

# ALO 100 | ALO 120 | ALO 120 micro

## LASER WELDING SYSTEM FOR MANUAL WELDING

If you want to weld long or bulky parts quickly, manually and flexibly, if you are looking for a simple load and want to work in the shielded laser safety area, the ALO is the ideal device for you.

The working chamber can be loaded via various, laser-safe openings: Through lateral slots you can position longer components in the processing room and then weld them in a laser-safe manner. Another passage at the bottom of the working chamber also allows loading from below. At the front, a large opening ensures easy access to the spacious welding chamber. The laser-proof leather curtain offers laser protection so that the ALO can be placed in any work environment.

The armrest is extremely comfortable - thus ensuring relaxed work. Again, we have paid much attention to a good ergonomics.

In the ALO 120 micro, the working chamber also has a T-slot for the fast inserting of long components, such as cables and sensors. A micromanipulator ensures the micrometer-accurate positioning of the components and the control for the pneumatic rotary axis\* is already integrated. The LED beam deflection unit provides a good illumination of the work area and the lens with focus adjustment a comfortable and fast setting of the correct focus position.

\*Option



ALO 100/120

With the ALO 100 we offer 100 W output power and 25 Hz pulse frequency available and with the ALO 120 even 120 W and 50 Hz, so you can use this model additionally for laser polishing.

The possibility to connect an external cooling system allows high frequency operation over a long period of time.

This system is optimal for manufacturers of sensors and micro components, for goldsmiths and dental laboratories and for anyone who wants to weld and polish small components manually quickly and easily.

## Technical data

	ALO 100	ALO 120	ALO 120 micro
<b>LASER</b>			
Laser crystal	Nd:YAG		
Wave Length	1064 nm		
Average power	100 W	120 W	120 W
Peak pulse power	7 kW	10 kW	10 kW
Pulse energy	60 J	95 J	95 J
Pulse frequency	Single pulse -25 Hz	-50 Hz	-50 Hz
Pulse duration	0.5 ms - 20 ms		
Welding spot Ø	0.2 mm - 2.0 mm		
Focus setting	integrated motoric		
Optical viewing system	Leica microscope attachment with eyepieces for glasses wearers, 10 × optional 16 ×		
Pulse shaping	3 preset pulse shapes		10 fixed/10 programmable
Programming memory	39 parameter sets saveable		> 50
Cooling air nozzle	integrated		
Protection gas supply	One fixed and one flexible protection gas nozzle, Can be locked and adjusted individually		
Exhaustion	integrated H 14		
Rotating axis control	manuel		programmable via SPS
<b>OPTIONS</b>			
Micro welding	○	○	○
Work chamber with T-slot	---	---	●
LED beam deflection unit	○	○	●
Controller unit rotating axis	○	○	●
Cooling connection	○	○	○
Rotating axis manual	○	○	○
Rotating axis pneumatic	---	---	○
Micromanipulator	○	○	○
--- Nor available ○ Optionally available ● Fitted as standard			



Rotating axis with manual chuck



Rotating axis with pneumatic chuck



Micromanipulator



Working chamber ALO 120 micro with T-Slot