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Kurtz Ersa Magazine

For Customers and Business Partners of Kurtz Ersa Corporation

Global Footprint – growing worldwide

… with innovative strength and proximity to the customer

Pushing Automation to the Next Level

Ersa expands wave soldering system with automation solution

Forged by Challenge, Driven by Vision!

DIMER and Kurtz: Partners in a challenging situation

GLOBAL. AHEAD. SUSTAINABLE.

kurtz ersa

Editorial

On course for growth worldwide – with innovative strength and proximity to the customer

Thomas Mühleck and Hubert Baren

Our "Global Footprint" is not only a central component of our strategy – it is an expression of our attitude: this is how we understand our business and this is how we ensure that we can offer our customers tailor-made and innovative solutions worldwide.

This issue of our customer magazine provides you with exciting insights into the activities of our business units and national companies. We show you current customer projects and report on developments in our business units – here you can find out about the diverse projects we are currently working on around the world.

Even if the economic environment remains challenging: We are looking ahead with full confidence. Our global production strategy puts us in a position to implement the best solutions directly on site at the customer's premises. With this global footprint, we are able to react quickly and be present for our customers in all markets.

There is also exciting news on the project page. From page 13 onwards, you can find out how we "selectively" solder for the aerospace industry, 25 Shape Moulding Machines in just five years made the production of our customer DIMER fit again (page 21) or how our automation unit manufactures power module units for electromobility (page 33). Our global production strategy is a living reality: through local production according to the principle of "local for local" and "local for global", through global sourcing via our new purchasing hub in Asia and through local engineering. Application centers located around the world implement our customers' requirements in the shortest possible time. Our central research and development department creates the technological foundations that we roll out worldwide via a global franchise model. In this way, we are growing at high speed worldwide. On the next page you will find an overview of all the locations where we produce for our customers worldwide, offer local contacts and provide direct service. With new locations in Singapore and Romania as well as additional demo and service centers in Vietnam and Thailand, we are expanding our presence in Southeast Asia and Eastern Europe. At the same time, we are intensifying our activities in new markets such as India. In all regions relevant to us, we not only offer our machines and systems, but also comprehensive services.

Our strong market position in China is also particularly pleasing – with several locations here, we are creating the conditions for further growth.

The direct line to our customers is and remains a central component of our business model. This is the only way we can identify customer needs at an early stage and develop optimal solutions together.

As in previous issues, in this issue I am once again giving colleagues from our operating units a chance to speak – and provide you with insights into their day-to-day business. I am particularly pleased to introduce Hubert Baren, CEO of our Automation business unit, to you today. His message is clear: "Automation has become an integral part of mechanical engineering and an important addition to our systems. We are currently sharpening the range of services offered by the Automation BU – and aligning it globally. Our aim is to establish automation as an integral part of our global footprint. This is already evident in our Ersa Soldering Line, for example – an optimal solution for customers who want soldering and automation from a single source. Automation is also becoming increasingly important in the field of Moulding Machines – here we want to offer real added value with integrated solutions."

If you would like to experience Kurtz Ersa live, we cordially invite you to the major industry events such as productronica, K Trade Fair and formnext. These trade fairs are perfect platforms for presenting new solutions and technologies – including the initial results of our AI pilot project, which we are driving forward at high speed.

I look forward to meeting you there in person.

Thomas Mühleck
CEO Kurtz Ersa Group

Hubert Baren
CEO Business Unit Automation

Opening of Kurtz Ersa Romania on June 17 in Timisoara

Romanian success story continues

Kurtz Ersa Romania opens new branch in Timisoara

For over 25 years, we have successfully worked the Romanian market with our partner in Romania, creating a base of over 200 machines for around 80 customers. Following the withdrawal of EEE S.A., Kurtz Ersa Romania S.R.L. was founded in Timisoara at the end of 2024 and moved into a new building of around 220 m² in March. The new establishment in Romania is part of the Kurtz Ersa Group's "Global Footprint" strategy, which enables the machine manufacturer to offer its customers worldwide tailor-made and innovative solutions thanks to its local presence.

In addition to office space, manpower was also built up for the Romanian market: Four experienced employees, who we took over from our partner EEE and who continue to look after our machines and rework systems at the customer's premises, and an Area Sales Manager were also hired. The team of five was of course present at the opening on June 17, which took the form of a technology meeting with 35 existing customers. The technology day began with the introduction of the new team, expert presentations on selective and wave soldering, rework and hand soldering – enriched with partner contributions on topics such as "AI in SMD lines" (Viscom) and "Special ordering of THT components" (Fuji Europe) as well as "Solder frames for wave soldering applications" (Schnaidt GmbH).

The varied program was very well received, and from 05:00 p.m. all participants gathered for a get-together on the premises and on the terrace to toast the success of Kurtz Ersa Romania together. This involved exploring the potential of the Romanian market, which is dominated by automotive EMS and industrial electronics and continues to be characterized by growth. "The move to Kurtz Ersa Romania was very well received – the new team means we are much closer to the Romanian market and can respond optimally to local requirements. The best conditions for continuously developing the business in Romania," said Ersa's General Sales Manager and Managing Director Rainer Krauss at the opening. The aim is also to further expand the service and process organization for existing customers and to carry out application trials in the rework area in the new office.

On course for growth worldwide – with our global footprint

Plymouth, WI
USA

Haguenau
France

Kreuzwertheim, Wertheim
Germany

Juarez
Mexico

Sonnenbühl
Germany

Guadalajara
Mexico

Our global footprint reflects our attitude towards our customers worldwide. This enables us to offer our customers unique solutions worldwide. Our global presence allows us to react quickly to market changes and always be at the forefront of technological developments.

Timisoara
Romania

Hong Kong, Shenzhen, Zhuhai
China

Shanghai
China

Bangalore
India

Bac Ninh
Vietnam

Bangkok
Thailand

Singapore
Singapore

Kurtz Ersa shines at

APEX 2025

in California

Kurtz Ersa´s booth at the 2025 IPC APEX EXPO in Orange County, California (USA)

This year, IPC APEX EXPO celebrated its 25th anniversary and welcomed 3,541 attendees from 39 countries. The trade show – North America´s largest and most influential event for PCB design and manufacturing, electronics assembly and testing – provides a global platform for innovation, networking and collaboration in the electronics manufacturing industry. Kurtz Ersa, Inc. emphasized the importance of APEX with an attractive trade show presence for the 2025 show based on the triad of innovation, excellence and leadership.

HR 600P – groundbreaking further development of rework technology

A highlight of the event was the presentation of the prestigious NPI Award 2025 to the new Ersa HR 600P rework system. The award recognized the groundbreaking advancement in rework technology, which sets a new industry standard for precision, efficiency and reliability with the HR 600P with automated residual solder removal. Live demonstrations on Ersa reflow soldering systems (HOTFLOW THREE), Ersa selective soldering machines (VERSAFLOW 4/55, VERSAFLOW ONE X-Series, VERSAFLOW ONE F-Series) and the award-winning HR 600P rework system attracted many interested visitors to the trade fair to experience state-of-the-art soldering solutions up close.

