

SPE "Diskovi Systemy" provides SMT PCB assembly using up to date high-tech automatic assembly lines of SMD components. Technical re-equipment of the machinery in the year 2008 and 2010 allowed us to improve significantly the quality of the printed circuit board assembly, and increase productivity up to 50,000 components per hour.



For large-scale production work is done on automatic SMD assembly, the first of which includes:

- PCB loader SML-120X , manufactured by SJ Inno Tech (South Korea);
- [Automatic printer](#) HP-520 for solder paste application, produced by SJ Inno Tech;
- [Two mounters](#) for SMD assembly of components with a total capacity of 35,000 components per hour produced by Mirae (South Korea), allowing the body to mount from 0402 to 42x32 mm;
- [Convection reflow oven](#) with seven heating zones manufactured by Tolo Machinery, allows you to perform assembly of printed circuit board technology for Pb-free technology (lead-free soldering);
- [PCB unloader SMU-120X](#) manufactured by SJ Inno Tech;
- Cleaning of printed circuit assemblies produced in two ultrasonic baths manufactured by Min Shin Machinery.

The second line consists of:

- Semi-automatic printer BS1400 manufactured by company Autotronik (Germany);
- Mounter MX200P with capacity 15,000 components per hour produced by Mirae (South Korea), allowing the body to mount from 0402 to 42x32 mm;
- Five zone convection reflow oven manufactured by Tolo Machinery, which enables printed circuit board technology Pb free (lead-free soldering);
- PCB unloader UL-3 manufactured by Tolo Machinery.

For small-scale production the desktop chamber furnace ERSA TT500A, digital and analogue soldering station ERSA are used.

Supplies: solder paste, fluxes, wash-out fluid are the most important elements of surface mount technology. The end result depends highly on the quality of the selected supplies. Based on past experience, we chose the production of world leaders such as Kester, Radiel, Qualitek, Zestron, Kyzen.

Technological capabilities of SMD assembly area:

- Single-and double-sided surface mount;
- Nomenclature of mounted cases: chip-elements, SO, SOD, SOIC, SOT, SOP, SOJ, PLCC, QFP, QFN and BGA, supplied in tape, sticks and matrix trays;
- assembling of the elements from 0402 till 42x32 mm, including elements of odd-shape;
- The maximum size of the board for surface mounting is 450x460 mm;
- The minimum board size is not limited.

-