

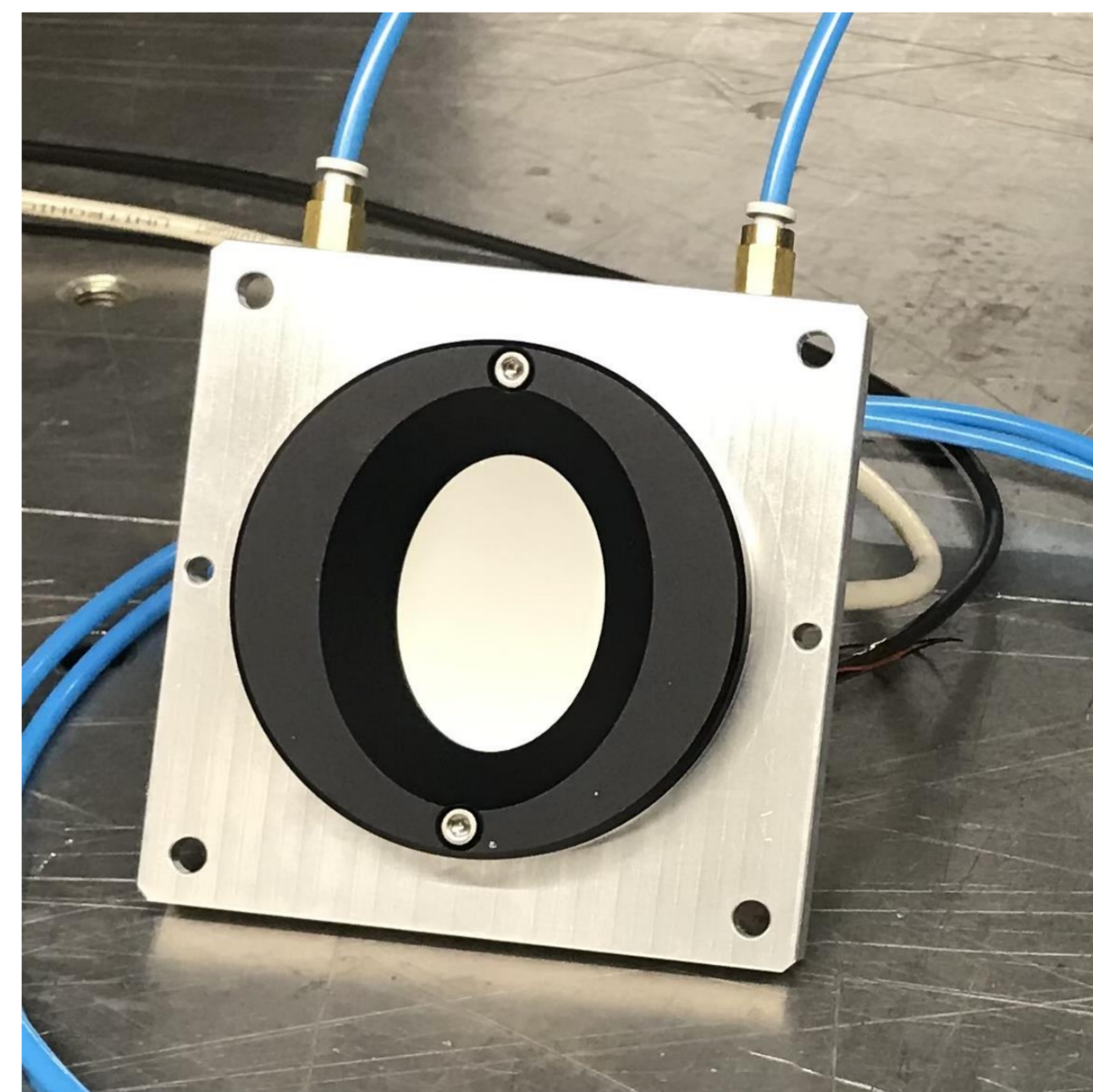
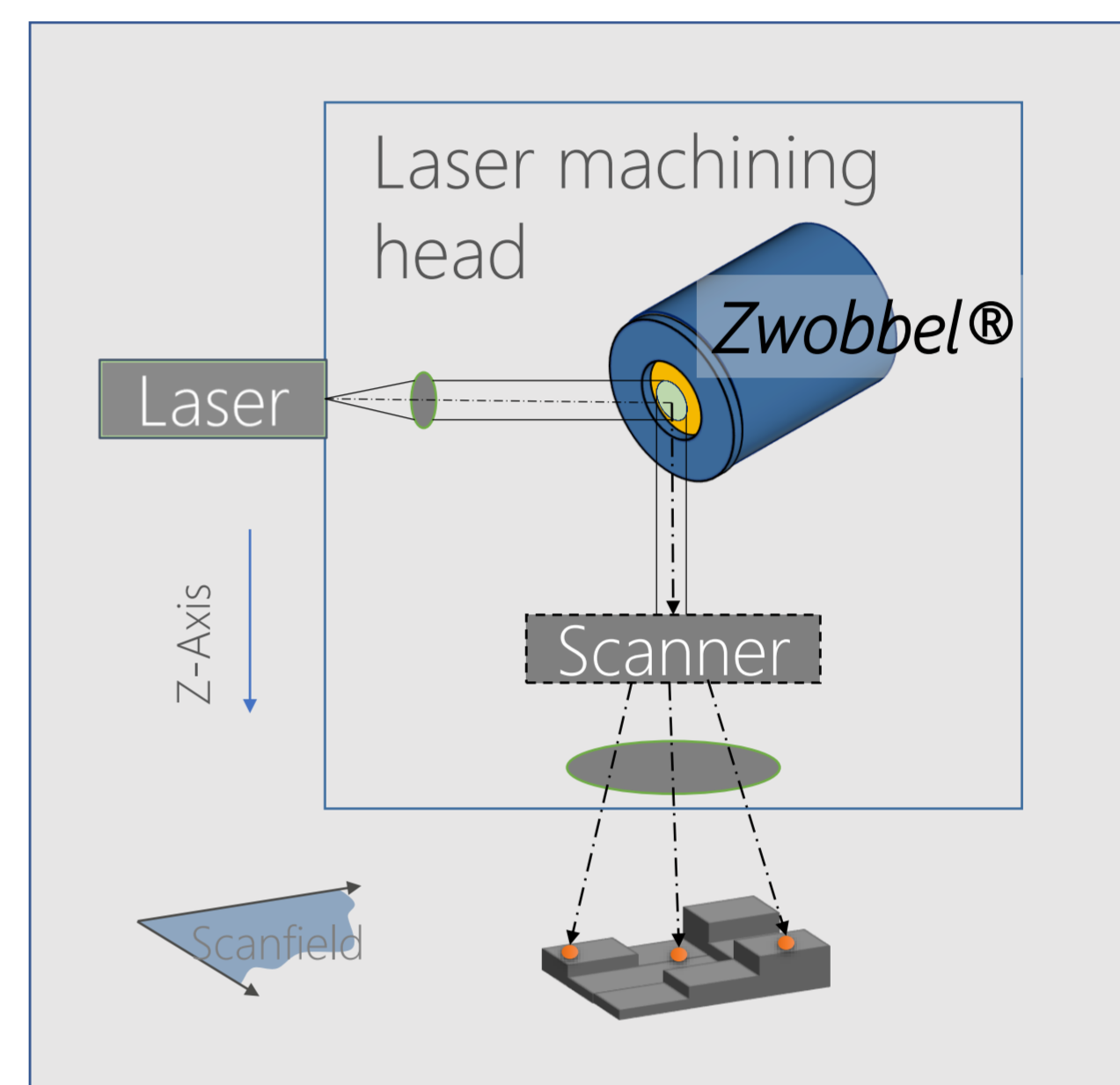
Home of the ZWOBBEL®

