



zeus **Burnishing Tool**



So that
everything
runs smoothly!



Added values

- Highest quality surface finishes ($R_z < 1$)
- Simple handling and ease of operation
- No additional equipment required
- Compact design for machines with limited work space
- Adjustable counter-pressure (depending on the material being worked on)
- Tolerance compensation from suspension
- Easy to change the diamond tip, without changing the tool's basic settings
- Integrated centre height (top edge of the shaft)
- Cost effective
- Suitable for all common machine types (swiss type autolathes, CNC and conventional turning lathes)
- Possible to process hardened and high-strength materials

Your benefits

- Fast, efficient and cost-effective burnishing
- Suitable for hardened steels and high-strength materials
- Also suitable for small geometrics
- One tool can be used for different burnishing applications
- Ideal for all series sizes, including for prototypes
- Adaptable to different shaft sizes (delivered as a set)
- Standard program of burnishing tips to choose from

Burnishing Tool SET 510



Features

- Fixed tool head
- Can be adjusted up to $\pm 10^\circ$ thanks to integrated setting options in the shaft
- To burnish ripples with cylindrical surfaces – limited cones and radii

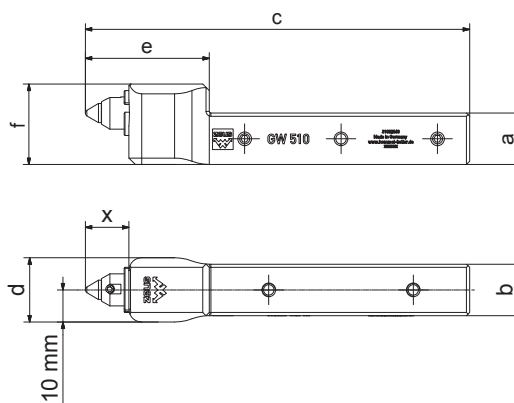
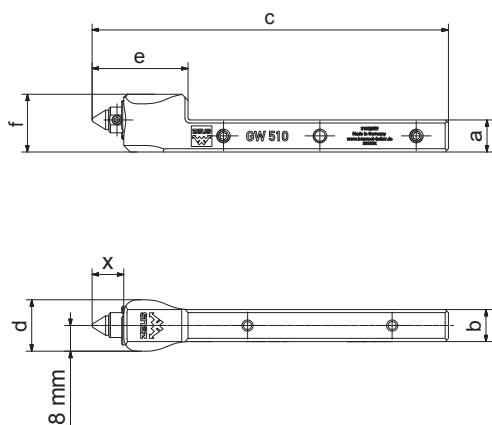
Recommendations

- Burnishing speed up to 200 m/min
- Feed rate up to 0.2 mm/U
- Workpiece measurement of 0.01 mm ($\sim R_z 10$) and 0.02 mm ($\sim R_z 20$)
- It is recommended to use a cooling lubricant

TOOL VERSIONS

| Order No. | Tool holder designation | Basic shaft [mm] | Dimensions [mm] | | | | | | | Including shaft adapter [mm] |
|-----------|-------------------------|------------------|-----------------|----|-------|----|----|----|------|------------------------------|
| | | | a | b | c | d | e | f | x | |
| 31002859 | 510-10U | 10 x 10 | 10 | 10 | 110 | 16 | 30 | 18 | 9 | 12 x 12 |
| | | | | | | | | | | 16 x 16 |
| 31002860 | 510-16U | 16 x 16 | 16 | 16 | 119.5 | 20 | 39 | 25 | 13.5 | 20 x 20 |
| | | | | | | | | | | 25 x 25 |

Sets delivered without diamond tip



DIAMOND TIP VERSIONS

| Order No. | Tip radii [mm] |
|-----------|----------------|
| 06TGW0008 | 0.4 |
| 06TGW0009 | 0.6 |
| 06TGW0010 | 0.8 |
| 06TGW0011 | 1.0 |



Burnishing Tool SET 520



Features

- Tool head is variably adjustable
- Tool with universal application
- Swivel range $\pm 90^\circ$
- Thanks to the adjustability of the tool head, it is possible to burnish plane surfaces, conical, convex and concave geometries
- Application up to a shoulder

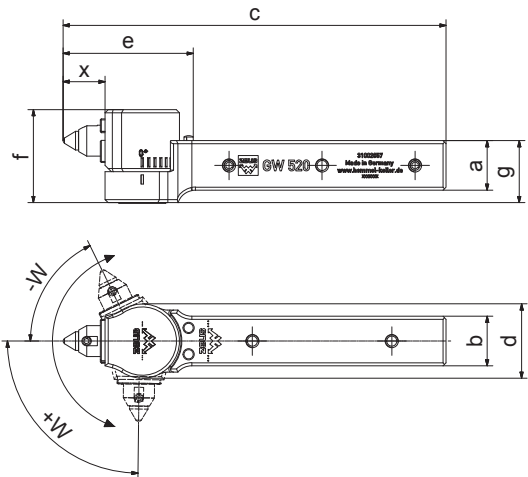
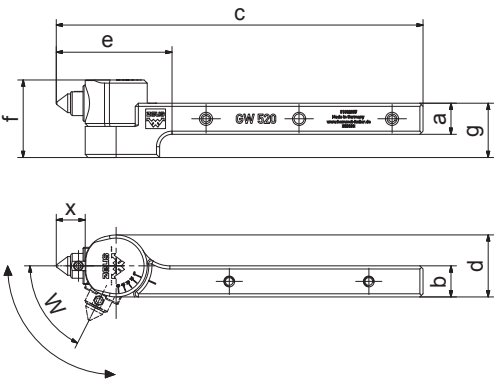
Recommendations

- Burnishing speed up to 200 m/min
- Feed rate up to 0.2 mm/U
- Workpiece measurement from 0.01 mm ($\sim R_z 10$) and 0.02 mm ($\sim R_z 20$)
- It is recommended to use a cooling lubricant

TOOL VERSIONS

| Order No. | Tool holder designation | Basic shaft [mm] | Dimensions [mm] | | | | | | | | Angle [°] | | Including shaft adapter [mm] |
|-----------|-------------------------|------------------|-----------------|----|-------|----|----|----|------|------|-----------|----|------------------------------|
| | | | a | b | c | d | e | f | g | x | +w | -w | |
| 31002893 | 520-10R | 10 x 10 | 10 | 10 | 118.5 | 20 | 36 | 25 | 17.5 | 9 | 90 | - | 12 x 12 |
| | | | | | | | | | | | | | 16 x 16 |
| 31002857 | 520-16U | 16 x 16 | 16 | 16 | 123.5 | 24 | 42 | 30 | 20 | 13.5 | 90 | 90 | 20 x 20 |
| | | | | | | | | | | | | | 25 x 25 |

Sets delivered without diamond tip



DIAMOND TIP VERSIONS

| Order No. | Tip radii [mm] | |
|-----------|----------------|--|
| 06TGW0008 | 0.4 | |
| 06TGW0009 | 0.6 | |
| 06TGW0010 | 0.8 | |
| 06TGW0011 | 1.0 | |

Application

The zeus burnishing tool is an all-rounder for all classic applications when burnishing surfaces – whether on cylindrical, conical, convex or concave surfaces. It is also possible to work on plane surfaces.





**zeus – a brand name of
Hommel+Keller**



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