As part of APEX, there was a high-profile interview with KEI VP Ernie Grice with insights into industry trends and the company´s strategic vision. The technical presentation by Sales Director Ian Orpwood on "Process Traceability in Hand Soldering, Rework, and Repair", which highlighted the groundbreaking possibilities of the IoT soldering station i-CON TRACE with full traceability, was also extremely well received. The presentation of the state-of-the-art HOTFLOW THREE reflow soldering system with patented three-stage SMART CLEANING system at APEX marked an important milestone in the industry. While other manufacturers of reflow soldering systems left the USA years ago, Kurtz Ersa is making a clear statement with its new plant in Juarez (Mexico). This has been very well received by customers, especially in times of complex geopolitical developments.

Kurtz Ersa´s APEX team!

The Kurtz Ersa Asia trade fair team at Productronica China 2025 in Shanghai

The Kurtz Ersa Asia trade fair team at NEPCON China

Kurtz Ersa Strengthens Local Commitment at ***Productronica China 2025***

At this year´s Productronica China in Shanghai, Kurtz Ersa reaffirmed its strategic dedication to the Chinese market – including the debut of the VERSAFLOW ONE, now locally manufactured in Zhuhai.

From March 26–28, Kurtz Ersa proudly participated in Productronica China 2025 at the Shanghai New International Expo Centre – one of the world´s most important trade shows for electronics manufacturing. Our strong presence underscored a clear message: Kurtz Ersa is fully committed to the Chinese market – the world´s largest and fastest-growing in electronics production.

We showcased cutting-edge solutions that are engineered in Germany and now manufactured locally in our Zhuhai plant. This strategic setup ensures premium quality, faster delivery times, and competitive pricing – tailored to the needs of our local customers.

A standout highlight was the launch of the VERSAFLOW ONE – our newest selective soldering system, now made in Zhuhai. Built for performance and flexibility, it truly is "the one for everyone" in modern electronics manufacturing. Our "local-for-local" strategy is backed by Kurtz Ersa´s global production network, enabling us to serve the Chinese market with localized support and proven quality. It reflects our long-term investment in China´s electronics industry.

As trends like electromobility and AI-driven production continue to transform electronics manufacturing, Kurtz Ersa is proud to support this evolution with innovative, reliable, and accessible solutions. Productronica China 2025 was a powerful reminder of the pace of change – and we are honored to be part of this journey alongside our partners and customers … across China and beyond!

NEPCON China 2025:
Navigating Global Challenges with Localized Solutions

The NEPCON China show in Shanghai once again proved to be an outstanding platform for showcasing the latest electronic manufacturing technologies and fostering industry dialogue. While the global economy faced challenges in the first quarter, China exceeded market expectations, achieving an GDP growth rate of 5.4 %. The overall Chinese electronics industry reported positive results for the first quarter, reflecting robust market conditions and strong customer demand across the sector.

However, conversations at NEPCON revealed a notable shift in sentiment as the second quarter has begun, characterized by increasing uncertainty due to recent global tariff escalations. These trade dynamics highlight the critical importance of Kurtz Ersa´s global footprint and underline our deep commitment to the China market. Leveraging our production facility in China, Kurtz Ersa remains dedicated to supporting our customers by building robust domestic supply chains. This strategic localization minimizes the impact of international tariffs, reduces delivery times, and lowers shipping costs, significantly enhancing market competitiveness and customer satisfaction.

Our team proudly introduced the locally manufactured VERSAFLOW ONE, a selective soldering machine now produced directly in China, representing a significant milestone in our localized manufacturing capabilities. Despite the uncertainty of this year, Kurtz Ersa remains fully committed to the Chinese market and continues to be a reliable partner for our customers, particularly during these challenging times!

Pushing Automation

Festo Bulgaria adds automation solution to existing wave soldering system with Ersa support

With over 20,600 employees, the Festo Group pursues a clear global goal: to continuously improve productivity and competitiveness for customers in factory and process automation. Under the claim "Automation for a world in motion", Festo has been setting standards in industrial automation technology and technical education for 100 years, thereby contributing to the sustainable development of the environment, economy and society.

In Bulgaria, where the Group has been active for 39 years, everything revolves around innovation – with 1,000 employees today and a turnover of 100 million Euro, the Sofia site has developed into a highly dynamic profit center and is one of the "top five" in the Festo Group. In order to meet the growing demand for more flexibility and efficiency, Festo Bulgaria has expanded an existing Ersa POWERFLOW PRO wave soldering system with a highly complex automation solution as part of an ambitious project.

Official handover of the Ersa POWERFLOW PRO wave soldering system extended with automation solutions at the Sofia site of Festo Bulgaria

20.000 m^2 of production space, over 4,300 products – these figures alone will impress anyone who takes a closer look at industrial production. It's easy to see why Festo Bulgaria is one of the most important production sites within the Festo family, whose headquarters in Esslingen am Neckar is just 20 kilometers from the Swabian metropolis of Stuttgart. The Festo site in the Bulgarian capital specializes in the production of electronics and electric drives, such as flow, position and pressure sensors, valve modules, PLC controls and electric motors. The Bulgarians do not want to stop at the status they have achieved; they have set themselves even more ambitious goals: They want to increase their current turnover of 100 million Euro to 300 million Euro by 2030. "We are increasingly moving away from pure hardware in the form of pneumatic and electronic products towards intelligent software solutions and seamless connectivity," says Kalin Dobrev, General Manager of Festo Bulgaria, who declares software and connectivity to be the "basis for our future business".

to the Next Level!

The demands on production present the electronics experts at Festo Bulgaria with immense challenges – 400 orders are received every day, 80 % of which are not planned in advance and with an average batch size of just eleven units. Festo manages its production with a high-availability strategy from order entry to goods receipt at the customer´s premises. A high-mix, low-volume approach was derived for this "production on demand" for Bulgarian electronics production in order to meet the maximum flexibility required. The soldering systems from system supplier Ersa fit these requirements perfectly and can also be adapted to changing needs thanks to their modular layout. Therefore, the next logical step was to expand the existing Ersa POWERFLOW PRO wave soldering system with automation solutions based on the Festo high flexibility strategy.

Ideal partner for sophisticated electronics production

The business relationship between Festo and Ersa began back in 2014 – initially as a purely German-German partnership. Ersa´s headquarters in Wertheim initially delivered two VERSAPRINT 2 stencil printers to Festo´s German site in Scharnhausen, before another printer of the same type was installed three years later. In 2019, the partnership was extended to Bulgaria, which naturally benefited from the experience of the colleagues in Germany – but did not adopt it unseen, but instead started its own evaluation with a comparison to the needs at the Bulgarian site. After this was also positive, the order for a POWERFLOW PRO wave soldering system was placed. After the first few years of successful production, a comparison was made with the strategic development – and it was determined that the existing system needed to be rethought in order to achieve future goals, with a greater focus on automated processes.

