



Need **FAST FOCUS** for your high power laser?

ZWOBBEL®

- L Particularly **dynamic focusing** for high-power 10kW lasers
- L 550g **light** and **compact** (100 mm x 100 mm x 60mm)
- L **Easy** to integrate

Innovation potential and applications

New applications often place special demands on hardware. Our wobble technology allows beam wobbling in the z-direction with frequencies up to 2000 Hz for dynamic beam shaping. As a result, dross-free cuts and speed advantages of up to 40% can be achieved in laser cutting without increasing the laser power. The profitability of the systems can thus be increased. Our Zwoebel® can also enable new innovative processes in laser welding and glass processing.

Installation options

Our Zwoebel® technology comes as a ready to use solution with all the necessary electronics, which can be set up at a distance of up to ten meters. An analog signal input (0-3V or 0-10V) is used to control the focus position.

Flange mounting with dowel pins is used for precision installation but 3-inch COTS mounts can also be used. Fluidic cooling ensures high-performance durability and consistent system performance.

Your Advantages

High focusing speeds in the smallest installation space with simultaneous performance stability are the advantages of Zwoebel technology. It is used as a 90° deflection mirror and in combination with a focusing lens of your choice, you can flexibly adjust the focusing in the z-direction. The module is available for wavelengths between 1020nm and 1080nm - other wavelengths are available on request.



Facts & Specifications

Zwobbel will be delivered as a set of

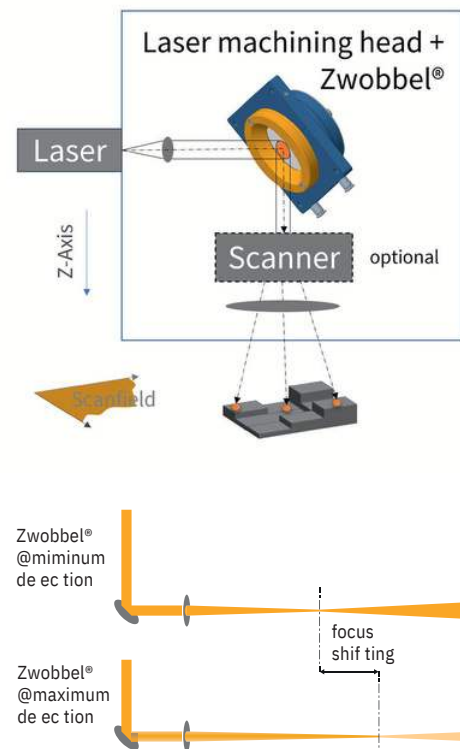
- »Zwobbel (Opto-mechanic)
- »ZwobbelSens (Controller)
- »ZwobbelDrive (Actuator supply)

Technical specification Zwobbel 1020

- »90° application
- »Aperture: between 10mm and up to 20 mm
- »Wavelength 1020 nm – 1080 nm
- »Analog interface
- »15 mm focus stroke in 2ms *
- »Oscillating focus freely selectable between 0 Hz and 2000 Hz
- »High power up to 10kW+ CW

On request

- »Zwobbel® 343 for UV lasers
- »Zwobbel® 10640 for CO2-Applications



Contact us now!

ROBUST AO GmbH
 Hans-Knöll-straße 6 · 07745 Jena
 +49 3641 554 180 · info@robustao.de

Up to **40 % faster**
 laser cutting and
 higher machining
 rentability

* In combination with f = 200 mm - focusing lens