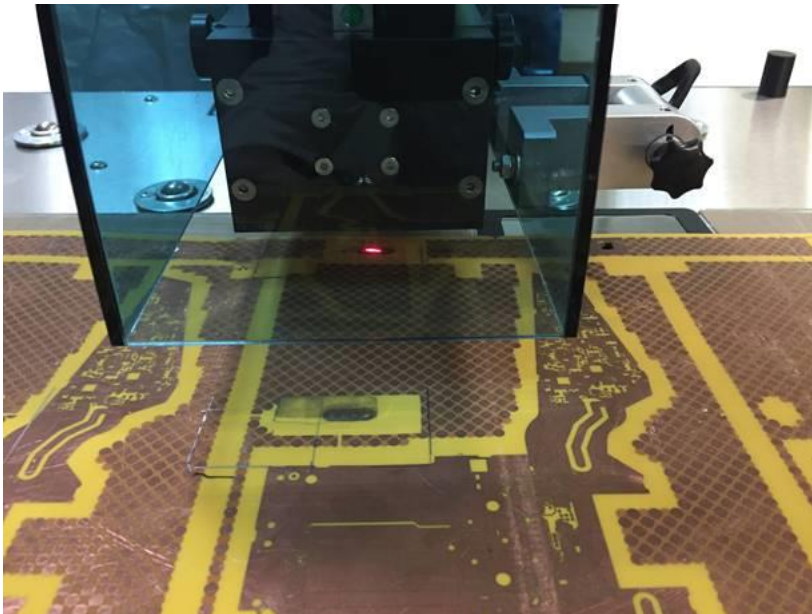
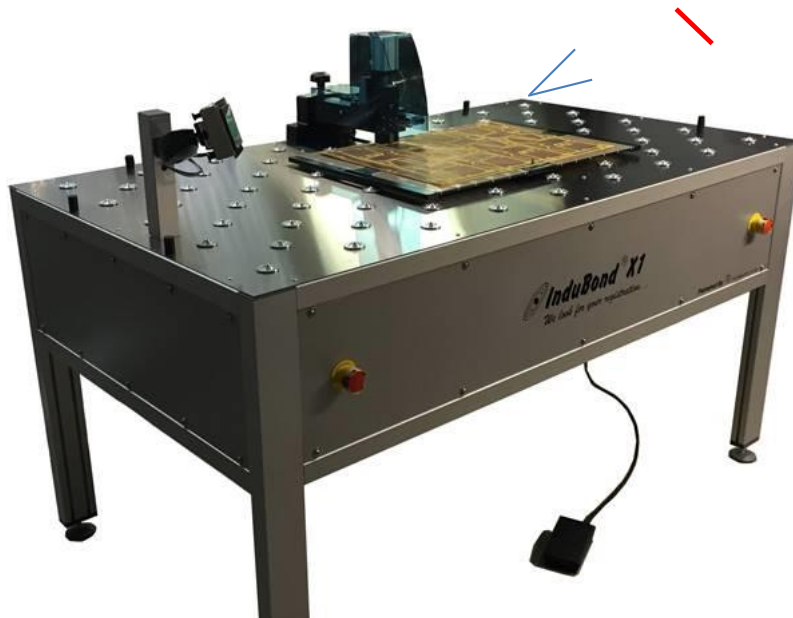
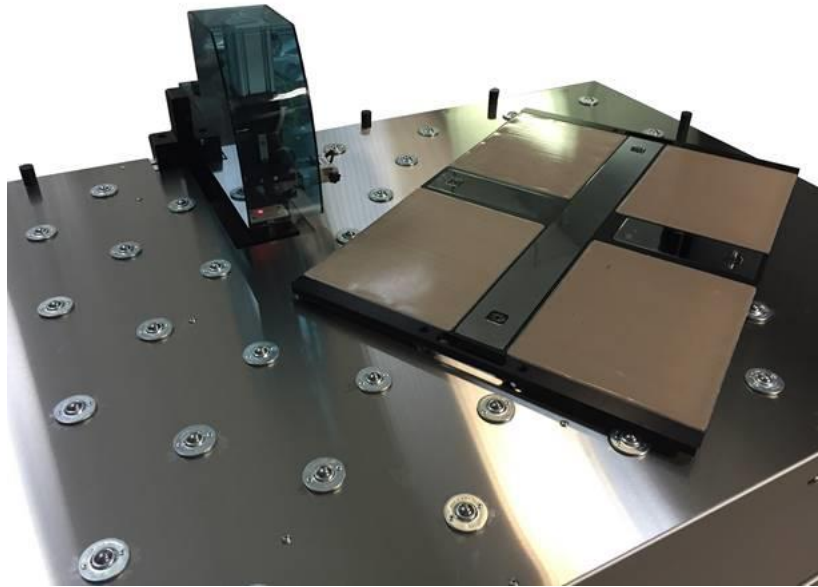


1. Equipment Technical Description





InduBond X1 Standalone Station.

