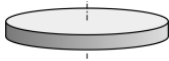



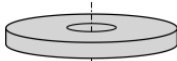
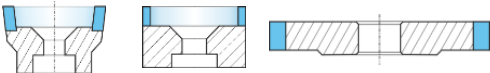
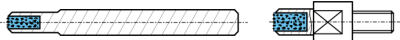

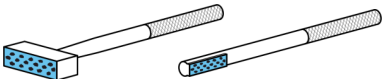

# REGENERATING, DRESSING and POLISHING

## Regenerators

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


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<br>for metal and resin bonds                                      | stock | <b>4-04</b> |
|  | Metal bonded diamond dressing wheels<br>for vitrified bonds                                      |       | <b>4-05</b> |
|  | Multiple diamonds dressing tools Diaglo<br>for conventional wheels with a straight profile       | stock | <b>4-06</b> |
|  | Multiple diamonds dressing tools Diaglo-Major<br>for conventional wheels with a straight profile | stock | <b>4-07</b> |
|  | Multiple diamonds hand dressers<br>for conventional wheels with a straight profile               | stock | <b>4-08</b> |
|  | Single point diamond dressers<br>for conventional wheels with a non-linear profile               | stock | <b>4-09</b> |

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 | <b>4-10</b> |

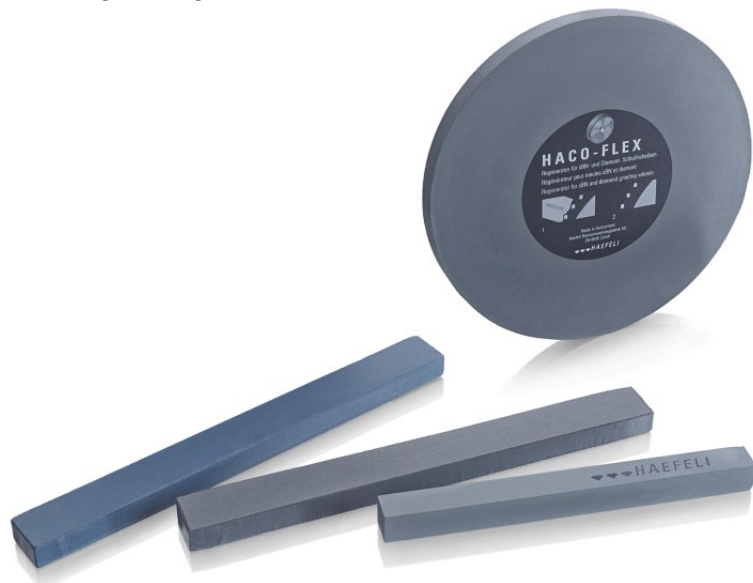
# REGENERATION OF ABRASIVE LAYERS

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

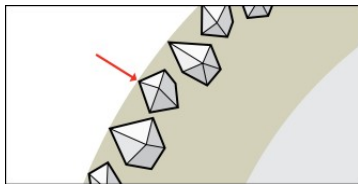
Puts the bite back into diamond and CBN grinding bonds!

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

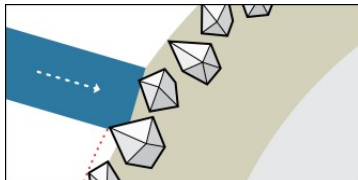


### Problem



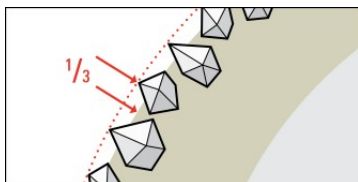
The bonding material and the abrasive grains are at the same level:  
The grinding tools only presses, but has not bite.