At ERSA-Bulgaria´s Technology Day 2023, a Festo engineer got talking to an Ersa Area Sales Manager, and a few months later an ambitious project was born – some of those involved still call it "crazy" to this day. In terms of content, it involved the consistent expansion of an existing wave soldering system with a tailor-made automation concept, which was implemented in intensive cooperation with the Ersa Demo Center in Wertheim, workshops in Sofia and close collaboration with the local team from ERSA-Bulgaria.
Stoyan Stoyanov, Global SMD/SMT Expert at Festo Bulgaria and one of the discussion partners at the exchange with Ersa Area Sales Manager Christian Ott at the time, describes the challenges in retrospect: "The implementation was complex – we had to ensure that the automation met our high requirements for repeatability, reliability and flexibility. Standard solutions did not work here – Ersa put a lot of effort into delivering a customized concept that was precisely tailored to our production environment. We joined forces to create 19 layouts until the final solution was found – a lot of effort, but when we look at the productive systems now: It was worth it in every respect!" The new system includes sophisticated handling technology, seamless MES traceability, barcode-controlled product identification and integrated quality checks – all embedded in a user-friendly interface with live data analysis. Where the operator was previously a potential bottleneck, automation now provides targeted support to ensure consistent quality in production at all times. Stoyan Stoyanov continues: "With our software-based solution, we are now able to produce four different products in parallel. The system recognizes the necessary parameters via barcodes and automatically adjusts the processes. That´s exactly the flexibility we need every day!"

Despite the high level of complexity, the installation went smoothly – the wave soldering system, which had grown considerably due to the upstream placement periphery, had to be moved from the second to the first floor and was able to start up directly in 3-shift operation after an intensive installation phase. The proximity to technical support was also a decisive factor: "The expertise of ››

The Sofia production plant in Bulgaria – Festo´s production site for electronics, electric drives and products for medical industry

With a length of 27 m x 6 m, the POWERFLOW can hardly be fitted into captured in one picture

General Manager Kalin Dobrev explains the digitized production at the Sofia site

The Ersa POWERFLOW PRO wave soldering system expanded with automated placement stations

Kalin Dobrev, General Manager (left), and Ivan Lazov, Operations Manager Electric Drives & SMT (center), from Festo Bulgaria with Ersa General Sales Manager Rainer Krauss (right)

» ERSA-Bulgaria and the close proximity is a great advantage for us – we were able to count on the fast and competent support of Nikolay Momchilov and his team at all times," praises Stoyanov.

Sustainability and employee focus

Festo is aiming for further growth in the future, but that is not the only goal – in addition to the massive technological development towards digitization, sustainability is another central pillar of the Group. In Bulgaria, the Festo employees chose the motto „Driving our future" to present their company. The development and production of high-tech products with the Festo brand in Bulgaria are an impetus for the sustainable development and success story of the company. And this effort is producing results: Festo Bulgaria is the winner in the "Industry" category in Lean & Green Management Award in 2024. Just two examples how the company is heading for a small CO_2 footprint: Production is almost paperless, the expansion of the company´s own photovoltaic system is being massively driven forward – General Manager Kalin Dobrev´s plans include an in-house contribution of up to 45 %. At the same time, the focus is on the team, which is a decisive factor in achieving the ambitious goals.

"We actively encourage and challenge our employees and make sure that life and work remain in balance," says Kalin Dobrev. This is no empty phrase, Festo Bulgaria enjoys an excellent reputation as an employer where employees often stay for many years and is socially involved in many areas – whether socially, in sport or through direct contact with future specialists or university graduates. "Both companies, Festo and Ersa, are family businesses and represent similar values – among other things, they live business relationships as partnerships at eye level and look back on a similar company history. Ersa already celebrated its 100th anniversary a few years ago, Festo has reached 100 years in 2025. Thank you very much for the trust you have placed in us and for the project, which was realized together in true teamwork and is truly a beacon for further projects of this magnitude," said Ersa General Sales Manager Rainer Krauss at the official handover of the plant in Sofia in mid-April 2025.

Automation at the next level

The joint Festo/Ersa project impressively demonstrates how close partnership, technical expertise and shared visions can lead to genuine innovation. With the new Ersa solution, Festo Bulgaria has done far more than just increase its production capacity – the company has made a sustainable investment in the future. "This project harmonizes perfectly with our strategy – we are convinced that it will take automation to the next level," summarizes Kalin Dobrev. "Thanks to Ersa, we are now more efficient, more flexible and ready for the next growth steps. The Festo Bulgaria team is looking forward to further cooperation – I am sure that more projects will be coming up soon."

Certified Ersa eLearning.

Discover New Horizons.

Revolutionary digital training and education platform with courses on soldering processes, machine operation and maintenance. Available 24/7.
With interactive content. From just € 199.

The requirements for training in electronics production are constantly increasing – flexible, efficient and practical learning solutions are needed. With Ersa eLearning, we offer an innovative training system that is precisely tailored to this: available worldwide, device-independent and accessible around the clock.

The interactive, module-based course offering covers key processes such as machine soldering and stencil printing – from operation and maintenance to process optimization. The learning offer is rounded off by an exclusive knowledge database with clear explanatory videos, continuously updated content and support from a digital assistant during the course.

The learning platform is accessible via **Kurtz Ersa CONNECT** or directly via standard browsers – anytime and anywhere. Examinations, final tests and certificates document the learning success, while the individual learning pace is tailored to every level of knowledge. This significantly reduces training times while increasing efficiency in the production process.

Ersa eLearning – the sophisticated training system for companies that rely on future-proof qualifications.
All information, courses and booking options online at
ersa.com/e-learning

Each solder joint is provided with individual parameters in order to achieve optimum product quality. Programming is carried out offline or – as shown here – directly on the VERSAFLOW 4/55

PressFinish: *EMS Service Provider with Passion*

Since its foundation in 1982, PressFinish Electronics GmbH has been a passionate EMS service provider. Since April 2024, the company has been manufacturing electronics for its customers in the medical technology, industrial and aerospace sectors at its new 2,000 m² site in Maisach near Munich. Selective soldering and paste printing technology from Ersa are also used here.

View through the PCB magazine into the VERSAFLEX soldering module

Germany currently has a hard time competing globally – too cumbersome, too high costs, too much bureaucracy. PressFinish meets these challenges with flexibility, expertise and top quality. The basis for this is a highly trained team and modern machines. "We work to make our customers happy," summarizes Production Manager Dominik Wimmer. PressFinish´s range of services includes the production of prototypes through to series production in batch sizes of up to 100,000 units. There is increasing demand in the development and prototype business. Here, PressFinish develops complete products on request – from PCB design and assembly to housing, software and subsequent prototype production. In the series production business, PressFinish takes care of component procurement, warehousing, final assembly and commissioning into the customer-specific sales packaging. Customers benefit from a strong team, short distances and direct communication. PressFinish is particularly valued as a partner in the aerospace, industrial electronics and medical technology sectors. For example, control units for drones, telemetry systems and – thanks to ATEX certification – explosion-proof electronic assemblies for industrial electronics are manufactured.

Challenge: aluminum laminated boards

A large proportion of production goes into medical technology. For over 20 years, PressFinish has been developing and manufacturing assemblies and devices for blood testing and processing, but also for lighting technology in operating theaters and for examination devices using LEDs as light source. One of the biggest challenges here is the soldering of LEDs on aluminum-laminated circuit boards. These special PCBs dissipate the heat generated during operation via their aluminum layer, which makes soldering the LEDs more difficult. PressFinish has specialized in this area.

