

User report | Best practice



EMS-Production Professionals: Hekatron and Ers

Manufacturing in New Dimensions

Hekatron Technik GmbH, located in Sulzburg, is a producer of electronic products. Started in 1963 in the security sector, today the EMS provider Hekatron manufactures and supplies products for a multi-

tude of industrial electronic companies world-wide. Since the expansion and modernization of its SMD manufacturing in 2015, Hekatron relies on soldering systems manufactured by the system supplier Ers

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 **kurtz ersa**



Integrated vacuum pipette for component removal and placement

For someone descending from the upper region of the Black Forreest - for example from the Belchen, with 1414 meters the third highest Black Forreest peak – in a western direction, and after a half-day march the beautiful Markgräflerland, the most southern region of Germany, opens up. We arrive in Sulzburg, from where it is less than 20 km to Freiburg im Breisgau and about 50 km to Basel.

This small town is first mentioned in documents in 821 A.D., having today - the incorporated village of Laufen included – just about 2560 residents. From Sulzburg, lying on the valley floor, the view will inevitably travel upwards, lingering on the vines that stretch up the hills, capturing the rays of the sun. Sulzburg-Laufen, the home of the current German wine queen, has been called by the German poet Johann Peter Hebel a veritable “garden of Eden”, where people know how to live a good, enjoyable life. Yet, it may not be immediately apparent: aside from the cultural landscape, there also is industry!

Hekatron is located in Sulzburg since 1964 and is specialized in the manufacture of electronic products. It is part of the Swiss-based Securitas Group, which has 12 000 employees’ world-wide and annual sales of over 1 Billion €. At its beginning, Hekatron Technik exclusively

manufactured products for its corporate sisters in the sector of hardware based fire detection systems. Until today, the full range of alarm systems are produced by Hekatron Technik, starting with complex fire detection systems and smoke switches right up to smoke alarms manufactured in the millionth. Probably no other manufacturer knows as well as Hekatron that the quality designed into his product is a proverbial lifesaving ingredient. For more than 15 years, its competence in production and its high quality standards are being recognized by other companies, many from outside the security sector. Board assemblies manufactured by Hekatron as an EMS provider can be found in test equipment from Testo, in mechanical engineering and in laboratory technology applications. Core competencies of Hekatron are clearly defined and lie in the area of engineering, procurement, production and distribution.

The products – “100% Made in Germany” – are shipped directly from the factory to the production plant of the customers, the wholesalers and the specialist shops or directly to the construction site. There are currently more than 400 employees at Hekatron Technik, which places it amongst the group of midsized to large EMS providers in Germany. “Hekatron provides probably more jobs in this town than there are

Infobox

Hekatron Technik GmbH in brief

Founded
1963

Location
Sulzburg

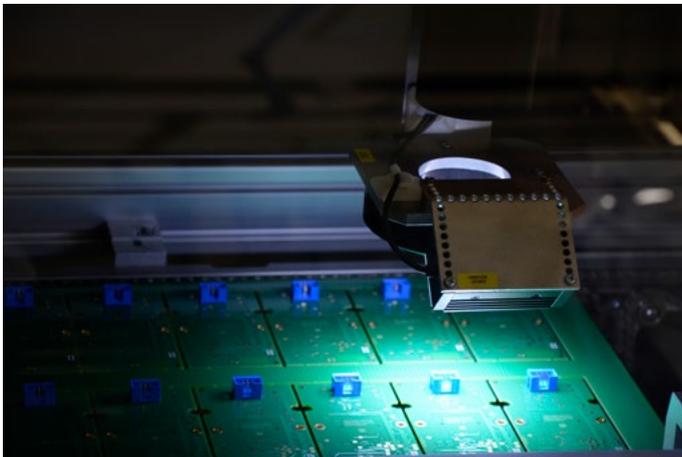
Sales 2015
85 Million Euro

Employees
Over 400

100% daughter company of Securitas AG (Switzerland)



Meinrad Eckert, Area Sales Manager at Ersa, has been instrumental in starting and maintaining the business relationship with Hekatron.



