



Photo: LAWITEX GmbH, Langenfeld

# ALM

Whether on the customer site or in your own workshop, the ALM offers you new, universal possibilities of use and greatest flexibility. Particularly large moulds, tools, casings and machine components of any size can be processed in an uncomplicated manner. It is possible to position the laser arm quickly and flexibly with millimetre accuracy. During the welding process, the arm can be steered per joystick, semi-automatically or by remote control. The turn-and-tilt processing head makes working possible at any point of the workpiece, even at deep lying spots. With the optional turn-and-tilt-optics the beam deflection can be set, infinitely variable, up to 40° from the vertical.



Mobile repair welding within the machine on a die-casting mould (Photo: Jutz Lasertechnik)



Repair welding (Photo: PML Lasertechnik, Nohra)

Technical data	ALM 150	ALM 200
<b>Laser</b>		
Average power	150 W	200 W
Peak pulse power	10 kW	9 kW
Pulse energy	100 J	90 J
Pulse duration	0,5 – 20 ms	
Pulse frequency	Single pulse up to 20 Hz	
Welding spot diameter	0,2 – 2,0 mm	
Focusing optics	150 mm	
Pulse shaping	Adjustable power-shaping within a laser pulse	
Control	User-specific operation with up to 128 data records	
<b>Viewing system</b>		
	Leica binoculars with oculars suitable for wearers of glasses, turn-and-tiltable	
<b>Working range</b>		
	Open system	
	Motorised motion system	
	Movement of the arm/processing head can be carried out manually or motor driven under joystick control	
X, Y, Z in mm	145 x 120 x 1300	
Lowest working point in mm	450	
Highest working point in mm	1500	
Arm travel in mm	1300	
<b>Mechanical dimensions</b>		
LxWxH in mm	1400 x 730 x 1505	
Weight	345 kg	
<b>Electrical connection</b>		
	3 x 400 V / 50–60 Hz / 3 x 16 A	
<b>Options</b>		
	> Turn-and-tilt optics	
	> Tilttable turntable with chuck for horizontal to vertical rotation	
	> Remote control	
	> TV system for demonstrating and observing the welding process	