

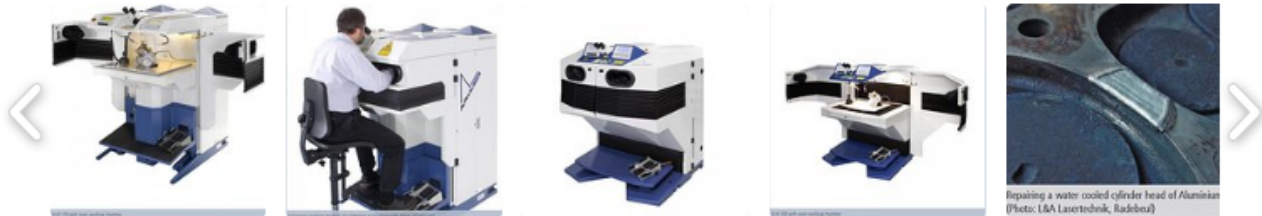


ALW Vario Laser Welder

Application: Mold and tool manufacturing, thin sheet processing, medical technology, sensor production.

The "gold" standard of glove box laser welding machines for adding material and repair welding in mold and tool manufacturing.

- The 3-axis positioning system (4th axis optional) allows a controlled movement of tools and parts up to 880 Lbs. underneath the laser beam.
- The working angle of the laser beam can be set individually.
- PC control software to automate small batch production.
- Constant Power Control (CPC) offers a more efficient absorption of the laser energy by the material.
- Bottom plate with adjustable height for foot-switch.
- The ALW with 100 W or 150 W are mainly used for repair and metal deposit on tools and molds.
- The new ALW 200 W or 300 W laser welders meets the increased demands of industries and trades to carry out larger laser welding jobs.



ALW Technical Data	ALW 100	ALW 150	ALW 200	ALW 300
Average Power	100 W	150 W	200 W	300 W
Peak Pulse Power	9 kW	10 kW	9 kW	9 kW
Pulse Energy	75 J	100 J	90 J	
Pulse Frequency	Single Pulse - 15 Hz	Single Pulse - 20 Hz	Single Pulse - 100 Hz	
Pulse Duration	0.5 - 20 ms			
Welding Spot Diameter	0.2 - 2.0 mm			
Pulse Shaping	Adjustable power shaping with laser pulse			
Viewing System	Leica Stereo Microscopes			
Working Chamber Dimensions (L x W x H) mm	800 x 850 x 500		850 x 1080 x 450	
Working Surface (W x D) mm	600 x 600		600 x 475	
Max. Workpiece Weight	350 kg		400 kg	
Workpiece Motion	Motorized via joystick			
Scope of Motion (X, Y, Z) mm	(X, Y) 180 x 180 x (Z) 380		(X, Y) 490 x 400 x (Z) 350	
Mechanical Dimensions (L x W x H) mm	1220 x 920 x 1570		1400 x 1190 x 1500	
Approx. Weight	500 kg		870 kg	
Electrical Connection	3 phase 400 V / 50 - 60 Hz / 3 phase 60 Amp			

Available Options:

- Turn and Tilt optics
- Micro Welding aperture for beam diameter $\phi < 100 \mu\text{m}$
- Tilttable turn table with chuck for horizontal to vertical rotation
- Magnetic workpiece bracket for free positioning of workpieces
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- TV system for demonstrating and observing the welding process
- Connection for regulated external cooling