

ALM

THE NO. 1 MOBILE LASER

Extremely short set-up times allow a vast range of machine components, pressing tools and large molds to be repaired and modified with the ALM at any imaginable location.

The ALM's versatility is impressive. The workpiece can be transported to the laser, or the laser to the workpiece. This ensures mobility within the company or at the customer's.

The ALM is air cooled and requires no additional cooling system. Just move the laser to the workpiece, secure the laser area, aim the slim laser arm at the weld, and start welding.

The hydraulic brakes fix the laser beam exactly at the desired work position. Welding can be done manually using a joystick, semi-automatically, or using an external operating unit.

Additional flexibility is possible with the unique turn and tilt objective, which allows the laser beam to be moved continuously up to 40° from vertical to any direction.



ALM

Options

- Turn and tilt objective
- Rotary axis module with chuck, tiltable, for horizontal to vertical rotation
- External operating unit (remote control)
- TV system for demonstrating and observing the welding process
- Ergo wedge

Technical data

	ALM 200	ALM 250	ALM 300
LASER			
Laser type/wave length	Nd:YAG, 1,064 nm	Nd:YAG, 1,064 nm	Nd:YAG, 1,064 nm
Average power	200 W	250 W	300 W
Peak pulse power	9 kW	9 kW	9 kW
Pulse energy	90 J	90 J	90 J
Pulse duration	0.5–20 ms		
Pulse frequency	Single pulse–100 Hz		
Operating mode	Pulsed		
Welding spot Ø	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	Display with membrane keyboard Laser parameters can also be set using a multifunctional footswitch, motor controls can be set through a touchscreen or optional external operating unit		
OBSERVATION LENS	Leica microscope attachment with eyepieces for glasses wearers 10 ×, optional 16 ×		
WORK AREA	The processing head can be freely positioned in the space and additionally moved using a joystick		
Movement speed (X, Y, Z)	0–25 mm/s		
Movement range (X, Y, Z)	120 × 110 × 800 mm		
Lowest working point	530 mm		
Highest working point	1,590 mm		
Arm deflection	1,300 mm		
EXTERNAL DIMENSIONS			
W × D × H	730 × 1,410 × 1,585 mm		
Weight	320 kg		
EXTERNAL CONNECTIONS			
Electrical connection	3 × 400 V / 50–60 Hz / 3 × 16 A		
External cooling	Prepared	Prepared	Prepared

ALM with small bench

