

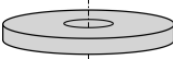
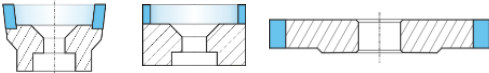


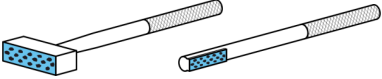
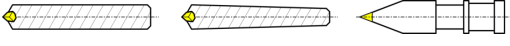
REGENERATING, DRESSING and POLISHING

Regenerators

Sketch	Details	Stock	Page
	HACO-FLEX: Just like an eraser Application and advantages		4-02
	HACO-FLEX and HACO-STEIN For the ideal grain protrusion in the abrasive layer	stock	4-03

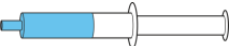
Regenerators are being used to open up the surface of the abrasive layer by recessing the bond for an ideal grain protrusion. The grinding tools are thus sharpened for a cool and aggressive grind.

Dressing tools

Sketch	Details	Stock	Page
	Corundum & SiC dressing wheels for metal and resin bonds	stock	4-04
	Metal bonded diamond dressing wheels for vitrified bonds		4-05
	Multiple diamonds dressing tools Diaglo for conventional wheels with a straight profile	stock	4-06
	Multiple diamonds dressing tools Diaglo-Major for conventional wheels with a straight profile	stock	4-07
	Multiple diamonds hand dressers for conventional wheels with a straight profile	stock	4-08
	Single point diamond dressers for conventional wheels with a non-linear profile	stock	4-09

Dressing tools are being used to reshape and profile grinding tools as well as to eliminate any concentricity errors.

Polishing pastes

Sketch	Details	Stock	Page
	Diamond polishing pastes in syringes	stock	4-10

REGENERATION OF ABRASIVE LAYERS

with **HACO-FLEX**: just like an eraser

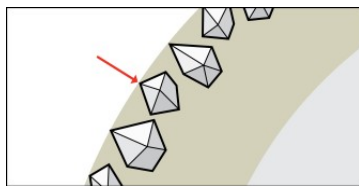
Puts the bite back into diamond and CBN grinding bonds!

With the HACO-FLEX, for resin and metal bonds you get ideal grain protrusion.

- Full grinding performance
- Cool grind
- Short grinding time
- Long tool life
- As a stick or a disc

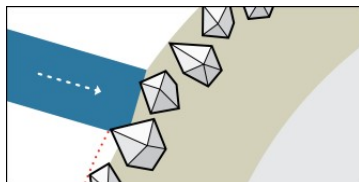


Problem



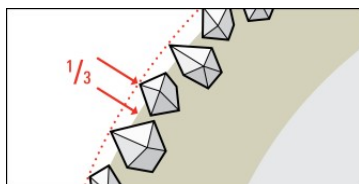
The bonding material and the abrasive grains are at the same level:
The grinding tools only presses, but has not bite.

Solution



The flexible HACO-FLEX is pressed either by hand or by machine, without a coolant, into the bonding material, ideally with a reduced cutting rate. It penetrates deeply and, like an erasing rubber, it cleans out the gaps until the abrasive grains protrude by about 1/3.

Result



The abrasive grains are now positioned ideally above the bonding material.
The grinding tool has got back its proper bite.

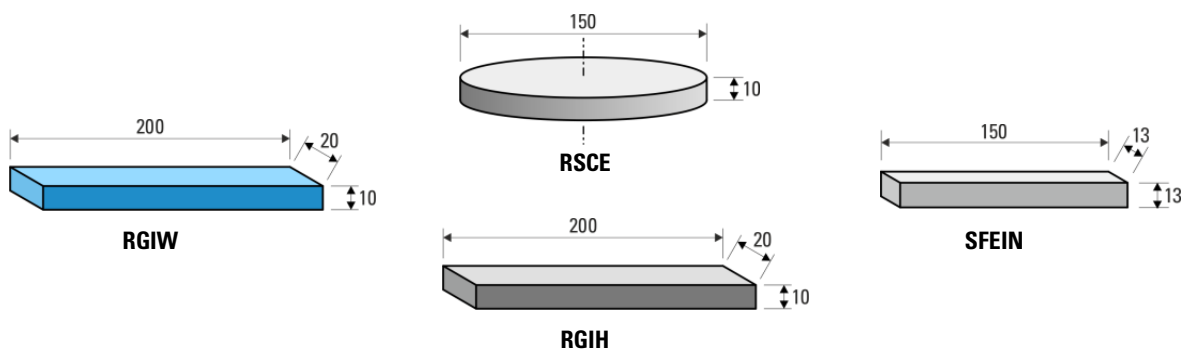
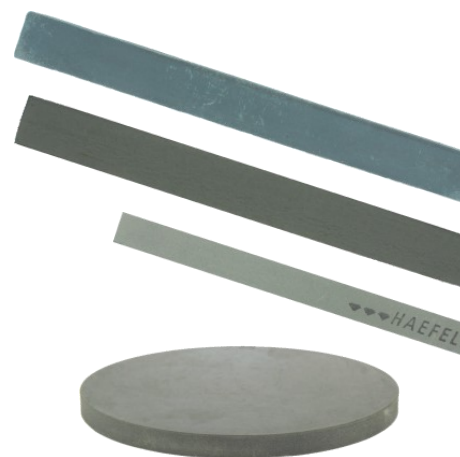
- Cleaning the surface of bonding material.
- "Resetting" the bond without damaging the diamond or CBN grains or ripping them out. The profile shape is retained.
- Haefeli grinding bonds are basically self-sharpening. Depending on the nature of the material to be ground, bonding materials can react in different ways. For materials which tend to smear over grinding coatings, thanks to HACO-FLEX, the ideal grain protrusion can be restored again.

