

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.

on plane surfaces
SET 520

on convex surfaces
SET 510 | 520

on cylindrical surfaces
SET 510 | 520

on concave surfaces
SET 510 | 520

on conical surfaces
SET 510 | 520

to the shoulder
SET 520



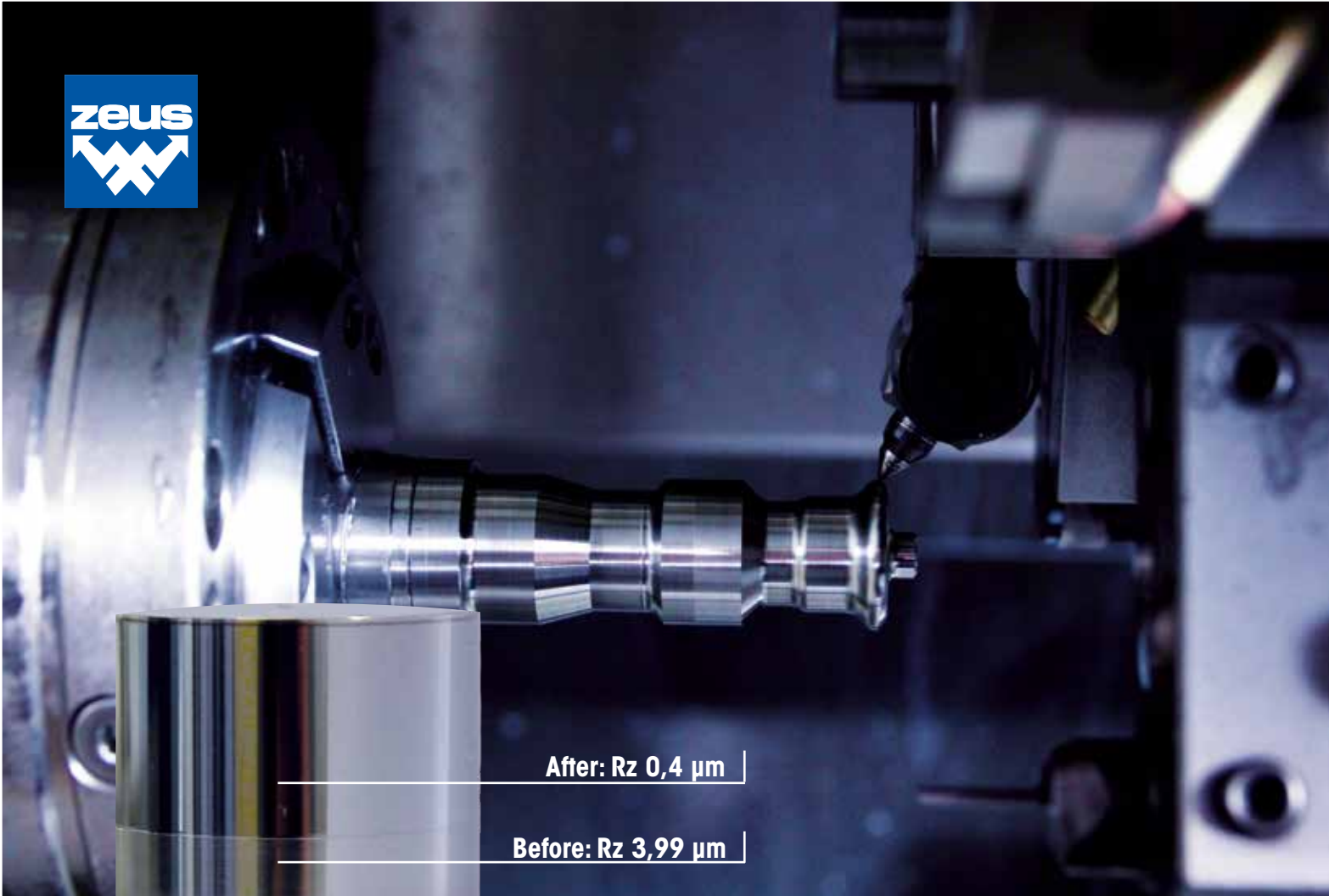
zeus Burnishing Tool

zeus – a brand of
Hommel+Keller



PRÄZISIONSWERKZEUGE

Hommel+Keller
Präzisionswerkzeuge GmbH
78554 Aldingen · Germany
Tel. +49 7424 9705-0
info@hommel-keller.de
www.hommel-keller.de



After: Rz 0,4 µm

Before: Rz 3,99 µm

The convincing benefits of the zeus burnishing tools:

- **TOP-CLASS SURFACE QUALITY** ($Rz < 1 \mu\text{m}$)
- **BURNISHING HIGH-STRENGTH MATERIALS (UP TO 65 HRC)**
- **TOP SURFACE QUALITY** - The cold deformation compresses and strengthens the surface. It is thus more resistant to wear and corrosion.
- **FASTER & COST-EFFECTIVE** - The zeus burnishing tool integrates the burnishing of a component into the machining process on a machine. It can replace subsequent processing steps such as sanding, polishing, superfinishing, honing or hardening.
- **FLEXIBLE** - zeus burnishing tools allow burnishing of larger diameters but also the smallest geometries or the internal burnishing of bores.
- **COMPACT DESIGN** - Can be used on machines with limited work space.

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

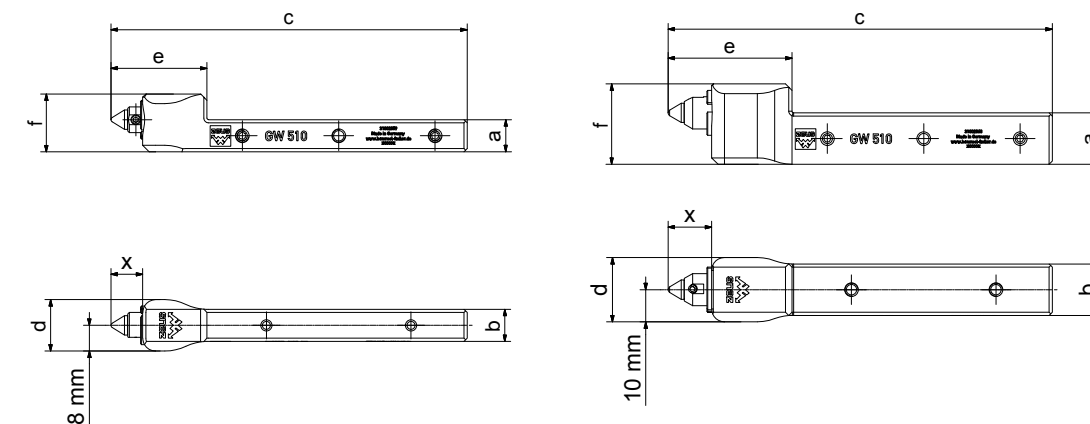
Recommendations

- Burnishing speed up to 200 m/min
- Feed rate up to 0.2 mm/U
- Workpiece measurement of 0.01 mm (~Rz 10) and 0.02 mm (~Rz 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

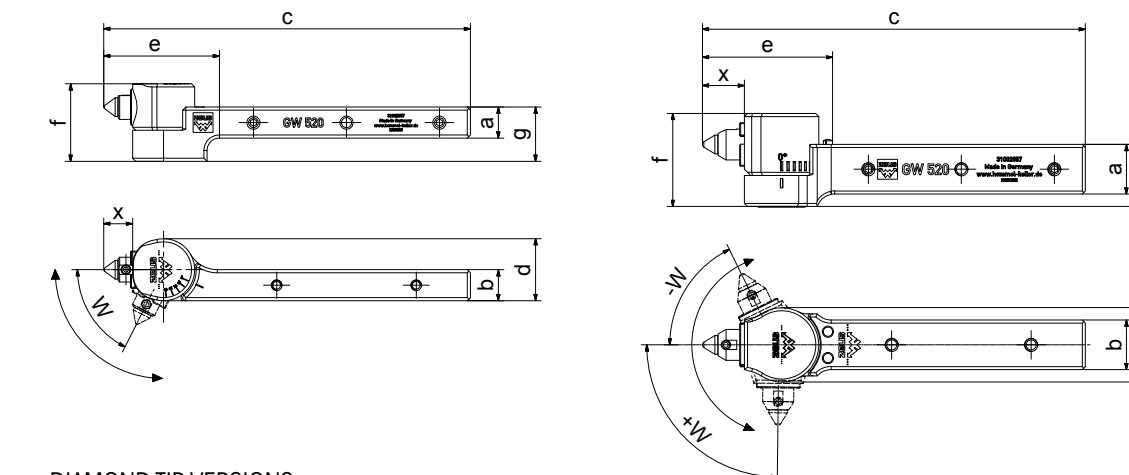
Recommendations

- Burnishing speed up to 200 m/min
- Feed rate up to 0.2 mm/U
- Workpiece measurement from 0.01 mm (~Rz 10) and 0.02 mm (~Rz 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	75	-	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	