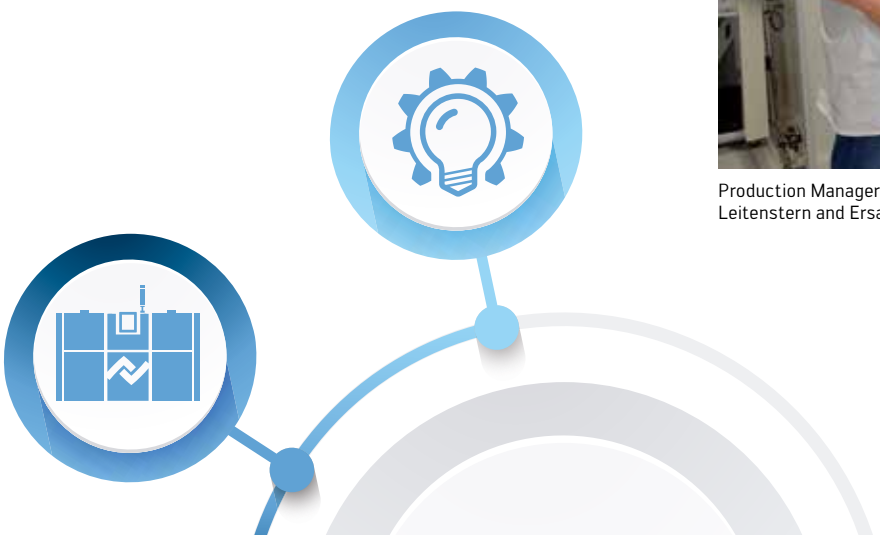
To apply the solder deposit to the PCBs, PressFinish uses an Ersa VERSAPRINT stencil printer, which has a line scan camera for automatic post-print inspection in the line cycle for complete traceability. "We know exactly which components were used from which batch and can verify this production data at any time," explains Sales Representative Franz Leitenstern.

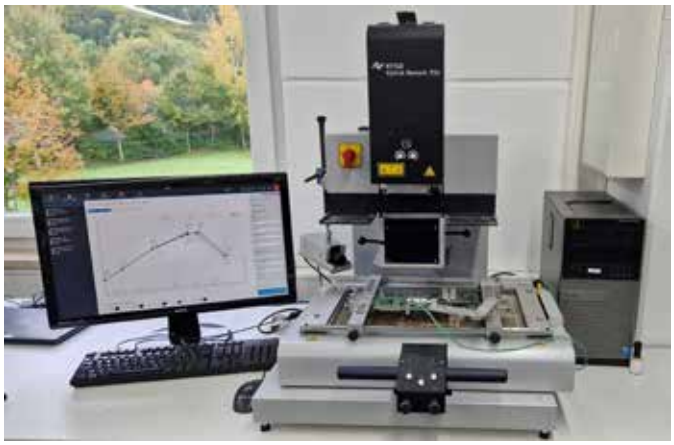
Electronics production changed with the development of SMD technology. THT components were replaced by surface-mounted chips and BGAs, but THT components are still irreplaceable in many applications. Especially in power electronics, mobile communications technology and e-mobility, a mixed assembly of SMD and THT is often required.

To further professionalize THT processing, PressFinish invested in an Ersa VERSAFLOW 4/55 selective soldering system in 2022, which impressed with its outstanding soldering quality, simple operation and fast set-up times. The company also uses the VERSAFLEX soldering module to process different solder joints on a PCB at the same time. This provides high flexibility and productivity. Another special feature is the complete traceability of the entire soldering process – all process parameters are recorded in detail and stored in the MES system. PressFinish relies on its partnership with Ersa to continuously expand its manufacturing expertise. Ersa's comprehensive service and process consulting are particularly important to the company. "Even with the best preparation and zero-defect strategies, errors can occur," says Dominik Wimmer. For this reason, devices are already being tested in order to expand expertise in the area of rework. It is quite possible that PressFinish will also rely on Ersa here ...

Is there still something possible? The VERSAFLOW 4/55 regularly pushes the limits of what is physically possible and masters even the finest pin spacing of 0.4 mm

Production Manager Dominik Wimmer, Sales Representative Franz Leitenstern and Ersa Area Sales Manager Mark Birl (right) in conversation





Ersa HR 550: guided rework with high-performance optics system and flexible heating technology in use at Allmendinger in Bad Überkingen, Swabia

Julian Feder setting up the control module on the second HR 550, which Allmendinger purchased in 2024 to cope with the increasing demand for component repair

Ersa HR 550

Rework in a double pack

Allmendinger Elektromechanik relies on professional component repair

For almost three decades, Allmendinger Elektromechanik KG has been offering repairs, spare parts deliveries, on-site service and retrofit programs for CNC machines worldwide. The company from Bad Überkingen with 200 employees specializes in the repair and supply of Siemens CNC and PLC controls, servo and spindle drives as well as servo motors – whether for current or discontinued systems from Siemens, Indramat, Heidenhain, Fanuc, Bosch or Kuka. Two Ersa HR 550 rework systems, with which Allmendinger repairs electronic assemblies at the highest technical level – quickly, precisely and sustainably, play a decisive role in this.

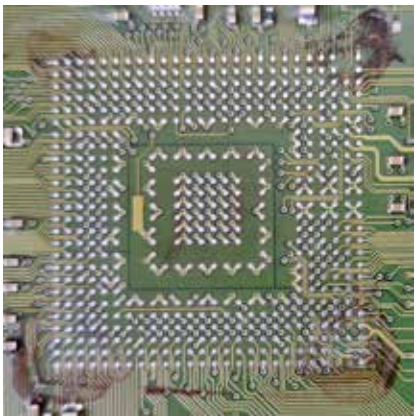
"Our customers usually get in touch when there is an acute defect – then it has to be done quickly, that´s when our core competence comes into play," explain Nadine and Daniel Allmendinger, Managing Directors of the second-generation Swabian family business. The service includes manufacturer-independent repairs of all assemblies at a fixed price for Siemens, Indramat, Heidenhain, Fanuc and Bosch, with direct replacement and express delivery on request. The aim is to minimize downtimes on high-quality production systems, which is supported by modern technology – over 110 test benches developed in-house, an in-house X-ray system and a 24/7 online store with direct access to more than 40,000 spare parts on 50,000 m² of storage space. This claim is based on the Allmendinger company credo: "Everything. Fast. Fair." This can also be seen in the certifications that Allmendinger has acquired over the years: DIN EN ISO 9001 (since 2011), which sets out requirements for quality management systems, and DIN EN ISO 14001 (from 2014) for operating in accordance with valid environmental guidelines.

Back to the service case: error analysis and data backup are carried out at the highest technical level, for example for the Siemens Sinumerik family, Simatic panels and Heidenhain CNC controls. The Ersa HR 550 rework systems are indispensable for repairs at board level. Thanks to precise process control, high-performance optics and flexible heating technology, they also enable the reuse of components for which spare parts are no longer available – such as older controllers. These then have to be "rescued" for reuse. "Up to 40-year-old assemblies are often made functional again with Ersa systems," says Julian Feder, workshop electronics technician responsible for assembly repair at Allmendinger since 2013. This results in approx. 60–70 % leaded rework applications, which are implemented by simply selecting the HRSoft2 database profiles. If there are no special or prioritized orders, the Ersa HR 550 rework systems are in operation all day – five to ten assemblies are reworked or repaired every day.

