



compact

Photo: L&A Lasertechnik, Radebeul

ALV

The compact laser machine ALV with the laser proof casing is used for fine welding work and for deposit welding. Its advantages become visible in tool and mould construction, in sensor manufacturing and in medical technology. The ALV offers three possibilities for processing: manual welding by joystick, semi-automatic welding and fully automatic welding by means of WINLaserNC-Software. In addition, the worktable's large vertical scope enables processing of larger tools and moulds.



Welding in the membrane of a pressure sensor



Wind wheel production
(Photo FSG Fernsteuer Mess- und Regeltechnik GmbH)

Technical data	ALV 100	ALV 150
Laser		
Average power	100 W	150 W
Pulse energy	75 J	75 J
Peak pulse power	9 kW	9 kW
Pulse duration	0,5 – 20 ms	
Pulse frequency	Single pulse –15 Hz	– 20 Hz
Welding spot diameter	0,2 – 2,0 mm, infinitely variable settings	
Focusing lens	150 mm	
Pulse shaping	Adjustable power-shaping within a laser pulse	
Control	User-specific operation with up to 128 data records	
Viewing system		
	Leica binoculars with oculars suitable for wearers of glasses	
Working chamber		
LxWxH in mm	590 x 450 x 550	
Working surface (WxD) in mm	360 x 335	
Max. workpiece weight	50 kg, centrally positioned	
Workpiece motion	motorized via joystick	
Scope of motion	z: 250 mm x, y: 100 x 100 mm	
Mechanical dimensions		
LxWxH in mm	1010 x 650 x 1350	
Weight	330 kg	
Electrical connection		
	200–240 V / 50–60 Hz / 16 A	3 x 400 V / 50–60 Hz / 3 x 16 A
Options		
	> digital version for fully automatic CNC-welding with programming, Teach-in or CAD-data input > Micro-welding aperture for welding spot-Ø < 100µm > Multi functional foot pedal for setting of the laser parameters > Tiltable turntable with chuck for horizontal to vertical rotation > Coaxial lights for optimum lighting of workpiece cavities > TV system for demonstrating and observing the welding process	