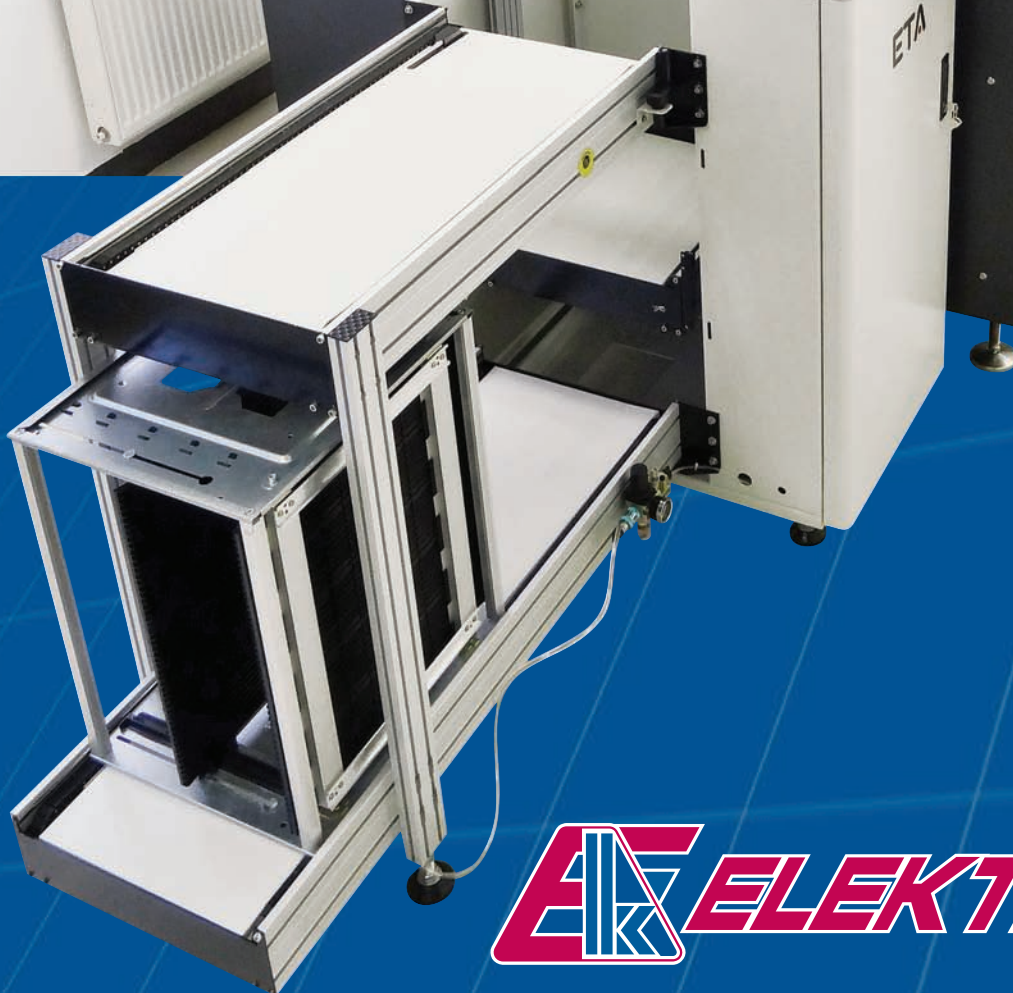


# SMT technology

*Innovative and professional solutions*



**EK ELEKTROKEM**

## About us

*Elektrochem is a company that has a long tradition in the production and maintenance of industrial electronics, production of "custom design" devices, navigation devices and GPS tracking systems, systems of public lighting, cathodic protection, electrical works etc.*

*The company has always been aspired in discovering new innovative solutions to ensure top quality by all standards, and above all to satisfy each of our clients.*

*Numerous projects, mainly in the field of railways, road signalization and power supply systems we have completed in past with success in cooperation with many reputable companies.*

*Behind us are many projects with many reputable companies, mainly in the field of railways, road signalization and power supply systems.*



*Openness to query each client, focuses us in different areas and puts in front of us various new challenges, that our team successfully solves and thereby gains knowledge and experience that allows constant growth and development of our company and our clients.*

*The pride of our company is a modern SMT production line and quality control for large series of PCBs.*

*We have the capacity to produce and control thousands of PCBs per day, which puts us among the most leading competitors in the European market.*



## Why SMT?

SMT technology enables us to make smaller and more compact devices.