Reballing process for existing BGAs

The reballing process is a special case: if new BGAs, usually from China, are not available, existing chips – such as Intel or graphics processors – are remanufactured. According to Julian Feder, the success rate is around 80 percent. Even challenging tasks such as removing adhesive dots before replacing BGAs on some control modules are successfully mastered with the HR 550. Allmendinger has been relying on the Ersa HR 550 since December 2016, which achieves outstanding results with guided processes, a high-performance optics system and flexible heating technology based on convenient operation. During its time in operation, the hardware and software have been continually updated. Two such systems are now in operation at Allmendinger. It is quite possible that more Ersa soldering systems will find their way to Bad Überkingen in the future ...

Assembly after desoldering



Enlarged section of the assembly with the cleaned landing surface of the BGA

The heating head is positioned above the BGA to be desoldered and this can be safely desoldered using closed loop control

For Julian Feder, removing the adhesive dots is a real challenge

Ersa reflow soldering systems: Always the right performance for all reflow applications!

Ersa has been setting standards in reflow soldering for almost 40 years – from the compact entry-level model HOTFLOW ONE to the powerful flagship HOTFLOW THREE, which sets the benchmark in high-volume soldering, to the EXOS 10/26 with vacuum technology for void-free soldering results. Whatever the requirements in electronics production, Ersa reflow systems offer maximum quality, cost-effectiveness and sustainability across the board!

Size does matter! HOTFLOW ONE: Benchmark in small footprint

HOTFLOW ONE ... High power with a small footprint!

The HOTFLOW ONE is the entry-level model in the Ersa reflow world and impresses with a strong price-performance ratio and high efficiency. The extremely compact reflow soldering system incorporates over 40 years of Ersa reflow expertise, which ensures excellent soldering results with optimum thermal performance, a good cross profile and excellent zone separation. Available with 14 heating modules with a process length of 3.35 m or with 20 heating modules (4.84 m process zone).

HOTFLOW THREE: Maintenance access as easy as Drag & Drop

HOTFLOW THREE: High end dual track transport

HOTFLOW THREE ... The new benchmark in high-volume reflow soldering

The HOTFLOW THREE offers the best reflow performance in every respect: Quality. Efficiency. Flexibility. Connectivity. It runs and runs and runs in 24/7 non-stop three-shift operation for up to twelve weeks or more without a maintenance interval. With its patented three-stage Ersa SMART CLEANING cleaning system, it sets the benchmark for reflow soldering. The Ersa reflow oven is also top-class in other respects: thanks to the highly efficient motor and control units (SCPU®) developed exclusively for Ersa, only the power actually required is used in the respective zones for optimized soldering profiles and perfect soldering results, and energy and nitrogen consumption is reduced to a minimum. Ersa is thus making a clear statement for even more quality, efficiency and sustainability in reflow soldering. With a continuous sound level <60 DB(A), it works "whisper quiet".

Thanks to its future-proof interface and Kurtz Ersa CONNECT, the HOTFLOW THREE is ideally equipped for all digital services and precise process data acquisition. With its wide range of configurations and equipment options, the HOTFLOW THREE meets all requirements. It is available with 16, 20 or 26 zones and offers single-track or variable dual-track systems for transportation.

Highlights HOTFLOW THREE:

- Highest machine availability thanks to patented cleaning system
- Maximum ease of maintenance
- Individually adjustable convection zones
- Smart cooling system and optimum thermal insulation
- Efficient sound insulation
- Extremely flexible (2-track) transport system
- Quick soldering profile change
- Excellent & intuitive ERSASOFT 5 software

EXOS 10/26 ... Vacuum reflow soldering with low void content

The EXOS 10/26 convection reflow soldering system guarantees low-void solder joints, as required in the aerospace, medical technology and power electronics industries, for example. The EXOS has 22 heating chambers and 4 cooling zones as well as a vacuum chamber after the peak zone, with which the void rate (depending on solder paste, component and PCB) can be reduced by up to 99 %. The innovative transport system of the EXOS is segmented into four parts – each individually adjustable – and guarantees reliable processes and maximum component quality.

EXOS – Reflow soldering from and for outer space: Void-free. Under Vacuum. Highly Reliable.

6th Technology Forum Electronics Production – impulses, innovations and intensive exchange

Wertheim became the meeting place for the electronics manufacturing industry for the sixth time in mid-May. Around 140 external visitors took the opportunity to gather and exchange practical information about new technologies, processes and partnerships at the Electronics Manufacturing Technology Forum and accompanying trade exhibition on May 14 and 15.

140 external participants attended the 6th Electronics Manufacturing Technology Forum in Wertheim

The 2nd industry get-together "Insight Beyond" took place the evening before the Technology Forum. Following a keynote speech and a high-caliber panel discussion, around 70 business partners discussed pressing future topics under the motto "Europe – yes we can. Yes we want.", they discussed pressing issues for the future. The event made it clear how important cooperation, visibility and political attention are for the success of European electronics manufacturing. Insights and impulses from the format flowed directly into the subsequent technology forum.

6th Technology Forum Electronics Production: Attractive mix of presentations, with lively exchanges between experts in between

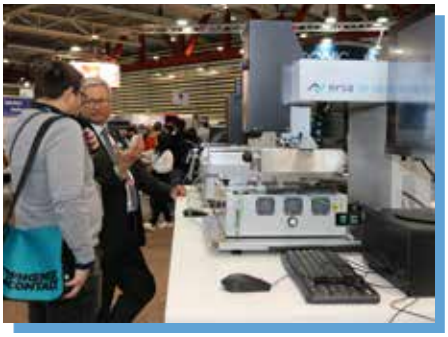
At the Technology Forum itself, the expectant participants were welcomed by Hansjürgen Bolg, Head of Soldering Tools, Rework & Inspection, and guided through the event by Christian Rückert, Product Manager Technology, as moderator. The two-day technology forum was once again a comprehensive reflection of the performance spectrum of electronics production and offered a condensed package of practical technical presentations, interactive hands-on sessions and individual process consulting. The presentations were very well received by the attentive audience, whether on automated solutions, data-driven services ("Unlocking the Power of Data in Electronic Manufacturing" by ASMPT or "Who's winning the race: 3D AXI vs. AI void analysis" by Viscom), rework technologies (including big boards and use in research & development), sustainable production ("Zero defect strategy in selective soldering" by Ersa) and the requirements for modern production equipment. None of the presentations were purely theoretical; instead, all contributions aimed to make collaboration along the entire process chain – from OEMs to EMS providers to end customers – even more tangible and to identify optimization potential. The direct dialog with industry colleagues, solution providers and decision-makers enabled participants to address specific challenges and develop joint solutions. One highlight was the accompanying in-house exhibition, where leading partner companies such as ASMPT, Atlas Copco, FUJI EUROPE, kolb Cleaning Technology, Koh Young Europe, Viscom, Schunk and many more presented their latest systems and products – from automated approaches and inspection solutions to the sustainable use of efficient fluxes, solder wires and pastes. The personal exchange was cultivated in the sessions – and in many cases continued over dinner at Wertheim Castle.

"The event showed us that the format and topics were spot on. Under the motto 'Only together can we shape and move things forward', we, our business partners and visitors alike were able to take home valuable ideas for the further development of solutions and sustainable partnerships in electronics production. The bar is set very high for next year's 7th Technology Forum – we are already looking forward to further strengthening the visibility and attractiveness of the industry with our event," concluded Hansjürgen Bolg at the end of the event.

