laser technology
tcms

ALW 200 | ALW 300

ERGONOMIC SEATED WORKPLACE

DESCTIPTION

The ALW is a comfortable, ergonomic seated workstation that offers plenty of legroom.
The observation optics offer a variable viewing angle in the range 10°-50° and thus enables comfortable working while sitting or standing.

Demanding materials such as aluminum, copper alloys, precious metals, titanium and sensitive alloys can be easily welded with the powerful
ALW 200/300. With the optional fine welding function, you can reduce the spot diameter to 0.1 mm.

This welding laser is ideally suited for series production. The NC software is integrated. Programming and teaching takes place directly on the 12.1“ touchscreen display. Additional I/Os are
also available. In addition, an automatic wire feeder. For toolmaking tasks, the functions „UCS“ (user coordinate system) and „individual teaching“ are very helpful.

The ALW has 3 linear movement axes, whereby the vertical Z-axis lifts up to 400 kg. The joystick for axis movement in X, Y, Z and R reacts very precisely. It is located in the working chamber, but
can also be attached to the outside of the housing - just as your task requires. An axis of rotation for circular welds is optionally available. The working chamber offers plenty of space and wide-opening doors make loading simple.

The closed, laser-safe housing makes the ALW a laser-protected workplace that can be used in the normal production environment without additional safety precautions.

The ALW meets the high security requirements for performance level d.

ALW 300

ALW 300 open

TECHNICAL DATA

	ALW 200	ALW 300
LASER		
Laser type/wave length	Nd:YAG, 1064 nm	Nd:YAG, 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 pulse -100 Hz	Single pulse -100 Hz
Operating mode	pulsed	pulsed
Welding spot Ø	0,2-2,0 mm	0,2-2,0 mm
Focusing objective	150 mm, further according to lens data sheet	
Pulse shaping	Adjustability of power curve within a laser pulse	
Display and operation	12,1“ “Touchscreen-Display	
OBSERVATION LENS	Leica Ergotobus with eyepieces for use with eyeglasses	
WORKING CHAMBER		
W × D × H	1080 × 850 × 450 mm	1080 × 850 × 450 mm
Mounting plate (W × D)	600 × 475 mm	600 × 475 mm
workpiece weight	400 kg max., central	400 kg max., central
Workpiece movement	Motorized through joystick	Motorized through joystick
Movement range (X, Y, Z)	478 × 340 × 332 mm	478 × 340 × 332 mm
EXTERNAL DIMENSIONS		
W × D × H	1,190 × 1,400 × 1,740 mm (with display folded 1,500 mm)	
Weight	870 kg	907 kg
ELECTRICAL CONNECTION	3 × 400 V / 50–60 Hz / 3 × 16 A	
OPTIONS	Turn and tilt objective Rotating axis Microwelding device Ergo wedge Camera system for demonstrating and observing the welding process Crossjet External cooling (regulated or unregulated)	

Manuell

Automatik

Pulsform

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