



MACO mobile

The unique mobile one

The MACO mobile welding laser unit opens up new application areas for joining and repair welding. Whether on site at the customer's plant or in-house, this unit allows unprecedented mobility. It is especially suitable for working on large moulds, dies, housings and machine parts of all sizes. The laser arm can be positioned flexibly with millimetre accuracy. A turn-and-tilt processing head enables working on any point of the workpiece, even in deep cavities. During welding, the arm can be moved with a joystick, semi-automatically, or under remote control. The optional swivelling optics support alignment of the laser beam on the workpiece, this assuring an ergonomically favourable working position even with complex cavity shapes.

Technical data	MACO 150 mobile	MACO 200 mobile
Laser		
Wavelength	1064 nm	1064 nm
Average power	150 W	200 W
Pulse energy	100 mJ - 100 J	100 mJ - 100 J
Peak pulse power	10 kW	9 kW
Pulse duration	0.5 - 20 ms	0.5 - 20 ms
Pulse frequency	Single pulse - 20/30 Hz	
Welding spot Ø	0,2 - 2,0 mm	
Focussing lens	150 mm	150 mm
Pulse shaping	adjustable power-shaping within a laser pulse	
Control	user-specific operation with up to 128 parameter sets	
Viewing optics	Leica binocular with eyepieces for spectacle wearers, tiltable and rotatable	
Working range	open system	
	motorised motion system	
	Movement of the arm/processing head can be carried out manually or motor driven under joystick control	
	x,y: 120 x 120 mm	
	z: 1200 mm	
Lowest working position	450 mm	
Highest working position	1500 mm	
Arm travel	1300 mm	
Mechanical dimensions		
L x W x H	1400 x 730 x 1505 mm	1400 x 730 x 1505 mm
Weight	approx. 290 kg	approx. 290 kg
Electrical supply	3 x 400 V, 50-60 Hz, 3 x 16 A, 8 kW	
Cooling	air cooled with internal cooling water circuit	
Options	<ul style="list-style-type: none"> > Turn-and-tilt optics > Tiltable turntable with chuck for horizontal to vertical rotation > Remote control > TV system for demonstrating and observing the welding process 	