Very popular at the Technology Forum: Hands-on sessions, here on the Ersa HR 550 rework system

Ersa Trade Fairs & Events

ALWAYS CLOSE TO THE CUSTOMER!



Recap GLOBAL INDUSTRIE | France

In 2025, GLOBAL INDUSTRIE took place in Lyon from March 11 to 14 – everything from steel, iron and sheet metal processing to plastic forming was represented at the French industrial trade fair. Ersa exhibits at our stand included HOTFLOW THREE, VERSAFLOW 4/55, the HR 600P and HR 500 rework systems and the entire hand soldering range. Many thanks to all visitors and partners who made the trade fair a success!

7th Techday ERSA-Bulgaria: Strong response in Sofia!

The 7th edition of ERSA-Bulgaria's Technology Day on April 8 was a complete success with 60 participants. Technical presentations offered insights into selective soldering, digitization, hand soldering and rework. Particularly exciting: the conversion of an existing wave soldering system into a largely automated production system and possible optimization potential through the use of AI. In addition to knowledge transfer, there was an intensive exchange during networking, so that the Bulgarian electronics manufacturing community was strengthened several times over.

Belmet MI d.o.o. & Stepan GmbH: Joint technology day in Slovenia

On May 21 and 22, the Technology Day Slovenia took place at the Grand Hotel Bernardin in Portorož. Jointly organized by Belmet MI d.o.o. and Stepan GmbH, the two-day event offered numerous specialist presentations on current trends in electronics production. Topics included selective soldering, digitization, AI, rework technologies and automation. Numerous participants took the opportunity to engage in intensive discussions and networking.

Technology Series India 2025 – New Delhi and Hyderabad

The Technology Series India 2025 kicked off with two successful Techdays in New Delhi (May 6) and Hyderabad (May 8), attended by a total of 65 participants. The first day focused on traceability, hand soldering, rework and the HOTFLOW THREE reflow soldering machine. Viscom presented AI-supported X-ray, Interflux showed soldering and fluxing solutions. As at the first event, the enthusiastic participants in Hyderabad took home numerous new experiences for their electronics production.

DIMER

FORGED BY CHALLENGE,

DRIVEN BY VISION!

Production line consisting of Kurtz shape moulding machines type N-Line

DIMER is a leading company in the processing of expanded polystyrene, polypropylene, and polyethylene. Since 1992, the Mexican company has maintained a trusting business relationship with our American location, Kurtz Ersa, Inc., not least with the Kurtz headquarters in Wiebelbach. A partnership that was tested in 2020 by external influences and has since become even closer. A success story that is anything but standard.

Decisive Moment

In the life of every company, there are moments that shape its character and determine its fate. For DIMER, this moment came in 2020 when a devastating fire in mid-December destroyed the plant in Reynosa. But as history teaches us, true strength is forged not in the comfort zone, but through adversity.

While the flames still smoldered and firefighters worked tirelessly, the DIMER team stood together amidst the rubble. In this decisive moment, a three-pronged plan was born: ensuring uninterrupted customer service, faster rebuilding, and securing financial recovery. This plan, simple in form but profound in execution, set DIMER on the path to restoring its pre-fire status and went even further.

DIMER immediately initiated measures to maintain operations. Outsourcing production just before Christmas, during the packaging industry's busiest time of the year, was no small feat, but it allowed them to continue fulfilling customer orders and maintain customer loyalty. However, this required short-term financial sacrifices. At the same time, DIMER made the crucial decision to move to a new location that would allow for quicker setup and future scalability. Within a few months, our customer was back in operation – thanks to determined leadership, a dedicated team, and unwavering support from strategic partners like Kurtz. ➔

Material flow, production planning and monitoring with MRP system "UKKO"

Strong Alliances

Kurtz, with whom DIMER has worked since 1992, proved indispensable for the new beginning. The Kurtz team understood the needs of the packaging specialist, had confidence in the company's future, and began production of new shape moulding machines immediately after DIMER committed to rebuilding. This commitment is an example of a cooperation that is rare in business – and even rarer in times of crisis.

The restructuring of DIMER did not end with the rebuilding. Determined never to experience such a vulnerability again, our partner heavily invested in fire prevention, safety protocols, and risk mitigation strategies. Today, DIMER is proud to hold certifications according to ISO 9001, ISO 14000, and ISO 45001. Additionally, a mutual aid agreement has been established with industry partners to ensure support in future emergencies. Thanks to such an agreement, intact tools will be provided to other packaging producers in the event of future fires or similarly caused production interruptions, allowing them to step in and continue production as subcontractors. This is especially important for maintaining customer relations.

Investments in People and Technology

After the fire, DIMER invested in its greatest asset: its employees. By strengthening the team in quality assurance, engineering, and advanced production management, it ensures that DIMER's operational capabilities align with its strategic ambitions.

The infrastructure at DIMER has also grown exponentially. From an originally modest footprint with one factory and one distribution center, the Mexican packaging manufacturer now operates two production facilities – Reynosa and a new plant in Celaya, Bajío – and three distribution centers in Monterrey, Saltillo, and San Luis Potosí.

Production capacities have expanded to 25 Kurtz shape moulding machines capable of processing EPS, EPE, and EPP with precision, flexibility, and at scale. This also includes state-of-the-art technology for producing EPP parts with insert components and their automation, such as production using the Kurtz ROTO FOAMER.

The centerpiece of the restructuring is UKKO, an internally developed MRP system for material requirements planning that integrates all areas of the operation – finance, production, maintenance, procurement, and more. Real-time monitoring provides detailed insights into resource consumption and machine performance. With ongoing AI integration, UKKO is more than just a tool; it is the digital nervous system of a company that aims to lead in efficiency, traceability, and innovation. This results in faster processes while also optimizing costs, offering additional value to customers.

Warehouse and dispatch for punctual deliveries

FORGED BY CHALLENGE, DRIVEN BY VISION!

2021 — Recovery and Restart

After the 2020 fire, operations resumed with **8 Kurtz machines**, marking the beginning of the rebuilding phase.

2022 — Strategie Growth

With **3 additional Kurtz machines**, this expansion allowed DIMER to begin processing EPP and EPE materials, opening new opportunities in high-performance applications.

2023 — Capacity Expansion

DIMER continued investing in equipment, bringing the total to **13 Kurtz machines** and increasing production flexibility.

2024 — Optimization Phase

One more Kurtz machine was added, strengthening DIMER's position in the automotive market.

2025 — New Horizons

The opening of DIMER's new plant includes **11 Kurtz machines**, representing the boldest expansion step to date.

Important milestones since the resumption of production in 2021

The Path to the Future

The expansion to Bajío was just the beginning. Our partner is committed to disciplined, intelligent growth – initially at the national level, and over time also internationally. Every step is calculated and driven by customer-oriented demand and a long-term vision. The time since 2020 has taught the company that resilience, discipline, strategic clarity, and strong partnerships are the true architects of success.

