


## SINAX L-50

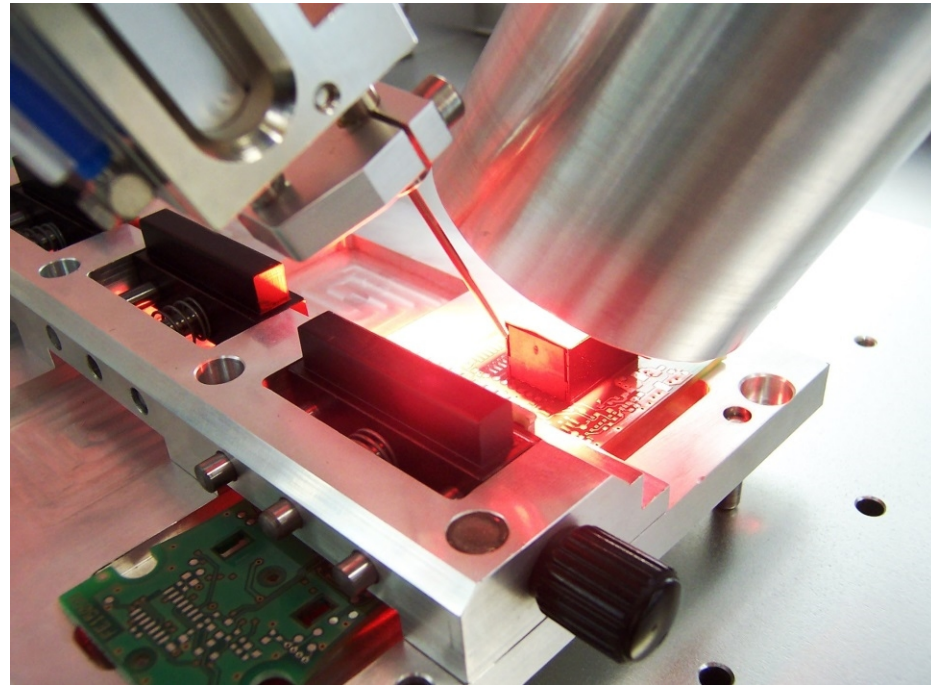
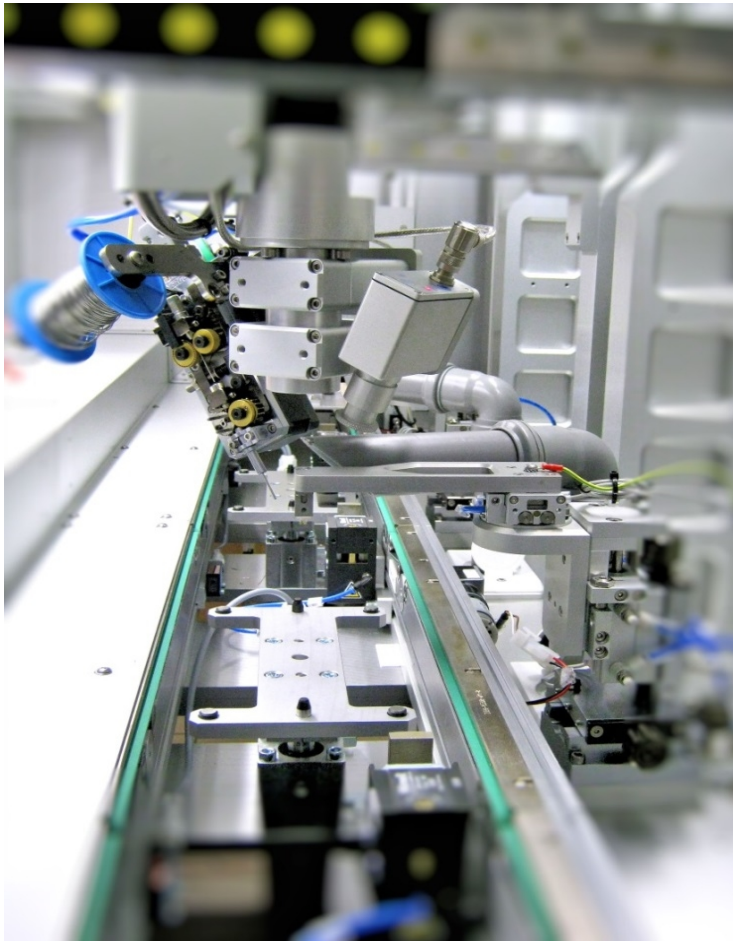
Sinergo industrial “**laser diode soldering robot**”

- “top class” design & construction.
- high performance PLC NC PC motion controller.
- up to six axes, brushless motors, interpolated.
- recirculating balls guides and screws
- very high speed and precision movements.
- Sinergo “SINLAS 50” laser source
- soldering process controlled by fast IR pyrometer and advanced PID+Fuzzy programmable algorithm.
- wide working area.
- custom versions available.
- remote management.
- option: database, statistics and traceability.
- accurate risk assessment and safety protections.
- CE compliant.
- EPA compliant. 