### 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.

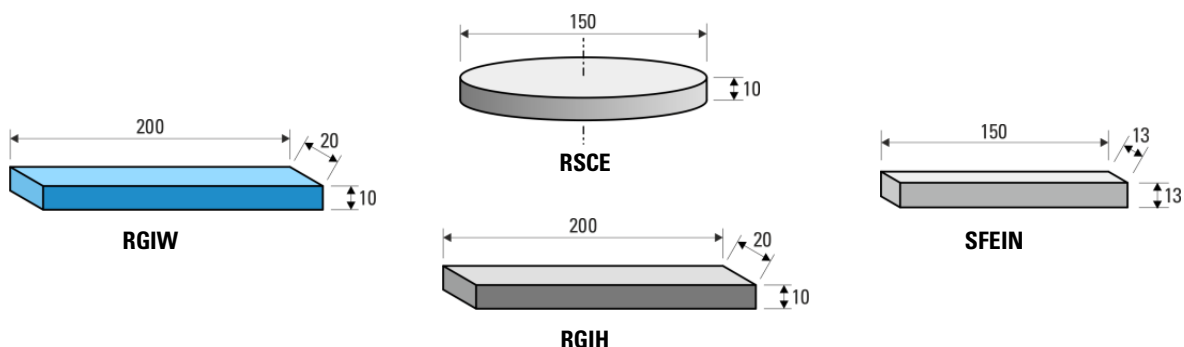
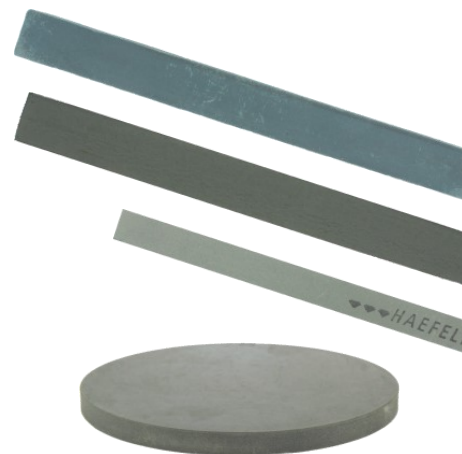
- Cleaning the surface of bonding material.
- "Resetting" the bond without damaging the diamond or CBN grains or ripping them out. The profile shape is retained.
- Haefeli grinding bonds are basically self-sharpening. Depending on the nature of the material to be ground, bonding materials can react in 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).

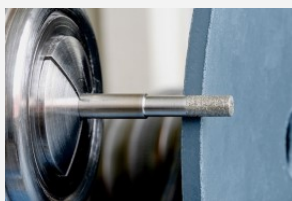
The grey rubber is more flexible while also being more abrasive than the stiffer, but less aggressive blue rubber.



## Stock articles

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

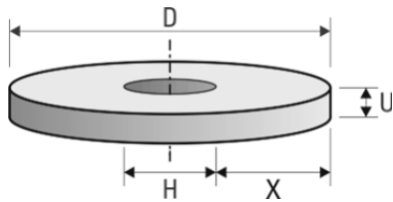
## Applications



# 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 | for grinding wheels with |                | Grit size | Your notes |
|------|------------|----|----|------|--------------------------|----------------|-----------|------------|
|      | D          | X  | U  |      | Metal (M)                | Resin (R)      | Mesh size |            |
| 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