The alliance with Kurtz is a constant source of strength, innovation, and resilience for DIMER in facing current challenges in the packaging market. We are DIMER's strategic partner, providing reliable and forward-looking support through our competent team in sales and local service. Our group has the right technology mix that enables us to serve our customers excellently – just as we do for DIMER in producing packaging and moulded parts for the automotive sector. We can efficiently deploy EPS processing machines, such as those from the N-Line series, for mass production lines. With the A-Line series, which is manufactured in the USA for the North American continent, we offer a product for maximum flexibility and precision in particle foam processing. The Kurtz T-Line machines are high-tech machines that meet the highest automotive standards. Thus, all customer needs, from small to large series, can be met with the highest efficiency and quality standards. This is also what DIMER appreciates about Kurtz technologies.

DIMER's success story is just beginning. The foundation for a promising future is laid, the vision is clear – and the opportunities ahead of DIMER are immense. We look forward to continuing to shape this future together with DIMER!

Kurtz Protective Solutions

Italy veteran retires

Stephan Gesuato (right) thanks Giovanni Contini (left) for 35 years of partnership

The Kurtz company has been closely associated with Giovanni Contini since 1989. In the early days, he was head of the sales and service branch at the Italian site, where his wife Rosa Bettinaglio also worked. After the branch closed in 2010, Giovanni Contini remained with Kurtz Protective Solutions as a sales representative and service partner until the end of 2024.

From 2010 to 2024, over 160 machines were sold to Italy, most of which were also commissioned and serviced by Contini himself. Giovanni Contini often brought challenges to his colleagues at the head office in Germany: customers in the Southern Europe region had and still have special requirements in terms of applications. Contini always managed his projects with great passion and motivation and provided many ideas for the realization of customer requests. Thanks to his extensive process knowledge, he made a significant contribution to ensuring that the promised properties in terms of quality and productivity could be fulfilled and that satisfied customers were the result.

We would like to thank him for the many years of excellent cooperation and wish him all the best for the new phase of his life!

View of the hardware of the process analysis tool

Preview K Trade Fair 2025

NEW *PROCESS ANALYSIS TOOL* ON OFFER AT KURTZ SERVICE

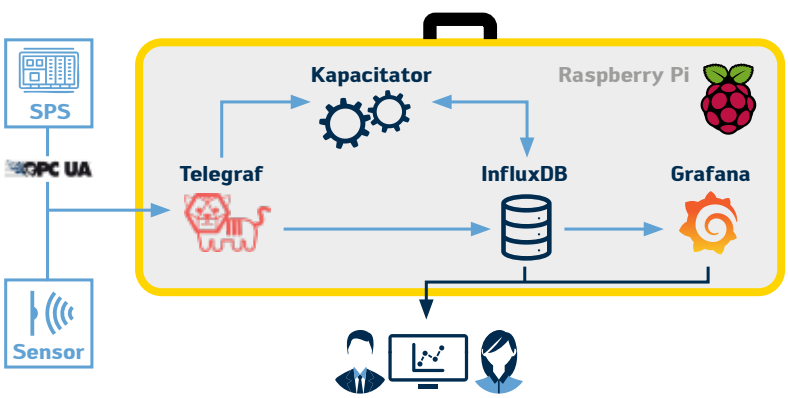
The key to greater efficiency lies in the process. This is why Kurtz is expanding its portfolio and offering a new service in the form of on-site service visits as of Q4/2025 – a first taste of what the Moulding Machines will be presenting at K 2025 in Düsseldorf.

Complex processes in the production of molded parts made of particle foam or cast parts require in-depth know-how. Kurtz knows how to analyze and further develop these processes so that customers receive the highest quality and efficiency. This knowledge has been built up and continuously improved over decades at Kurtz Moulding Machines. From fall 2025, a new analysis tool will be available for all Kurtz machines. The aim is to make ongoing processes transparent and to optimize them in a targeted manner.

MAKING PROCESS AND MACHINE DATA VISIBLE

The new analysis service from Kurtz Service enables the professional recording and visualization of process and machine data directly on site, which was previously not available. A service technician records all relevant process and machine parameters – such as tightness or positioning accuracy – independently of the control system using compact hardware. A log documents the condition of the machine and shows any deviations or changes. The data is then analyzed by Kurtz experts and evaluated with the customer. The aim is to uncover potential for process improvements, e.g. through pressure adjustment or temperature monitoring. Sometimes it is even possible to open up new production possibilities with the existing system.

Stations of the recorded data:



As of October, Kurtz Service will provide you with information on process data acquisition, evaluation and system diagnostics. From Q4 we are happy to test your Kurtz machine individually – regardless of the year of manufacture. Simply send an e-mail to *service-kurtz@kurtzersa.de*

Double Benefit with Highest Flexibility

2 in 1 Low Pressure Casting Machine for Permanent and Sand Mold

Full flexibility for your production: Kurtz AL13-13SC – suitable with permanent mold and sand core package

Flexibility is the key point for jobbing foundries besides quality and a reliable process. With every new investment, the first question is always the same: Which machine is "the right one"? Especially when it comes to small and medium-sized foundries that do not work for the mass market as automotive suppliers do. For a Turkish jobbing foundry, Kurtz was "by far the best choice" – statement of the customer –, offering the ideal machine and the perfect solution.

The "2 in 1 Solution" of Kurtz AL13-13SC fulfils the expectations for flexibility. Originally, this machine type was the classic low pressure die casting machine within the Kurtz portfolio. Based on the requirements of the Turkish market, Kurtz has further developed this machine type. Thanks to some additions, it is possible to cast complete core packages and sand molds besides permanent steel molds. In the case of sand molds, Kurtz is currently talking about sizes up to 1,250 mm x 1,500 mm x 1,500 mm, i.e. real large core packages.

Casting weight up to 700 kg

In addition to the mold size, the possible casting weight is important. Depending on the furnace, this can be 700 kg, as already realized by some of Kurtz' customers in Turkey. A flexible gating system is no problem – from one to five riser tubes everything is possible. The standard Kurtz "DOM System"-Design (docked onto mold) means, that the riser tube can be docked directly onto the mold or sand package, which means less interfaces and far fewer temperature losses.

Flexibility and productivity are not a contradiction in terms. Both is realized with a crucible furnace changing system. The furnace is changed using a crane. Both the machine and the furnace are equipped with centering devices and multi-couplings so that they can be changed quickly. One furnace is in casting mode and the second furnace can be prepared for the next use in parallel which enables productivity in permanent mold casting through continuous casting. Neither time nor temperature is lost due to recharging. Another advantage of the furnace exchange concept is that jobbing foundries can use different alloys and divide them up into different furnaces.

With this highly flexible all-round casting machine from Kurtz, you are ideally equipped to successfully fulfill high casting requirements. Contact our colleagues from Kurtz Casting Solutions if you are interested in getting more information.

Different furnace colors for easier identification of different alloys

Highest flexibility for jobbing foundries: Kurtz AL13-13SC "2 in 1 Solution" – left side: permanent mold, right side: sand mold/core package

Highlights of the Kurtz AL13-13SC "2 in 1 Solution" for Permanent Molds and Core Packages

- Crucible exchange furnace, from 300 kg to 1,500 kg capacity
- Use of 1 to 5 riser tubes via DOM System
- Manual on-site panel for teaching furnace filling level and pre-pressure determination
- Controlled or regulated water-cooling-system
- Controlled or regulated air-cooling-system
- Cooling circuits can be used as mixed circuits
- Blowing out the water circuits with air
- Machine axes via measuring systems, no mechanical adjustment of initiators as option
- Recipe management for machine and casting parameters
- Remote control for maintenance
- Parallel guidance
- Kurtz Ejector System

UPDATE ON METALLIC 3D PRINTING

The Additive Manufacturing (AM) business unit is the youngest in the Kurtz Ersa Group. A dedicated team has significantly increased the pace of technical progress in recent months – among other things by introducing agile project management and actively obtaining customer feedback.