HACO-FLEX / HACO-STEIN

Rubber and ceramic bonded discs and sticks

Regenerators for resin and metal bonds. HACO-FLEX for standard grit sizes (D/BN 46 - 251); as a disc or a stick. HACO-STEIN for micro grit sizes (D/BN 13 - 39).

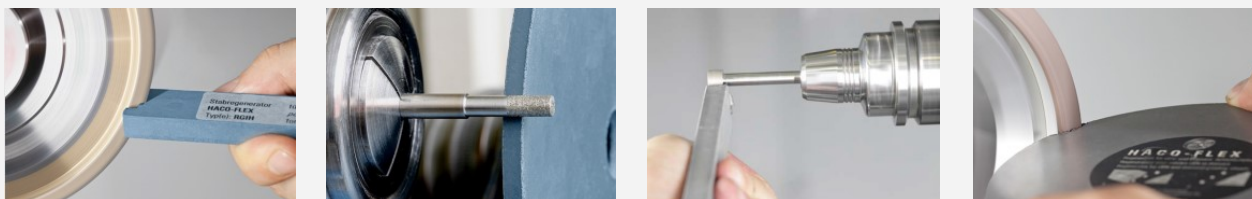
The grey rubber is more flexible while also being more abrasive than the stiffer, but less aggressive blue rubber.



Stock articles

	Type	Application for the dressing of	Dimensions mm	Bond	Your notes
Haco-Flex	RGIW	D/BN 46 - D/BN 251	20 x 10 x 200 stick	G7500 rubber "blue"	
	RSCE	D/BN 46 - D/BN 251	∅ 150 x 10 disc	G7501 rubber "grey" more flexible, abrasive	
	RGIH		20 x 10 x 200 stick		
Haco-Stein	SFEIN	D/BN 13 - D/BN 39 micro grit sizes	13 x 13 x 150 stick	V5900 soft ceramic "light grey"	

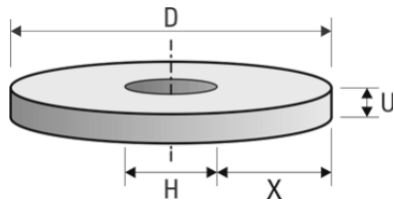
Applications



Corundum & SiC dressing wheels

for metal and resin bonds

Ceramic bonded dressing wheels which are well suited to dressing our diamond and CBN grinding tools on grinding machines or lathes. Guidelines for dressing with these dressing wheels → 1-16. Regenerating with HACO-FLEX is highly recommended after every dressing → 4-02.



Stock articles - standard applications

Type	Dimensions			Bore H	for grinding wheels with		Grit size Mesh size	Your notes
	D	X	U		Metal (M)	Resin (R)		
ASCH	ø 100	40	10	ø 20	D/BN ≤ 26	D/BN ≤ 33	SiC	K 320
					D/BN 23 - 41	D/BN 26 - 54	SiC	K 280
					D/BN 37 - 64	D/BN 46 - 76	SiC	K 180
					D/BN 46 - 76	D/BN 64 - 107	Corundum	K 120
					D/BN 64 - 126	D/BN 107 - 181	Corundum	K 60

No other variants currently on stock. The grit sizes given for the grinding wheels to be dressed are approximations.

