



# AUTOMATIC CUT SHEET LAMINATOR 1600-SPC/T





## DESCRIPTION

The Automatic Cut Sheet Laminator 1600-SPC/T is a high-productivity machine, specially designed to laminate a full range of PCB. This unit is capable of handling very thin and large heavy panels up to 12.7 mm (0.5 in.) thickness. The machine can be used also as Pre-Tack laminator for in-line vacuum process. The machine is provided with a data management system to supervise and statistically control the process parameters via proprietary software. The new machine incorporates stainless steel construction to comply with the most stringent requirements of clean environment and a "patent" shear type cutting system to reduce resist chips.

## ADVANTAGES

- New stainless steel construction suitable for clean room operation
- Suitable for innerlayer or rigid panels full range from 0.05–12.7 mm (0.002–0.5 in.) thickness
- Dry film photoresist width up to 762 mm (30 in.) panel sizes up to 787 mm (31 in.) wide
- High lamination pressure by booster cylinders
- No interruption during lamination when cutting the film long life shears type film cutting system (no chips)
- Friendly operation Allen Bradley PLC operator interface in various languages
- Preset for automatic in-line operation easy handshake with other units
- Statistic Process Control (SPC) Easy data system proprietary software provided\*
- Output panel temperature detected
- Soft contact centering unit
- Preset for connecting phone line for remote monitoring or updating of machine
- Expansion system rolls for lateral cutting
- Refrigeration system for vacuum lamination process if requested

\* Ex.: local and remote supervision, management and monitoring data by PC, auto-tuning for panel exit temperature, management of maintenance operations; automatic set-up of working parameters

| Overall Dimensions                               |                                |
|--|--------------------------------|
| Width  | 1,730 mm (68.1 in.)            |
| Length   | 1,760 mm (69.3 in.)            |
| Height (min.–max.)                               | 1,680–1,880 mm (66.1–74.0 in.) |
| Overall Dimensions (Electrical Cabinet)          |                                |
| Width  | 550 mm (21.7 in.)              |
| Length   | 630 mm (24.8 in.)              |
| Height   | 1,580 mm (62.2 in.)            |
| Electrical Requirements                          |                                |
| Power Type                                       | 3 phase; 50/60 Hz + Ground     |
| Power Consumption                                | 8.5 KVA                        |
| Nominal Voltage*                                 | 400/480/220/200V ±7%           |
|  |                                |
| Compressed Air                                   |                                |
| Consumption                                      | 12 NI/Cycle (0.42 cfm)         |
| Working Pressure                                 | 6 kg/cm (85.3 psi)             |
| ExhaustSide                                      | Accuracy ± 0.5 mm (0.02 in.)   |
| Consumption                                      | 300m/hourOptions               |
| Weight   |                                |
| Gross  | 1,750 kg (3,857 lbs.)          |
| Net  | 1,402 kg (3,090 lbs.)          |
| *Different voltage can be provided upon request. |                                |
|  |                                |
| Panel Size                                       |                                |
| Width (min.–max.)                                | 120–787 mm (4.7–31.0 in.)      |
| Length (min.–max.)                               | 200–787 mm (7.9–31.0 in.)      |
| Thickness (min.–max.)                            | 0.05–12.7 mm (0.002–0.500 in.) |

Important Note:  
The above specifications can only be applied to the lamination of PCBs that meet standard quality requirements, including but not limited to materials, warp, rigidity, surface topography or uneven surface.

| Dry Film Photoresist Size                              |   |
|--|---|
| Width (min.–max.)                                      | 120–762 mm (4.7–30.0 in.)                             |
| Length (min.–max.)                                     | 187–762 mm (7.4–30.0 in.)                             |
| Rolls Diameter   | 250 mm (9.8 in.)                                      |
| Conveyor (Adjustment)                                  |   |
| Conveyor Height  | 850–1,050 mm  |
| (min.–max.)  | (33.5–41.3 in.)                                       |
| Conveyor Speed   |   |
| Conveyor speed adjustable up to 5 m/min. (16 ft./min.) |   |
| Lamination Roll  |   |
| Temperature (max.)                                     | 130°C (266°F)   |
| Materials  | Silicon 65 SH (anti-solvent<br>rubber 75 SH optional) |
| Film Placement   |   |
| Front edge   | Accuracy ± 0.5 mm (0.02 in.)                          |
| Back edge  | Accuracy ± 1 mm (0.04 in.)                            |
|  |   |
| Expansion rolls support poly take-up top and bottom    |   |
| Expansion rolls support dry-film top and bottom        |   |
| Expansion system rolls for lateral cutting             |   |
| Very thin layer option 5 or 6 fingers (0.05–1 mm)      |   |
| Software "Easy Data System" Statistic Process Control  |   |
| Refrigerator for vacuum lamination                     |   |