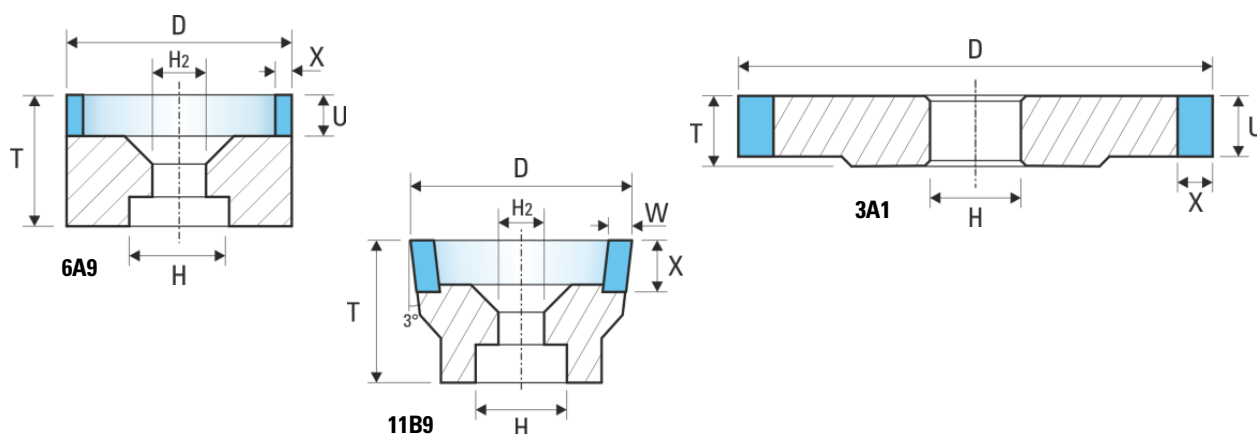
| Type | Dimensions |      |    | Bore | for 14E1D                      |          | Grit size | Your notes |
|------|------------|------|----|------|--------------------------------|----------|-----------|------------|
|      | D          | X    | U  |      |                                |          | Mesh size |            |
| ASCH | ø 95       | 37.5 | 16 | ø 20 | M4010 D/BN 64<br>R159 D/BN 126 | Corundum | K 60      |            |

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

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

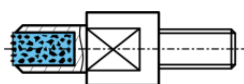
# Multiple diamonds dressing tools

## 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 &amp; D42




D222, D224, D225

## Stock articles

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

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

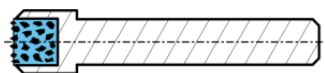
| Type  | Sketch  | Description                                       | Your notes |
|-------|---|---|------------|
| DS230 |  | ø 12 x 160 , knurled shank,<br>screw thread M 5.5 |            |

Other multiple diamonds dressing tools on stock.

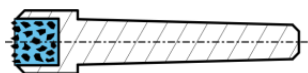
# Multiple diamonds dressing tools

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

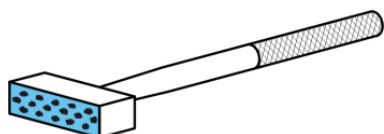
## Remaining stock

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.

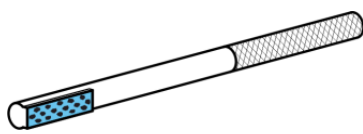


# Diamond hand dressers

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.



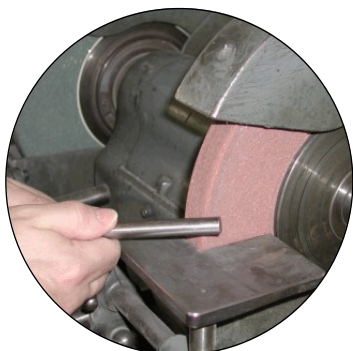
A-1-S



A-5

## Stock articles

| Type | Layer<br>mm | Shank<br>mm                     | Bond<br>Metal | Diamonds<br>Quantity | Your notes |
|------|-------------|---------------------------------|---------------|----------------------|------------|
| DA1S | 38 x 10     | 11 x 185<br>overall length: 195 | M4950         | 16 diamonds          |            |
| DA5  | 25 x 10     | 11 x 125<br>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       | Shank     | for grinding wheels | Bond  |            |
|------|-----------------|-----------|---------------------|-------|------------|
|      | Diamond (carat) | mm        | Diameter            | 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<br>Diamond (carat) | Angle<br>V | Radius<br>mm | Shank<br>mm   | Bond<br>Metal | Your notes |
|------------------|------------------------------|------------|--------------|---------------|---------------|------------|
| DFO<br>(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<br>µm (micrometer) | Colour       | Conc.<br>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.