## SINAX L-50 laser diode soldering robot

- Several versions available:
- Manual loading of piece inside the cell
- piece loading by operator, on sliding tray.
- rotating servo table version.
- fully automatic versions like ..  
pallet line or smema line.



- 330x350xH150 mm working area.
- Special laser head with sensors.
- Tin wire feeder unit with encoder "NC"
- backlash free superfast rotating axes.
- buffered encoders: immediate start up,  
no "homing" required.

### OPTIONS:

- machine vision for the self-alignment & robot driving
- laser device to detect the effective height of piece
  - soldering process study and optimization
    - dedicated tooling design and supply.
  - barcode or datamatrix reader integration
    - Larger working area version



**SINAX L-50 laser diode soldering robot**

Integrated:

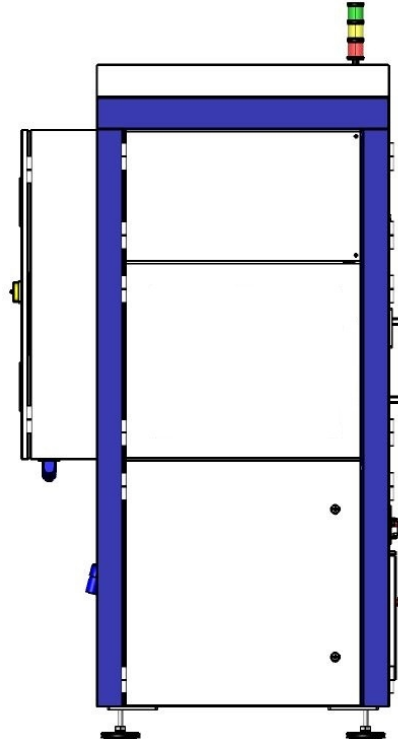
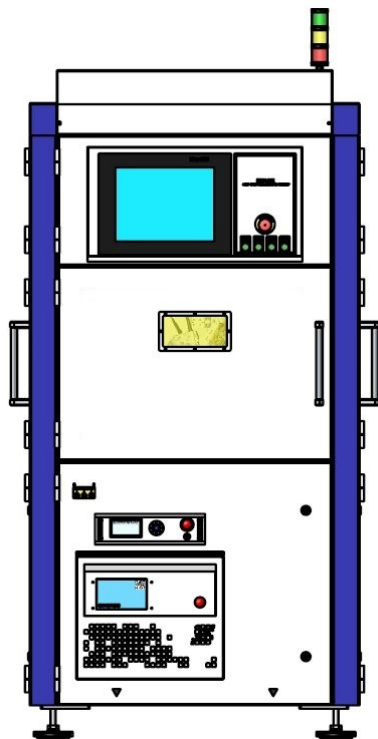
- “**SINLAS 50**” laser source
- “**OP**” infrared pyrometer or thermo camera (opt.)
- “**SI-CHILL 25**” water cooling set rack 19”



- 18” touch panel PC Human Machine Interface.
- Multilanguage display ( language file loading )
- Infinite numbers of working programs.
- Many functions available: single point, step by step, sliding soldering, skip to, pre-tinning functions,
- Temperature profile management.
- Inert gas protection during soldering.
- Indexed fixtures and/or pallet RFID recognition.
- Local & remote program managing and recalling.
- Five levels password access.
- Diagnostic interface and maintenance banner
- Over internet remote diagnostic & managing
- Management of inert gas valves, pallet stopper and lifter, interface to external line PLC, ...



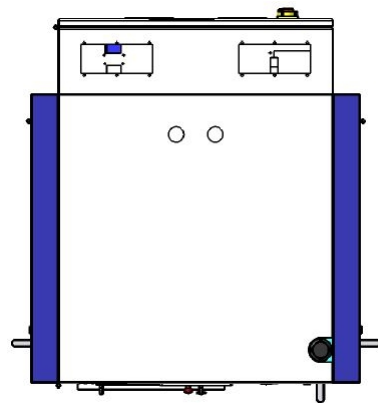
## SINAX L-50 laser diode soldering robot



CLASS 1  
laser product

**CLASS 1 laser product.  
"sealed" laser system  
containing a CLASS 4 laser source.**

Width 1150 mm max  
Depth 1200 mm max  
Height 2100 mm max + lights  
Weight ~550 Kgs max



main supply: 3x400 Vac 50-60Hz max. 12A 3poles + GND socket 32A  
option: independent supplies: 1x230 Vac 50-60  
robot only 10 A max. - chiller 16A max. - laser 6A max.  
compressed air 6Kg/cm<sup>2</sup> connection  
LAN & USB socket  
collector for external fume extraction  
ESD bracelet point socket  
Sinergo software license  
panel PC Windows 7 license