- Low friction solid table to move the registration tooling plate.
- 1 InduBond head last generation V3 with PTF film protection.
- High pressure system up to 300PSI.
- 1 InduBond driver last generation V3.1 installed.
- Laser light pointer to point where the center of bonding location is.
- The head can bond / treat all standard materials as well high Tg. FR4, Rogers (4.000, 3000 series), Polyimid, halogen free, etc.
- Allows to bond more than one multi-layer assembly at the same time up to the maximum pin height, if high production is required.
- Tight mechanical alignment through Multiline slot pin system or standard round pins according customer requirements.
- Simple and intuitive touch screen allows to set the bonding parameters.
- Foot switch for hands free and easy operation.
- System comes in a kit format easy to assembly

2. Operation Description.

Operator build up the inner-layers assembly over the registration tooling plate (customizable). To place a weigh over the stack-up is recommended to keep assembly flat during the bonding process.

Operator set the bonding cycle on the touch screen according the thickness, number of layers, slides the tooling plate to make to match the Laser pointer with the center of the desired bonding location. Once the panel is in the correct position, operator hits the pedal switch to begin the bonding cycle.

Once the bonding cycle is over, the heads will open automatically, the unit is then ready for the next bonding cycle in a different location or in the same location.

3. InduBond X1 system Hardware / Software list.

ENCLOSURE SUBSYSTEM

- Master electrical breaker.
- Master pneumatic breaker.
- On/Off power switch.
- Main electrical, air and suction inputs.
- Enclosure with removable sides for access to the internal subsystems (doors, windows, covers).
- Keys to open doors.
- Enclosure mounted on adjustable foots for easy level adjustment.
- 1 Emergency shutoff switch.
- Foot switch.

INDUBOND SUBSYSTEM

- 1 Induction Bonding Heads type (InduBond v3.1).
- PTF film protections for the heads.
- 1 InduBond Driver v3.1.
- Laser light pointer.

CONTROL SUBSYSTEM

- Panasonic FPO-Sigma PLC.
- Panasonic 2 lines Touch Screen
- 24Vdc Power supply.
- Fuses for over current protection.

PLC AND PC SOFTWARE

- Last version of the software dated Nov. 2015

4. InduBond X1 System Specifications

PHISICAL

System dimensions...(aprox.) 1800x1000x900mm
71x40x35"
(WxLxH)
Weight.....(aprox.) 100 kg./ 220pounds

OPERATING ENVIROMENT

Environment..... Clean, dry and
Chemical- free
Temperature15 to 30°C
59 to 86F
Relative Humidity 20 to 65%

UTILITIES

Power..... < 1KW; 400VAC
(3ph.+N+G) 50Hz
Power stability..... ±10%
Max. Air pressure..... 10bar
Working Air pressure..... 6bar
Suction flow rate..... 0 l/s
Master pneumatic breaker..... 10bar
(no harm machine after any pressure fail)
Master electrical breaker..... 5A

PRODUCTION REQUIREMENTS

Max. Inner layer size..... 762x610mm
30"x24" (LxW)
Min. Inner layer size..... 250x250mm
10"x10" (LxW)
Max. bonding thickness..... Up to 12mm
(16 mm pin height)
Registration tool..... Custom Template
Available materials..... Standard, High
Tg, Halogen free, Polyimid, Rogers(3-4000 series).
Etc.
Standard Bonding Cycle..... 60 seconds (10
FR4 inner layer, up to 1,6mm thickness)

DOCUMENTATION

Operation manual (CD and 1 Printed) includes:

- Installation guide.
- Operation description.
- Maintenance guide.
- Spare and wear parts list.
- Electrical and pneumatic diagrams.
- Warranty conditions.
- CE certified