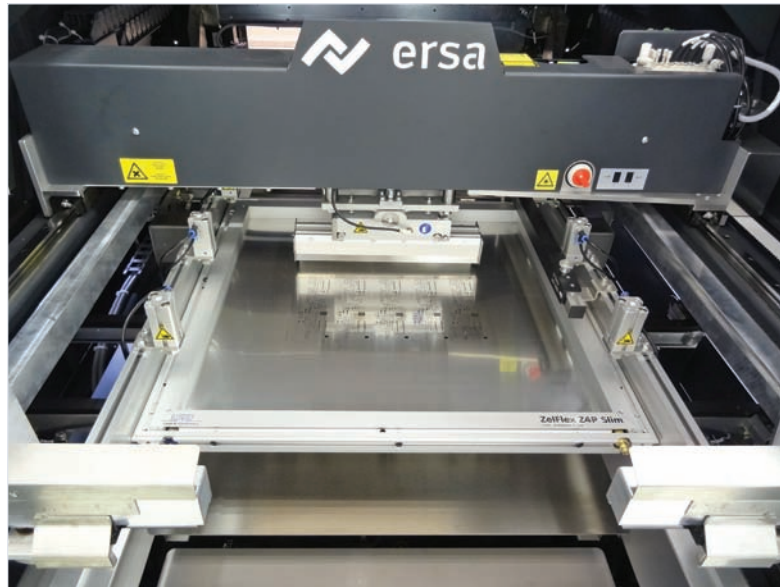
Because of their physical characteristics, SMT components are ideal for machine-mounting, and the whole process of preparation, through installation, soldering and quality inspection is fully automated.

## Applying Soldering Paste

Solder application is the first step in the SMT production line.

Solder paste is "printed" on the PCB board through stencil.

After applying the paste, automatic 2D control system controls whether the paste is applied on the PCB correctly or not (100% quality control).



## Component Placement and Assembly

SMT components are coming in two types of packages: trays or reels.

The machine for automatic assembling is adapted to work with both of them.

Also, "I-Pulse" machine has a working head with the possibility of simultaneous acceptance of six nozzles for a vacuum reception of the components.

**This allows mounting up to 30,000 components per hour!**

After the components are mounted, conveyor automatically transfers PCB board into the reflow oven.



## Selective soldering

Classic THT (through-hole-technology) components are still present in some devices and their soldering is quickly and efficiently solved with machine for selective soldering.

The machine is multifunctional, which means it can operate in point-to-point soldering mode or it can operate in wave-soldering mode.



## AOI und Visual Check

The last process is the visual quality control. Machine for visual inspection checks the quality of solder joints, polarity of the components, the presence of components and searches for different kinds of defects on the PCB board.

The machine is equipped with highest quality cameras and the speed and accuracy greatly surpass traditional methods of PCB inspection.



*Innovative solutions with fulfilled all quality requirements and standards, excellent team of people and environmental awareness are the strongest qualities of our company. To our customers, we guarantee only top quality products and success.*



A. Šenoe 69, Vugrovec, 10360 Sesvete, Zagreb - CROATIA  
Phone.: +385 1 20 51 400, 20 51 442, Fax.: +385 1 20 51 406  
e-mail: [elektrokem@elektrokem.hr](mailto:elektrokem@elektrokem.hr)

[www.elektrokem.hr](http://www.elektrokem.hr)