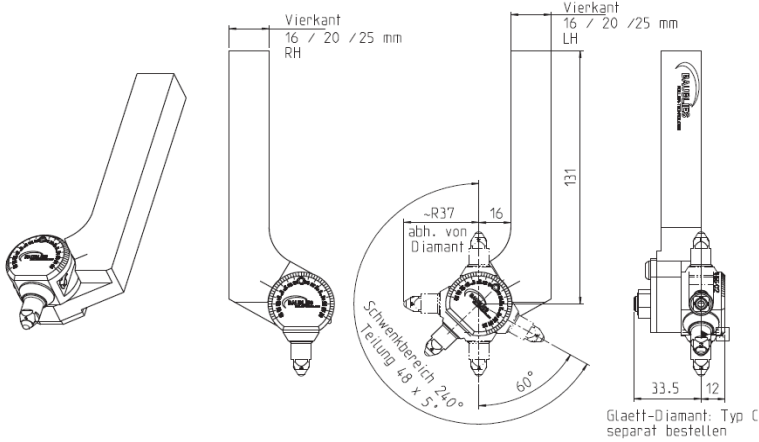
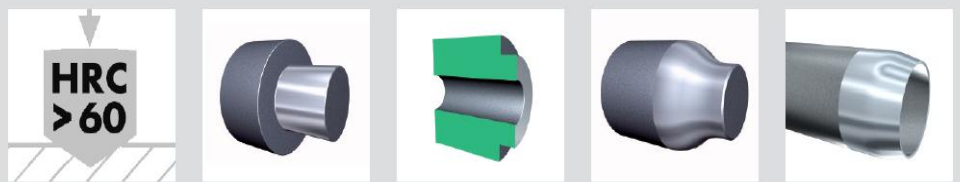




## Diamond burnishing tool for external use



**Variable diamond burnishing tools** are not intrinsic tools for smoothing and work hardening of shafts and external contours. Due to the swiveling diamond these tools are quite versatile.

### Advantages

- Universally useable
- Suitable for hard machining and thin walled workpieces
- Slim design enables the application in small spaced machine tools
- Spring loaded diamond
- Changeable diamond insert
- Regrinding of the diamond is possible

### Diamond burnishing tool for external use

Application	shafts and external contours
Standard fixture	square shank 16/20/25 mm left or right hand
Swiveling range	240°
Indexing	48 x 5°

### Options

- Fixture VDI, HSK etc.
- Tailor made diamond shape
- Assembly device

### Application parameters

Please note that this information represents standard values which must be adapted to the individual cases.

Workpiece allowance	up to 0.02 mm
Tool pre-load	up to 1 mm
Lubrication	emulsion or oil, filtration of the lubricant (<40µm) can improve the surface quality and the tool life
Pre-machining of workpiece	surface roughness up to 15 µm
Speed	up to 150 m/min
Feed rate	0.05 – 0.2 mm/rev
Suitable for hard machining	

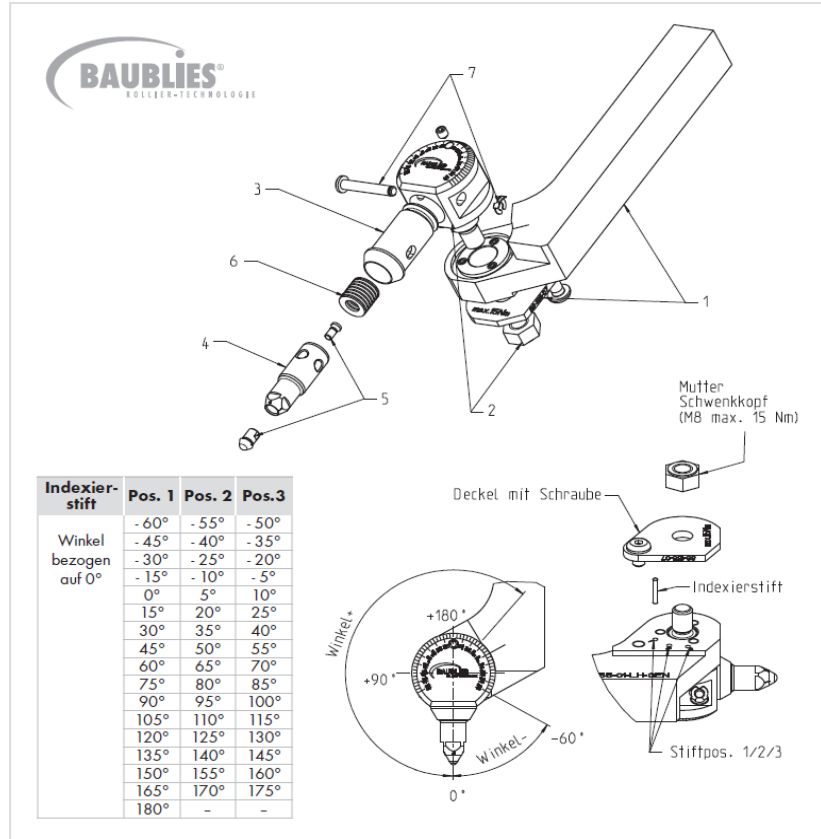
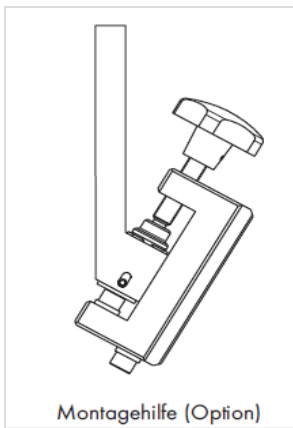


## Tool assembly and handling

### Variable diamond burnishing tools

Parts list and assembly

- 1 square shank
- 2 swiveling head
- 3 bushing
- 4 diamond holder for type form C
- 5 diamond insert form C with screw
- 6 spring
- 7 pin with locking ring



### Adjusting the angle:

Disassemble nut (2). Lift swiveling head (2). Place indexing pin into position 1/2/3 according to chart.

Set required position of swiveling head (2). Assemble nut (2) (max. torque 15Nm)

### Replacing the diamond:

Slightly pre-load diamond (5) (with assembly aid). Remove pin with locking ring (4). Declamp diamond. Remove or rotate diamond into the next position. During assembly pay attention to the position of the pin hole in the diamond holder.

Slightly pre-load diamond (5) (with assembly aid). Insert pin with locking ring (4). Declamp diamond.

### Tip:

- The preload of the tool during burnishing should be in a range between 0.1 and 0.5 mm.
- If possible do not place the diamond vertically to the surface. In this case the wear of the diamond would be excentric and the diamond can be used 4 times by rotating it in steps of 90°.
- coolant must be used at any time
- avoid interrupted cuts
- If the diamond is not damaged (cracks) regrinding is possible.