Board OK? Hekatron relies in its Ersa selective soldering system on the VERSASCAN module.

working people in Sulzburg", smiles Dietmar Bohn, the Production Manager of Hekatron Technik GmbH, which in the last year had sales of 85 Million € and produced 7,5 Million end products. Needless to say, he is very satisfied with the expansion of the EMS portion of the business and the attendant growth during over the last years. "We are very proud of our cooperative partnership with Testo AG, where we have been designated preferred supplier for electronic assemblies. We are continuously striving to make it beneficial for our customers having made their decision in our favor. An open customer-supplier relationship, such as the one we have with Testo, confirms and strengthens us in our drive to be the first choice in EMS suppliers in Germany".

MANUFACTURING AREA INCREASED BY 1600 M² DURING 2015

A further building was erected by Hekatron during the last year: a facility internally referred to as the "heart", with 1600 m² manufacturing space used mainly for SMD manufacturing, but also containing a section for coating and cleaning the assemblies, and an 800 m² office area. Additional parcels of land for future expansion were also purchased.

"Currently we are building an additional warehouse, and at the same time we are in the planning stage for our next building – things are on the move in Sulzburg. I am now 10 years with Hekatron, and during that time at least one new building has been added every year. We are continuously growing, and our mother concern Securitas not only maintains the site in Sulzburg, but systematically invests in its growth", states Dietmar Bohn. Aside from the smoke alarms, other large projects, such as the continuous expansion of its production competence and its scope of services, need to be tackled by Hekatron in order to improve their competitiveness in the EMS market. The diversity of its customers places serious demands on Hekatron, but it also advances it by forcing the company to not only open itself up to new markets, but it also prepares it for a successful future.

There is not much that cannot be manufactured by Hekatron Technik in Sulzburg. Very important for this EMS provider are the common roots with the specialist in fire protection, the Hekatron Vertriebs GmbH. Both these companies have equally contributed to today's success associated with the brand name Hekatron. "Even after producing fire alarm systems for almost 55 years, we are still proud to manufacture fire detectors that have been designed and tested in one of the most modern fire test laboratory of Europe, located right across the street from us".

Hekatron Production Manager Dietmar Bohn always keeps an eye on production and processes.



In operation since fall 2015 at the Hekatron Salzburg facility: Ersa in-line selective soldering system VERSAFLOW with three solder baths and the upstream VERSASCAN module for highest throughput.

ENERGY EFFICIENCY IN PRODUCTS AND PRODUCTION

In all projects undertaken by Hekatron, environmental protection and energy efficiency are important issues, which entails that energy efficiency is found not only in each product, but also in their production. Thus, the building erected in 2015 is equipped with a cogeneration heating plant with which Hekatron produces 400 kWh electric current, using its waste heat for process cooling. And on the roof, 50% of which is a green roof, a photovoltaic system is installed. Quantum leaps, which raise a technology to a new level, can frequently be observed in the security technology.

For example, addressable smoke detectors were not available 20 years ago, while the newest generation of detectors communicates directly with smart phones. "The old detectors were installed one after the other, sometimes 50 units in series, and if one unit responded, complete facilities had to be evacuated. This no longer is in line with market requirements. Now each detector has its own address, allowing to exactly localize from where the signal is coming", says Dietmar Bohn. When introducing new products, Hekatron ensures that new and old products can "talk to each other", and that an old detector can be upgraded to the level of an addressable detector at little cost.

Useful approaches, as detectors in industrial areas are replaced, as a rule, ever 8 years, whereas in private environments replacement takes place every 10 years.

