

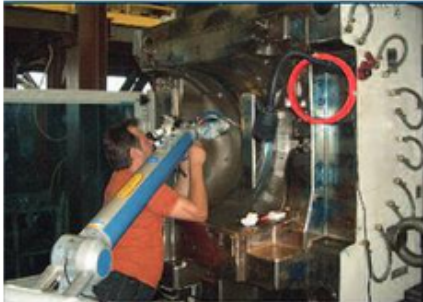
# ALM

## Mobile Laser Welder



**Application:** Deposit welding, welding of molds of any sizes, repair of machine parts, turbine blades.

- The ALM mobile laser welder was first introduced in 2003.
- Air cooled and does not require an external unit.
- Optional turn and tilt objective allows for unconstrained working. Ideally suited for working in difficult to reach areas. With this objective, it is possible to steer beam from vertical up to a 40° angle within the entire 360° swivel range.



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



Repair welding (Photo: PML Lasertechnik, Nohra)

Technical data	ALM 200 DC	NEW: ALM 200	NEW: ALM 250
<b>Laser</b>			
Average power	200 W	200 W	250 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 up to 20 Hz	Single pulse up to 100 Hz	Single pulse up to 100 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	User-specific operation with up to 39 data records with up to 128 data records	
<b>Viewing system</b>			
Leica binoculars with oculars suitable for wearers of glasses			
<b>Working range</b>			
Movement of the arm/processing head can be carried out manually or motor driven under joystick control			
Speed of motion (X, Y, Z)	0 – 2.5 mm/s	0 – 25 mm/s	0 – 25 mm/s
X, Y in mm	145 x 120		
Z in mm	1300		
Lowest working point in mm	450	510	
Highest working point in mm	1500	1560	
Arm travel in mm	1300	1300	
<b>Mechanical dimensions</b>			
LxWxH in mm	1400 x 672 x 1505	1410 x 730 x 1585	
Weight	290 kg	320 kg	320 kg
<b>Electrical connection</b>			
3 x 400 V / 50–60 Hz / 3 x 16 A			
<b>Options</b>			
<ul style="list-style-type: none"> <li>&gt; Turn-and-tilt optics</li> <li>&gt; Tilttable turntable with chuck for horizontal to vertical rotation</li> <li>&gt; Remote control</li> <li>&gt; TV system for demonstrating and observing the welding process</li> </ul>			