MPS700 bottom side selective soldering machine

Iron

As a complement or an alternative to miniwave soldering, the MPS700 machine provides maximum accessibility and eliminates copper dissolution in high-mass joints thanks to the iron technology.

Advantages

- Angled approach of soldering iron can reach joints unaccessible with wave/mini-wave
- Process tested in laboratory
- No need to wait for solder pots to heat
- Fluxing of boards is not required before soldering
- Very low maintenance - no solder tanks, dross or flux residue to clean
- Quick and easy change of solder alloys - swap the solder spool
- Lower energy and consumable costs than wave machines

Features

- 3-axis cartesian robot
- Welded frame construction
- 700x700mm working area
- Monitoring camera
- Vision for automatic realignment of solder points for precise process control
- Industrial PC controller with Windows 10 operating system
- Multipe process parameters can be tuned at each joint
- Safety door and guardings
- Conveyor with adjustable width in line with SMEMA standards
- Remote maintenance with Team Viewer

Options

- Rotary axis
- Fixture customization
- Clamping system to maintain the PCB and its components
- Fume extraction system
- Vision quality inspection
- Traceability of parts and integration of barcode reader
- Part height measuring sensor
- Barcode reader or RFID reader
- Second screen

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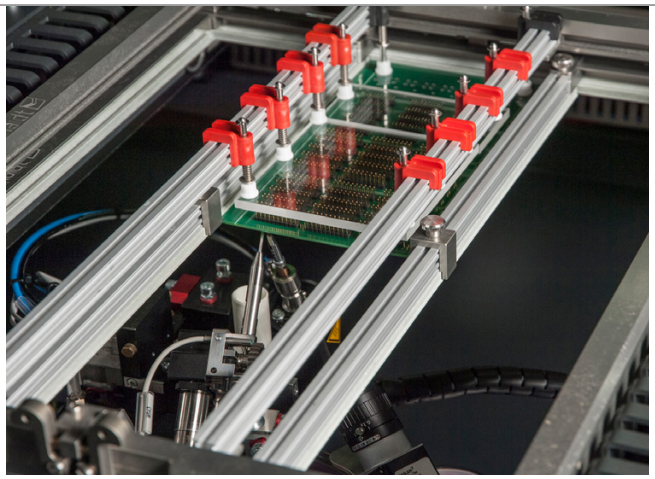
Typical bottom side soldering applications

Through-hole soldering components PCB

As the MPS700 machine is an inline, bottom-side, process that uses a robotic soldering iron, it is ideally suited to solder problematic joints; thus, allowing manufacturers to process the entire board inline.

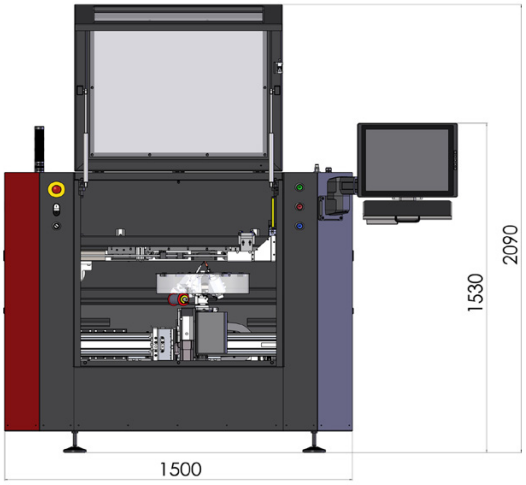
The overall throughput improves as problematic joints do not need to be processed offline.

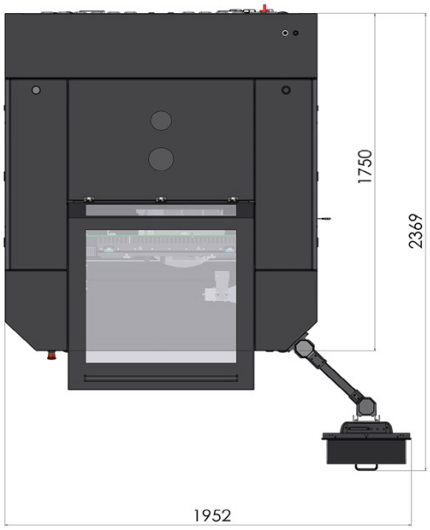
Quality and consistency also improve dramatically as hand-soldering is eliminated and wave technology is not forced to solder joints beyond its technical limits.



MPS700 technical specifications

Pallet/PCB max. size	700 x 700 mm
Pallet/PCB max. weight	20 kg
Iron power	150W
Iron temperature	adjustable to 450°C (837°F) and standby mode
Temperature accuracy	±5°C
Solder wire diameter	0.3 - 1.2 mm
Typical speed	X=0.7m/s, Y=1m/s, Z=0.5m/s, T=3.14 rad/s
Typical acceleration	X=10m/s2, Y=10m/s2, Z=5m/s2, T=14 rad/s2
Programming	HMI Windows oriented
Operating system	WINDOWS
Positioning repeatability	±20 µm
Conveyor type	belt
Conveyor length	1’500 mm
Conveyor width range	50-700 mm
Conveyor height	930 mm ±50 mm (SMEMA)
Typical conveyor speed	0.3m/s
Interfaces	SMEMA / Ethernet / USB port
Power supply	3x400 VAC- 50Hz
Power consumption	2 kVA
Air pressure	max. 6 bar
Dimensions	1’500 x 1’750 x 1’350 mm
Weight	~900 kg





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