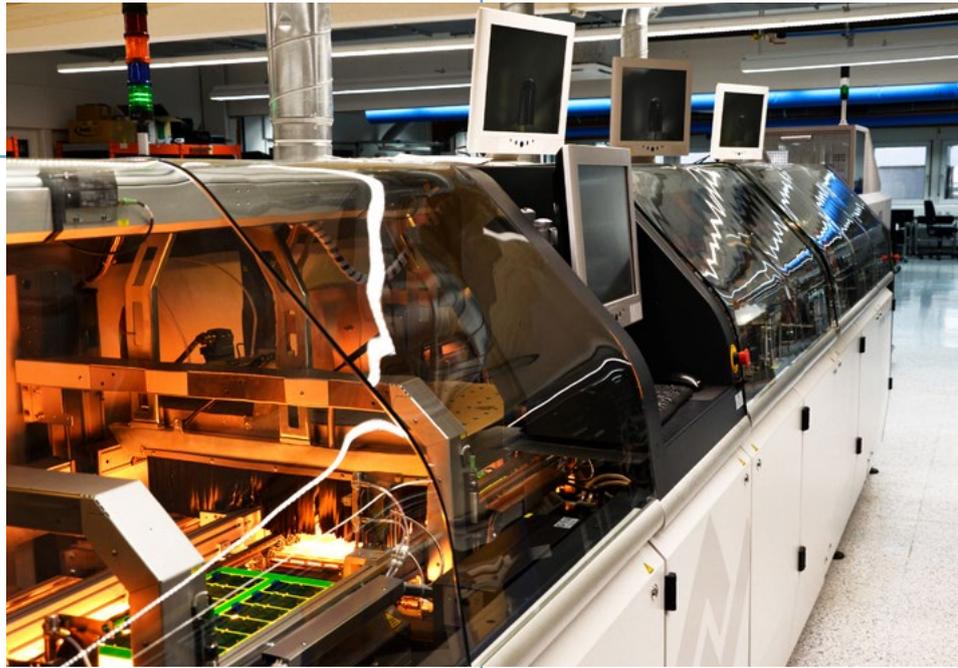
FROM HIGH VOLUME TO "HIGH MIX, LOW VOLUME"

Based on the broad range of products, production volumes at Hekatron vary from 500 units up to a few million. In production, the fully automatically produced 3, 3 million smoke detectors are



Genius Plus X – New generation smoke detector from Hekatron, able to communicate with smart phones.

Ersa in-line selective soldering system VERSAFLOW with three solders bath and the upstream VERSASCAN module for highest throughput.



mixed with highly complex assemblies at low volumes. "These demands frequently necessitate manual soldering, which we have performed using pallets and masks.

That is why we had, during 2015, started to look at whether selective soldering would be a solution for us. In this context, Ersa, with its encompassing portfolio in equipment for electronic manufacturing, appeared very early on our radar", states Dietmar Bohn. Still, a number of other suppliers were also scrutinized, but in the end Ersa's range of products and services was most convincing and it received the purchase order. Today, numerous programs are running on the Ersa VERSAFLOW selective soldering system installed in Sulzburg, covering the 700 to 800 different boards and board assemblies manufactured by Hekatron.

With its three solder modules and its upstream VERSASCAN, the Ersa system is singularly configured to offer a high degree of flexibility and high throughput. The need for masks and pallets has been eliminated, and the ever growing demand for "High Mix, Low Volume" is now embedded in the performance profile of Hekatron. While investigating the subject of selective soldering, Hekatron noticed in the Wertheim demo center of Ersa the VERSAPRINT stencil printer.

"Our technicians were a number of times at Ersa for soldering trials, and during these visits the printer, which was not really on our shopping list, was noted by them", says Dietmar Bohn. Printing tests were performed, and they showed that this innovative product would seamlessly fit into the production line of Hekatron. Taking these findings back to the management in Sulzburg and receiving their positive feedback, an order was issued. On account of the shorter lead time of the printer, it could be installed even before the VERSAFLOW. "We are very pleased that our proposals for the selective soldering system as well as that for the printer were accepted by Hekatron", notes Meinrad Eckert, Area Sales Manager of Ersa covering the southern region of Germany.

The cooperation between Hekatron and Ersa in the technologies of selective soldering and stencil printing has been successfully initiated – and plans for continuous growth at Hekatron Technik are already in full swing. Hekatron is preparing to strengthen itself for the German EMS market. And in times like these it is beneficial to have a partner such as the system supplier Ersa on one's side, who, in his extensive product portfolio, has available flexible solutions to respond to dynamically changing demands. ■

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