Stock articles - for Xing-Dressing of our pointed profile wheels 14E1D

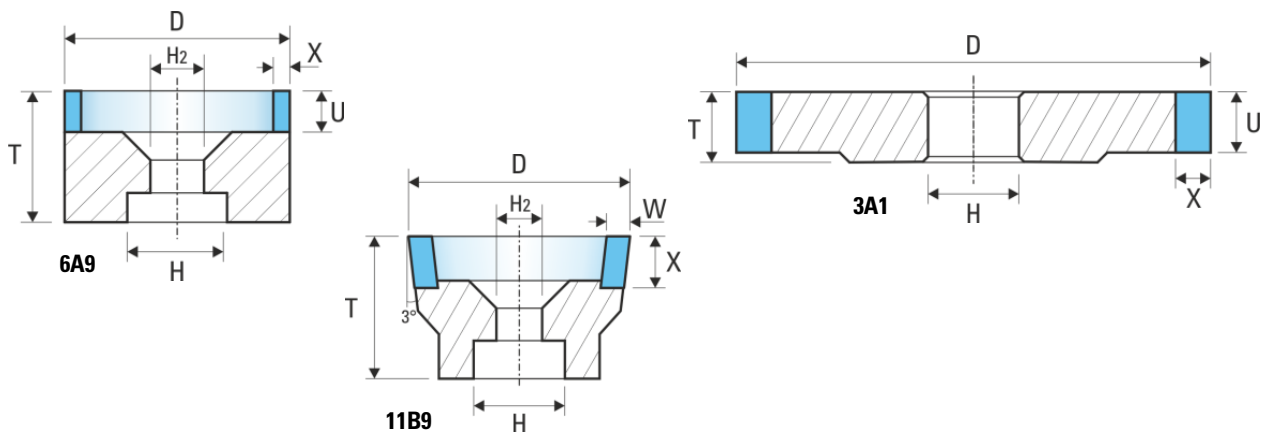
Type	Dimensions			Bore H	for 14E1D	Grit size Mesh size	Your notes
	D	X	U				
ASCH	ø 120	50	20	ø 20	M4010 D/BN 64 R159 D/BN 126	Corundum	K 60
	ø 95	37.5	16				

No other variants currently on stock. Our 14E1D pointed profile wheels → 2-12.

Diamond dressing wheels

for vitrified bonds

Very wear resistant metal bonded diamond wheels for dressing vitrified grinding tools with straight profiles. For conventional emery or SiC wheels as well as for vitrified diamond and CBN grinding tools (incl. our V5000 bond). Not suitable for metal, resin and resin ceramic bonds.



Examples of possible configurations

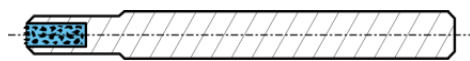
Type	Abrasive layer			Bore H	Height T	Conc.	Bond Metal	Grit size Diamond	Your notes
	\varnothing D	X	U/W						
6A9	18	0.8	5	\varnothing 7	16.5	C 145	M4010	D 107 - 302	
11B9	16.2	3	1.8	\varnothing 7 (H2: \varnothing 4.3)	14.2	C 145	M4000	D 107 - 302	
3A1	50 - 200	5	5	\varnothing 20	8	C 145	M4010	D 107 - 302	

We also manufacture metal bonded diamond dressing tools in other sizes on request.

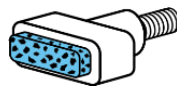
Multiple diamonds dressing tools

DIAGLO for conventional grinding wheels

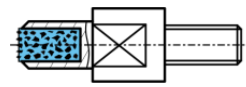
For dressing conventional emery or SiC grinding wheels with straight profiles. Natural quality diamonds in a metal bond for maximum tool life. Diamond layer can be used right up to the end with always new diamond tips in action.



D36 & D42



D221A



D222, D224, D225

Stock articles

Type	Diamond layer mm	Shank mm	for grinding wheels		Bond Metal	Grit size Diamond US mesh	Your notes
			Diameter	Grit size			
D36	∅ 4 x 10	∅ 8 x 77 length overall: 90	≤ ∅ 150 mm	60 - 120	M4030	K 50	
				120 - 400		K 100	
D42	∅ 5 x 8	∅ 12 x 112 length overall: 125	≤ ∅ 200 mm	46 - 80	M4030	K 30	
				60 - 120		K 50	
				120 - 400		K 100	
D221A	17 x 7 x 2 (cuboid)	screw thread M 5.5 length overall: 30	≤ 500 mm	46 - 100	M4035	K 30	
D222	∅ 8 x 4	screw thread M 5.5 length overall: 30	≤ 350 mm	46 - 100	M4030	K 30	
D224	∅ 6 x 7	screw thread M 5.5 length overall: 30	≤ 300 mm	46 - 100	M4030	K 30	
D225	∅ 5 x 7	screw thread M 5.5 length overall: 30	≤ 200 mm	46 - 100	M4030	K 30	

We offer matching hand holders for Diaglo D221A, D222, D224 and D225:

Type	Sketch	Description	Your notes
DS230		∅ 12 x 160, knurled shank, screw thread M 5.5	

Other multiple diamonds dressing tools on stock.

