

ALW

ERGONOMIC SEATED WORKPLACE

ALW 200/300

The movement system's stability is an important criterion for optimal welding results. Only this can ensure exact focusing. The ALW's stable steel construction ensures a highly precise movement mechanism, so that the ALW 200/300 is ideal for automatic applications.

During welding, the workpieces can be moved precisely on 3 axes (X, Y and Z). In addition, there is an optional rotating axis for circular welding.

Even demanding materials like aluminum, precious metals, titanium or sensitive alloys can be processed easily with the powerful ALW 200/300.

ALW 100/150

With 100 or 150 watts, this ALW is mainly used when the primary tasks include repairs and deposition welding in tool and mold manufacturing, but programmed welding is not required.



ALW 100 open



ALW 200



TECHNICAL DATA	ALW 100	ALW 150	ALW 200	ALW 300
LASER				
Laser type / wave length	Nd:YAG, 1064 nm	Nd:YAG, 1064 nm:	Nd:YAG, 1064 nm	Nd:YAG, 1064 nm
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	90 J
Pulse duration	0.5 - 20 ms			
Pulse frequency	Single pulse - 15 Hz	Single pulse - 20 Hz	Single pulse - 100 Hz	Single pulse - 100 Hz
Operating mode	Pulsed			
Welding spot Ø	0.2 - 2.0 mm With micro welding function (optional) < 100 µm			
Focusing objective	150 mm, further according to lens data sheet			
Pulse shaping	Adjustability of power curve within a laser pulse			
Display and operation	Display with membrane keyboard Laser parameters can also be set using a multifunctional footswitch		Additionally through WINLaserNC software	
OBSERVATION LENS	Leica trinocular microscope attachment with eyepieces for use with eyeglasses, 10x, Optional 16x			
WORKING CHAMBER				
WxDxH in mm	800 x 850 x 550	800 x 850 x 550	1080 x 850 x 450	1080 x 850 x 450
Mounting plate (WxD) in mm	600 x 600	600 x 600	600 x 475	600 x 475
workpiece weight	350 kg max., central	350 kg max., central	400 kg max., central	400 kg max., central
Workpiece movement	Motorized through joystick	Motorized through joystick	Motorized through joystick	Motorized through joystick
Movement range (X, Y, Z)	180 mm x 180 mm x 380 mm	180 mm x 180 mm x 380 mm	490 mm x 400 mm x 350 mm	490 mm x 400 mm x 350 mm
EXTERNAL DIMENSIONS				
WxDxH in mm	920 x 1220 x 1570	920 x 1220 x 1570	1190 x 1400 x 1500	1190 x 1400 x 1500
Weight	500 kg	500 kg	870 kg	870 kg
ELECTRICAL CONNECTION				
Electrical connection	3 x 400 V / 50-60 Hz / 3 x 16 A	3 x 400 V / 50-60 Hz / 3 x 16 A	3 x 400 V / 50-60 Hz / 3 x 16 A	3 x 400 V / 50-60 Hz / 3 x 16 A
Extreme cooling			Optional	Optional
Extraction	Integrated	Integrated	Integrated	Integrated
OPTIONS				
	Coaxial illumination Rotary axis module Micro welding function Ergo wedge TV system for demonstrating and observing the welding process		Turn and tilt objective Rotary axis module Micro welding function Ergo wedge TV system for demonstrating and observing the welding process	