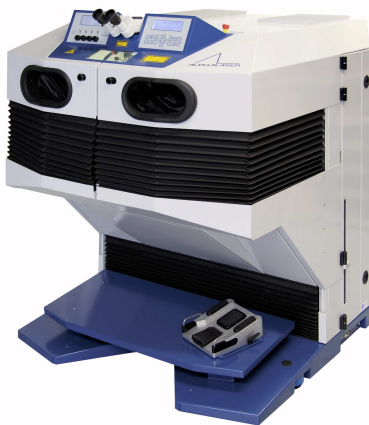
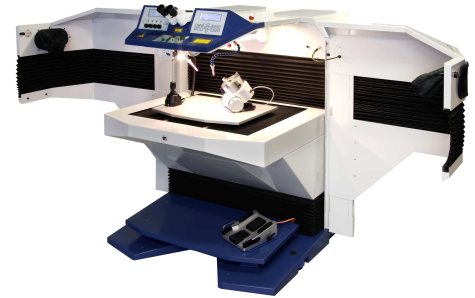


### Closed Laser welding system

Developed as workstation to sit at, the ALW 300 allows concentrated working without fatigue even over long hours. Its excellent ergonomics are owed to the well-positioning of the foot control, the keyboard, the display and the joystick. An extended axes range now offers a path of 500 mm x 400 mm x 350 mm in x, y and z. Up to 300 Watts average power permits the use of filler metals with bigger diameters and offers a continuously homogeneous fusion with the base material. The digital control allows finest positioning of the work piece in 4-axis x, y, z and r (rotary axis is optional) either in manual operation (by joystick) or semi automatically with preselected speed of the motion axes or in automatic mode with the unique WIN-Laser "UCC"-software which adapts the motion system to the work piece geometry. By using the turn and tilt optics the beam deflection can be increased by up to 40° from the vertical position. The integrated LED-ring illumination provides best visibility in the working area.

From competent advice in the selection of the appropriate laser system, for your business, to quick response times by our fully trained technical support team. Our team of application engineers will elaborate process parameters and complete solutions for the individual problems of our customers



Technical Data	ALW 200	ALW 300
<b>Laser</b>		
Laser crystal	Nd: YAG	Nd: YAG
Wavelength	1064 nm	1064 nm
Average power	200 W	300 W
Peak pulse power	9 kW	9 kW
Pulse energy	90 J	90 J
Pulse duration	0,5 – 20 ms	0,5 – 20 ms
Pulse frequency	single/continuous pulse -100 Hz (automatic operation) - 25 Hz (under observation)	single/continuous pulse -100 Hz (automatic operation) - 25 Hz (under observation)
Welding spot Ø	0,2 – 2 mm	0,2 – 2 mm
Pulse shaping	adjustable power-shaping within the laser pulse	
Machine axes	3 or 4	
Working area (X, Y, Z)	500 x 400 x 350 mm	
<b>Viewing system</b>	Leica Ergotubus (including Ergo Wedge) with ocular for wearers of glasses	
<b>Mechanical dimensions</b>		
L x W x H	1400 x 1190 x 1500 mm	1400 x 1190 x 1500 mm
Weight	approx. 870 kg	Approx. .8700 kg
<b>Electrical connection</b>	3 x 400 V, 50/60 Hz, 3 x 16 A	3 x 400 V, 50/60 Hz, 3 x 16 A
<b>Options</b>	<ul style="list-style-type: none"> <li>- Turn and tilt optics</li> <li>- Micro-Welding aperture for welding spot-Ø &gt; 100µm</li> <li>- Tilttable turntable with chuck for free positioning of workpieces</li> <li>- Magnetic workpiece bracket for free positioning of workpieces</li> <li>- TV system for demonstrating and observing the welding process</li> <li>- Connection for regulated external cooling</li> </ul>	