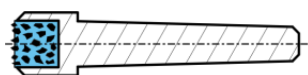
Multiple diamonds dressing tools

DIAGLO-MAJOR for conventional grinding wheels

For grinding conventional emery or SiC grinding wheels with straight profiles. Natural quality diamonds in a metal bond for maximum tool life. Diamond layer can be used right up to the end with always new diamond tips in action.



DM with cylindrical shank



DM with conical shank

Stock articles

Type	Diamond layer mm	Shank mm	for grinding wheels		Bond Metal	Grit size Diamond H-mesh	Your notes
			Diameter	Grit size			
DM 5A	ø 5 x 7	ø 12 x 68 length overall: 77	≤ 200 mm	36 - 100	M4035	1/3	
DM 8A	ø 8 x 5	ø 12 x 68 length overall: 80	≤ 350 mm	36 - 100	M4035	1/3	
		MK-1					
DM 12A	ø 12 x 5	ø 12 x 68 length overall: 80	≤ 1000 mm	36 - 100	M4035	1/3	
		MK-1					

Other dimensions and grit sizes available on request.

Grit size 1/3 (Haefeli mesh)
corresponds to grit size 16-18 (US mesh).

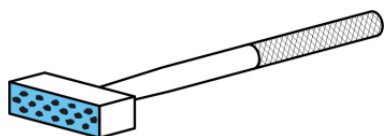
Remaining stock

We have a large stock with stationary multiple diamond dressers in many different shapes and forms. Just contact us directly if you are looking for dressing tools and were not be able to find anything suitable in this catalogue.

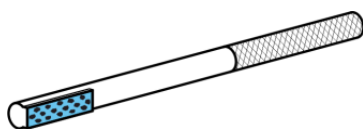


Diamond hand dressers

For dressing conventional emery and SiC grinding wheels with straight profiles on bench grinders. 16 diamonds sintered into carbide. Good value. Top quality. For workshops, sculptors, locksmiths and so on.



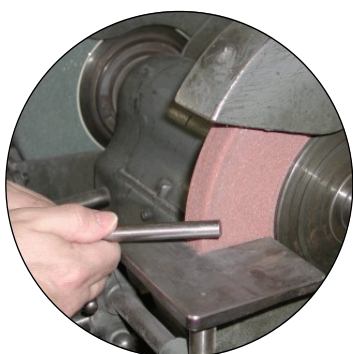
A-1-S



A-5

Stock articles

Type	Layer mm	Shank mm	Bond Metal	Diamonds Quantity	Your notes
DA1S	38 x 10	11 x 185 overall length: 195	M4950	16 diamonds	
DA5	25 x 10	11 x 125 overall length: 150	M4950	16 diamonds	



dressing conventional wheels by hand

Single point diamond dressers

For dressing conventional emery and SiC grinding wheels with non-linear profiles. Standard single point dresser (DEK) with natural diamond tip for simpler profiles. Diaform (DFO) with sharpened diamond tip for very precise profiles.



DEK with cylindr. shank



DEK with MK



DFO (Diaform)

Stock articles

Type	Grit size <i>Diamond (carat)</i>	Shank mm	for grinding wheels Diameter	Bond Metal	Your notes
DEK	0.3 ct	∅ 8 x 60	≤ ∅ 250 mm	M4950	
		MK 1			
	0.5 ct	∅ 8 x 60	≤ ∅ 400 mm		
		∅ 10 x 60			
		∅ 12 x 60			
		MK 1			
	0.8 ct	∅ 12 x 60	≥ ∅ 400 mm		
		MK 1			

Other dimensions and diamond sizes available on request. We also have a large stock of various single point dressers.

Examples of possible configurations

Type	Grit size <i>Diamond (carat)</i>	Angle V	Radius mm	Shank mm	Bond Metal	Your notes
DFO (Diaform)	0.33 ct	40°	R 0.125	∅ 9.52 x 44.5	M4951	
		60°	R 0.25	∅ 8 x 60		

Other dimensions and diamond sizes available on request.

POLISHING

Diamond polishing paste

In syringes with 5 grams each



Stock articles

Grit sizes µm (micrometer)	Colour	Conc. C	Amount	Your notes
20 - 40	white	C 75	5 gr.	
20 - 30	light blue			
12 - 22	light green*			
8 - 16	orange			
6 - 12	red			
4 - 8	yellow			
2 - 4	green			
1/2 - 3	black*			
0 - 2	blue*			
0 - 1	grey			

Syringes with 20 grams available on request.

* Available from stock as long as stock lasts. Thereafter available on demand as a special execution.