



Small production line

Affordable line is designed for small scaled production or contract manufacturing.

Line capacity: **15 000 CPH**

Korean SMT Solutions – the best is available for you.



Stop choosing between the best and the affordable.

The equipment in the line is selected regarding the wide range of tasks of a beginner company or small own manufacturing.

The line equipment is maximally coordinated by specifications and abilities to consider it as a universal solution to assemble PCBs of various complexity.

The line is fully automatic from loading of PCBs up to output of assembled product. One or two operators are enough for such line with positive influence to the cost of the product.

The line works with any most frequently used SMD components – from small chip components 01005 up to big ICs 50 x 50 mm. Component mounting precision is $\pm 25 \mu\text{m}$ (at 3σ).

It corresponds to the best precision characteristics of up-to-date analogous equipment.

Possibility to prepare work program offline together with intelligent feeders allows maximal preparation of a project before launching in the line.

Changeover of the line to a new project takes only several minutes.

The line capacity could be increased in the future by upgrading with more efficient pick-and-place system. It provides a large reserve for further development of the initial manufacturing with minimal investments.

Line specification	Vendor	Model
PCB loader to line	SJ Inno tech	SLD-120X
Solder paste screen printer	SJ Inno tech	HP-520S
SMD pick-and place system	Mirae	Mx-200LP
Visual check work table	SJ Inno tech	SWT-900X
Solder paste reflow oven	TSM	A70-j71
PCB unloader from line	SJ Inno tech	SUD-120X



Surface Mount Technology



Options list:

For SMD pick-and-place system:

- Trolley with feeder bases for quick changeover to a new product
- Offline programming software for faster creation of programs
- System of barcode reading from component reels for convenient work of electronic warehouse
- Classic reel tape feeders (C-Feeder) for tape 8 – 88 mm
- High-speed reel tape feeders (eX-Feeder) for tape 8 – 88 mm
- Stick feeder for 6 sticks
- Manual tray holder for IC in JEDEC pallets
- Automatic tray feeder for 20 JEDEC pallets

For solder paste printer

- Pneumatic support pins
- Automatic adding of solder paste
- Microclimate support system

For solder paste reflow oven

- N₂ atmosphere soldering
- Thermal profiler to control temperature at PCB surface
- Possibility to combine chain and mesh conveyers for simultaneous work with PCBs of different width

Line specification:

- PCB size: from 50 x 50 mm up to 510 x 460 mm
- Speed according to IPC-9850: 15,000 CPH for chip components and 1,200 CPH for IC
- Components: from 01005 up to 50 x 50 mm (or 90 x 30 mm for oblong components), max. height of component 18 mm
- Quantity of 8 mm feeders: 100 ea.
- Component placing precision: $\pm 25 \mu\text{m}$ (at 3σ)
- Solder paste application control: 2D vision system
- Oven: 7 heating zones, 1 cooling

