions → 2-21.

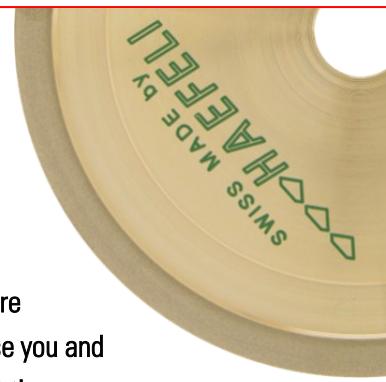
Stock articles 4A9 - for rake face grinding

Abrasive layer				Angle	Bore	Conc.	Bond	Grit size	
D	W	X	T	H			Diamond	Your notes	
Ø 150	3	10	29	Ø 20	C100	R296	D 64		

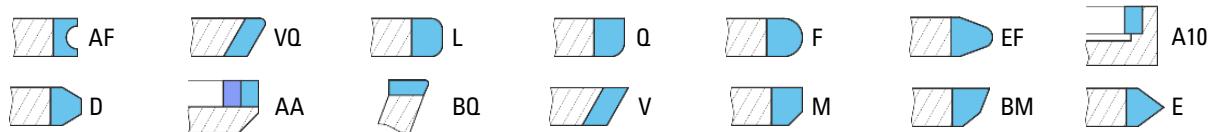
The 4A9 feature a self-removing internal support body.

CUSTOM-MADE TOOLS for your individual task in the shortest time

We manufacture grinding wheels in all shapes and compositions for various grinding applications up to a diameter of 400 mm. Just ask us if you have not found what you were looking for in this catalogue, and tell us about your requirements. We are happy to advise you and manufacture just the right grinding wheel for your individual grinding task in a very short time. We are looking forward to your request.

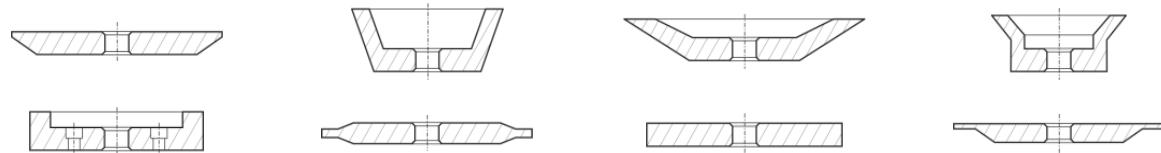


A selection of other possible profiles / rim shapes



For more information about our bonds please consult the corresponding pages in this catalogue (starting from page 1-03). By the way, our metal bonds can be eroded very well same as our resin hybrid bonds.

A selection of possible body shapes



Our bodies are made from various materials. We also manufacture electrically conducting bodies so that grinding wheels can be eroded in the grinding machine itself with the appropriate equipment (EDM).

E-mail: post@haefeli.swiss

Telephone: 0041 (0)44 377 80 50

Optional request form → page 5-01

We wish successful grinding!