Our solution for fast focussing in laser machining:

- Replaces a 90° deflection mirror
- aperture: up to 24 mm
- Digital or analog interface
- 15 mm focus stroke in 2ms *)
- Compact design

Product options:

- Zwobbel® 1064 to 6kW CW
- Zwobbel® 532 for pulsed lasers
- Zwobbel® Box as complete solution with focusing lens and housing
- Customized versions for all laser wavelengths available



*) In combination with $f = 200$ mm - focusing lens

Your benefit: *Up to 40 % faster machining
higher machining rentability*

ROBUST AO

Home of the ZWOBBEL[®]

Technical specifications Zwobbel[®] – 1020

Wavelength	1020 nm – 1080 nm
Reflectance	99.99% in specified wavelength range
Clear Aperture	15 mm, 20 mm or 24 mm
Laser power, max.	6 kW
Full stroke speed	2 milliseconds
Wobble frequency	1 kHz
Focal shift	FL 200 mm (-0/+15) FL 500 mm (-0/+147)
Weight	550 g
Size	100 mm x 100 mm x 50 mm sealed housing
Analogue interface	0-5V, BNC
Cooling interface	tube Ø 4 mm water cooling preferred
Mounting interface	see here



Side view of the Zwobbel[®]-1020 with its low thickness of 50 mm.



Rear surface of the Zwobbel[®]-1020 with control and high voltage interfaces.

ROBUST AO

Home of the ZWOBBEL[®]

Technical specifications Zwobbel[®] – 532

Wavelength	532 nm
Reflectance	> 99.8 %
Clear Aperture	15 mm, 20 mm or 24 mm
Laser power, max.	pulsed, LIDT>18 J/cm ² (10 ns/1Hz)
Full stroke speed	2 milliseconds
Wobble frequency	1 kHz
Focal shift	FL 200 mm (-0/+15) FL 500 mm (-0/+147)
Weight	550 g
Size	100 mm x 100 mm x 50 mm sealed housing
Analogue interface	0-5V
Cooling interface	tube Ø 4 mm water cooling possible
Mounting interface	Details here



Side view of the Zwobbel[®]-532 with its low thickness of 50 mm.



Rear surface of the Zwobbel[®]-532 with control and high voltage interfaces.