

AL-IN 150 / 200

LASER WELDING MACHINE AL WITH MOVEMENT SYSTEM AS SET

The AL-IN is available with the Nd: YAG laser sources 150 W or 200 W. Standard is a fixed objective with 150 mm focal length. Optionally, the turn and tilt objective or the perpendicular objective with LED ring light is possible, too. The 200 W laser provides a connection for an unregulated, external cooling.

The movement system is operated via a novel control box. This control box is mounted on top of the supply unit of the laser AL. The welding process is usually done with a joystick but can also be carried out semi-automatic or fully automatically.

The work pieces can be positioned in front of the movement system, either on a worktable or directly on the pallet truck.

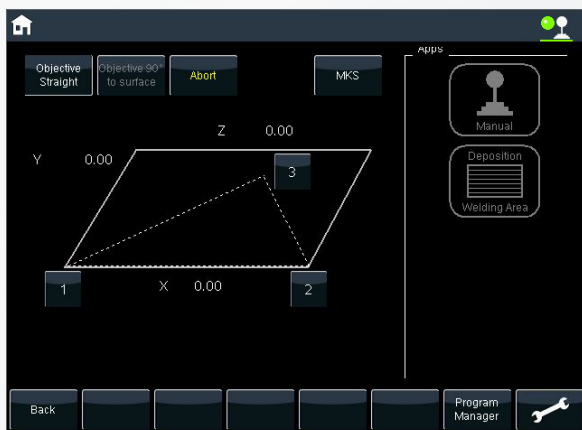
Optionally a tabletop is available.



New functions:

- UCS – User-Coordinate-System
- Apps for a surface areas or for rotary parts
- Control of the AL wire feeder





Possible Options:

- 600-0351D.U Turn and tilt objective
- 600-0381B.U Perpendicular objective with LED ring light
- 701-0148A Ergo wedge
- 700-0633A Tabletop with inclined stand
- Separate vertically adjustable table
- 700-1440A Rotary axis with chuck

Technical Data

LASER SYSTEM	AL-IN 150	AL-IN 200
Article No.:	000-0633A	000-3183A
LASER		
Laser type/Wave length	Nd:YAG, 1064 nm	Nd:YAG, 1064 nm
Average power	150 W	200 W
Peak pulse power	9 kW	9 kW
Pulse energy	75 J	90 J
Pulse duration	0,5 - 20 ms	0,5 - 20 ms
Pulse frequency	-100 Hz	-100 Hz
Operating mode	Pulsed	Pulsed
Welding spot ø	0,2 - 2,0 mm	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 & operation	Display with membrane keyboard. 2 step footswitch, no Interface for external triggering available	
OBSERVATION LENS	Leica microscope attachment with eyepieces for glasses wearers, 10×, Optional 16×.	
POWER SUPPLY UNIT LASER AL		
W × D × H (basic component)	820 × 400 × 910 mm	820 × 400 × 910 mm
Weight	120 kg	120 kg
LASER BEAM SOURCE		
With focusing unit (length × Ø)	900 × 120 mm	1100 × 120 mm
Weight	approx. 18 kg	approx. 20 kg
ELECTRICAL CONNECTION	3 × 400 V / 50-60 Hz / 3 × 16 A	3 × 400 V / 50-60 Hz / 3 × 16 A
OPTIONS	Turn and tilt objective	
	Rotary axis module with chuck, tiltable, for horizontal to vertical rotation	
	TV system for demonstrating and observing the welding process	
	Ergo wedge	

MOVEMENT SYSTEM AND CONTROL BOX		
EXTERNAL DIMENSIONS	Movement system	Control box with touch
W × D × H	950 × 1250 × 850 mm	600 × 325 × 212
Weight	230 kg	14 kg
WORK AREA		
Machine axes	X, Y, Z, rotary axis optional	
Movement speed X, Y, Z	max. 25 mm/s	
Movement range X, Y, Z	400 × 210 × 300 mm	
CONNECTIONS		
Electrical connection	200 - 240 V / 50 - 60 Hz / 16 A	200 - 240 V / 50 - 60 Hz / 16 A
External connection	Emergency stop switch connection AL connection rotary axis laser wire feed system AL	
OPERATION	Joystick	Touch Display 10"
OPTIONS	Table top with inclined stand (700-0633A)	
	separate, vertically adjustable table	
	Rotary axis with chuck (700-1440A)	