PCB automatic assembling

The company has got the automatic line for surface mounting component assembling on PCB with dimensions up to 500x400 mm.

Automatic line consists of:

1) PCB automatic loader onto the line SXLD-120 (South Korea)

4 magazines, 50 PCB in each

4 different feed steps (10, 20 ,30 ,40 mm)

2) High speed precise screen process printer of brazing paste coating-HP-520S

Minimal printing cycle time is 8 s

Maximal print area (Length x Width) is 630x440 mm

PCB thickness is 0,5 -2 mm

Wiping blade shifting speed is 2 – 150 m/s

Printing fidelity (micron on 6 sigma): 15

2D control of brazing paste

3) Transfer conveyor – model SXCC-900 (South Korea)

4) Universal assembling machine of SMD components – Mx400 (South Korea)

Maximal productive capacity 42000 components an hour according to the Standard IPC9850

Assembling accuracy on 3 sigma ± 50 micrometer

Minimal distance of component position from the edge of board - 2mm

Range of sizes of component to be assembled: min: 0,4x0,2mm (01005) max: 18 x 18mm

Component height is 0,1÷10mm

5) Universal wiring machine of SMD components – Mx200P (South Korea)

Max. productive capacity 15 000 components an hour according to the Standard IPC9850

Wiring accuracy on 3 sigma (QFP) ± 25 micrometer

Minimal distance of component position from the edge of board - 2mm

Range of sizes of component to be wired: min: 0,4x0,2mm max: 50 x 50mm and 90x32mm

Component height is 0,1÷20mm

6) Inspection workstation SXWT-900 (South Korea)

Assembling of component on PCB (large size components, bulk components)

7) A furnace of convection type A70-i82 for melting brazing paste (South Korea)

There are 8 top and 8 bottom heating zones with independent control. The length of each zone is 300 mm

There are 2 zones of air cooling. The length of each zone is 700 mm

The general length of operating zone is 3800 mm.

8) Automatic system of PCB and complete unit inspection MV-7Xi (5M)

Inspection area of PCB and assemblages is from 50x50mm to 410x460mm

Inspection method is 2D control + side look laser

5 megapixels camera

9) Automatic discharger of PCBs from the line SXVD-120

4 magazines in use (1 top, 2 bottom, 1 in use)

50 PCBs in a magazine

Separator of group workpieces Maestro 4M/450

Minimal distance of component position from the edge of board - 2mm

Maximal length of cutting is 450mm

PCB thickness is from 0,5 to 4 mm

Height of components is up to 20 mm

Productive capabilities of our factory allow to perform automatic assembling of chip-components with the minimal dimension of the body 01005 (400x200mm), microcircuits with lead pitch from 0,3 mm and also microcircuits in the units TQFP, TSOP, PLCC, JLEAD, PQFP, QFP, SOIC, SOIC (SOJ), BGA and other elements, meant for SMD assembling.

Assembling and brazing of electronic components are performed by using the latest developments of the world wide companies, up-to-date automatic equipment, innovative technological processes and materials. The automated lines of surface assembling allow to assemble electronic components quickly and accurately with the following types of carriers: winders – 8; 12; 16 and 24mm, sticks of any width, matrix pallets.

**Automatic wave soldering of hinged assembling**

System of automatic wave soldering HS03-2000 (South Korea)

The possibility to process PCB with dimensions up to 410x355mm

Lead-free soldering