

LIGHT BEAM
- economic -

Semi-automated laser soldering station



- *40/60 W diode laser*
- *3 linear axes (stepper motor) T-axis optional*
- *Working area 395x300x140 mm*
- *PC-control*
- *programming system WinControl*
- *enclosed working area (laser safety ref. to CE)*

Soldering station economic A400L

The economic A400L is an universal, computer-guided desktop robot with three axes. The device is especially suitable for process evaluation of new products, but also for the production of small to medium sized lots.

The housing is laser-tight and the automatic front door is integrated into the interlock circuit of the laser.

The control of the entire machine is an industrial PC. The respective machining processes are covered by their own micro-controllers. The decentralized control approach relieves the PC control of the entire module and guarantees the real time requirements for the process.

The PC control allows a simple and comfortable administration of the process parameters and programs. Today's manufacturing flexibility and short product cycles require universal production device that can be adapted quickly and cost-effective for different tasks.

Technical Specifications

Positioning:		A400	Controls <ul style="list-style-type: none"> • PC including 3.5" FDD, HDD, CD, 19"-TFT • for 3 stepper motors up to 3.75 A • T-axis optional • resolution 50,000 micro steps • digital inputs 10-30 V • digital outputs 24 V, 0.5 A
Working range:	x-axis	395 mm	
	y-axis	300 mm	
	z-axis	140 mm	
Working table:	(x, y)	600 x 375 mm	
Dimensions:	w x d x h	710 x 820 x 750 mm	
Diode laser		40W / 60W	

Laser Soldering

The soldering is done with a diode laser. The laser diode generates the laser beam with a wavelength of 980 nm. The laser diodes are actively cooled with peltier elements. With highly flexible optical fibers of the beam is led to the soldering head and focused there with a optic. About the laser output (400 microns), the optical fiber of (400/600 microns) and optics (1: 1/1: 2/1: 3) can be optimally coordinated with the respective application of the laser beam. Depending on the application are suitable 3 variants.

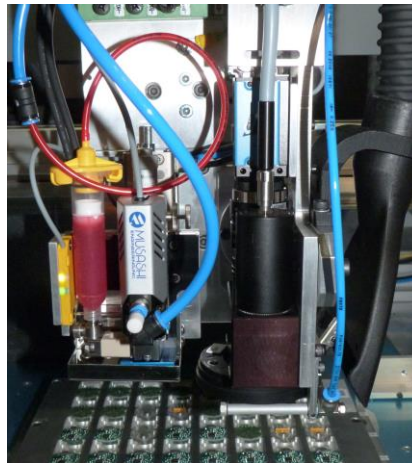
EcoA400L-LS Laser with AirPulseDispenser



Economic A400L
3 axis (XYZ)
IPC with WinControl
compact laser control unit
single optic
external camera
SuperSIGMA Dispenser
Z-stroke for Dispenser

Option power meter

EcoA400L-LJ Laser with AeroJet



Economic A400L
3 axis (XYZ)
IPC with WinControl
compact laser control unit
single optic
external camera
AeroJet with Controller
ThermoController

Option power meter

EcoA400L-LL Laser with SolderWireFeeder



Economic A400L
4 axis (XYZT)
IPC with WinControl
compact laser control unit
single optic
SolderWireFeeder with Controller