

# VL 50 | ALS 100

## MANUAL WELDING LASER

These compact laser welding devices are suitable for demanding manual work and for tasks in small-series industrial production. Ideal for gold and silver, but also for ordinary steels.

The VL 50 bench laser welding device and the ALS 100 upright device offer 50 or 100 watts for high-performance beam behavior. They stand out for their consistent, powerful yet smooth welding behavior.

The spacious working chamber offers a very well-lighted work area. The ALS 100 is loaded through two side doors, and the VL 50 through the front flap.

Even the finest joints can be created with the optional micro welding option, and monitored through the stereo microscope.

**Thanks to the ergonomically designed housing, the well-arranged operating elements, keyboard, display and joystick, this manual welding laser lets you concentrate on your work – even for hours.**



VL 50

ALS 100



TECHNICAL DATA	VL 50	ALS 100	ALS 100 S
<b>LASER</b>			
Laser type / wave length	Nd:YAG, 1064 nm	Nd:YAG, 1064 nm	Nd:YAG, 1064 nm
Average power	60 W	100 W	100 W
Peak pulse power	7.5 kW	8 kW	10 kW
Pulse energy	50 J	60 J	95 J
Pulse duration	0.5 – 20 ms		
Pulse frequency	Single pulse - 25 Hz		
Operating mode	pulsed		
Welding spot Ø	0.2 – 2.0 mm, continuously adjustable		
Focusing objective	120 mm		
Pulse shaping	3 preset pulse shapes		
Display and operation	Display with membrane keyboard Touchscreen optional (VL 50)		
OBSERVATION LENS	SMK (Leica binocular microscope attachment optional)	Leica microscope attachment with eyepieces for glasses wearers, 10x Optional 16x	
<b>WORKING CHAMBER</b>			
WxDxH in mm	475 x 232 x 192	488 x 308 x 209	488 x 308 x 209
Max. workpiece height in mm	88 (200 with recessed working chamber)	105 (165 with recessed working chamber)	105 (165 with recessed working chamber)
Extraction	integrated (H14)	integrated (H14)	integrated (H14)
<b>EXTERNAL DIMENSIONS</b>			
WxDxH in mm	510 x 645 x 430 mm	570 x 800 x 1260 mm	570 x 800 x 1260 mm
Weight	50 kg	100 kg	100 kg
<b>EXTERNAL CONNECTIONS</b>			
Electrical connection	200 - 240 V / 50-60 Hz / 10 A	200 - 240 V / 50-60 Hz / 16 A	200 - 240 V / 50-60 Hz / 16 A
OPTIONS	Micro welding function TV system for demonstrating and observing the welding process Ergo wedge Halogen dimmer LED ring light	50 Hz technology	50 Hz technology