Following its entry into additive manufacturing in 2021, Kurtz Ersa has since regularly achieved important milestones in metal 3D printing. First, a compact, high-performance printer was introduced specifically for SMEs, research & development and training purposes. This cost-effective entry-level device enabled companies to integrate 3D printing into their work processes and discover new possibilities in production. The next milestone followed with the introduction of swivel arm technology. The "Perfect Angle Printing" method redefines the manufacturing process and offers strong advantages such as a constant laser deflection angle over the entire build area, a defined spot on the entire build platform and constant laser intensity. This results in consistent flow and energy input ratios every time the laser beam hits the part. This is the basis for identical component properties across the entire surface and enables true scalability and modular construction of systems with different build field sizes.

In 2023, the Additive Manufacturing division was established as an independent business unit with a distinct start-up character. Kurtz Ersa thus committed itself to continuous development in this dynamic sector. The focus has now shifted to qua-

lity and process-side development. In the current year, the AM team is concentrating in particular on customer-oriented issues. This is based on the diverse requirements from customer discussions and the results of a customer survey.

Agile project management was introduced at the same time, with work being structured in "sprints" every two weeks. The individual team members commit to results that they want to achieve independently in two weeks. The results are then presented to the rest of the team and new goals are planned. After six sprints have been completed, the results achieved are presented to a wider group of stakeholders – such as purchasing, production, service and quality – in order to achieve further transparency and obtain early feedback for subsequent implementation. The team gains speed and structure as a result and at the same time gives room for innovative ideas.

thus ensures the highest quality. At Kurtz Ersa, a process developed on small systems is transferred 1:1 to larger machine types in this way – without separate additional process development. This provides companies with a robust and flexible solution that grows with their production requirements.

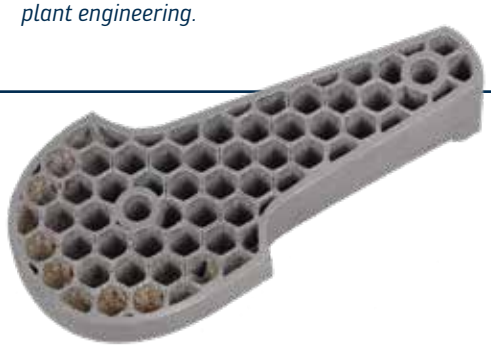
Stronger cooperation with other divisions of the Group – for example in the field of automation – also helps customers to benefit from comprehensive solutions. Kurtz Ersa thus offers a further unique selling point. Dr.-Ing. Astrid Rota, Managing Director Additive Manufacturing, looks back on her time at Kurtz Ersa so far: "The team thinks innovatively in all directions when finding solutions and retains its start-up spirit. I am very proud of what we have already achieved together in such a short time."

Scalability in production

An important milestone was reached with a project that laid the foundation for the so-called Flying Ray S – a system with an installation space of 250 x 250 x 300 mm. The first entry-level system with swivel arm technology. This commitment is part of a larger plan to promote scalability in production by guaranteeing that the starting system of installation space size S offers the same process conditions as an upscaled large-format system. The homogeneous energy input is realized through the use of swivel arm technology, which avoids distortions caused by laser beam deflection and

AM recognized as a driver of innovation

The German government is also taking a closer look at additive manufacturing and 3D printing and wants to promote them in the future. Alongside lightweight construction, artificial intelligence and robotics solutions, the technologies are recognized as part of the innovation boost for the German economy. The VDMA's Additive Manufacturing Working Group has contributed to the inclusion of the topic of additive manufacturing in the coalition agreement. AM will make a significant contribution to efficient mechanical and plant engineering.



automatica 2025: Kurtz Ersa presents

INNOVATION & PRECISION

automatica 2025 in Munich was the ideal platform for Kurtz Ersa and Vision4Quality to jointly present innovative technologies in the field of automation. The exhibits on show impressively demonstrated how modern mechanical engineering can sustainably increase the efficiency and quality of production.

The Automation business unit can once again look back on a successful week in Munich. With around 800 exhibitors from 40 countries and almost 49,300 trade visitors, automatica, the leading event for the automation and robotics industry, once again attracted thousands of trade visitors and international exhibitors this year. Kurtz Ersa with its Business Unit Automation is proud to have been part of this four-day event in the Bavarian capital again.

Our exhibition focused on solutions that optimize processes in electronics production. One highlight was undoubtedly the dispensing station from SCHILLER AUTOMATION. The system impresses with its precision and flexibility in dispensing a wide range of adhesive and sealing materials and can be used flexibly as a stand-alone or inline solution. Its ability to be integrated

into automated production lines makes it possible to make manufacturing processes even more efficient and fully meet the requirements of modern production lines.

THT ASSEMBLY – *fast, low error*

The new Kurtz Ersa industrial robotics assembly solution for fast and low-error THT assembly also attracted a lot of attention from trade fair visitors. With integrated component control, this innovation offers an efficient and reliable automation solution specifically for electronics production. Its adaptability to various production requirements represents an important advance in industrial automation and makes it a valuable tool for more efficient work.
In addition, our partner Vision4Quality presented its exhibit ModPCB, an innovative workstation for assembly process monitoring. This solution integrates a factory assistant system for live assembly control and thus supports improved safety and efficiency in production.

Another highlight at the Kurtz stand was a digital twin. This powerful tool is used to improve and optimize automation processes and supports Kurtz Ersa's professional project management. In this context, only two advantages should be mentioned here: Firstly, complex automation processes, for example, can be simulated and optimized before they are physically implemented. This reduces the risk of misconfigurations and saves a lot of time during the actual installation. Secondly, digital twins make it possible to quickly reconfigure automation systems to meet dynamic production requirements without interrupting physical operation. This is absolutely essential in many electronics production facilities – in Germany, Europe and worldwide.

Our exhibits were received with great interest by the trade visitors. Personal discussions and live demonstrations at the stand enabled a lively exchange about the performance and advantages of Kurtz systems and solutions. This led to inspiring discussions about future developments in production technology. Once again, the exchange of ideas and innovations in the field of automation was a central concern at automatica. Hubert Baren, Managing Director Automation in the Kurtz Ersa Group and member of the Global Board on the course of this year's trade fair: "The overwhelmingly positive feedback and the strong interest in our solutions encourage us to continue investing in technological advances to optimize our customers' production processes and increase their competitiveness." Many thanks to all visitors and partners for the enriching discussions.

SCHILLER has delivered:

Efficient automation for the eMobility industry

The Swabian region is known for its economy of praise – but when it comes to a successful project, a few words often say a lot. "SCHILLER has delivered" was the pleasing message from the purchasing department to our sales engineer in December 2024. Below we report on the successful project "Automation system for the production of power module units for the E-Mobility industry".

VR experience up close: Ulrich Leibfritz, mechanical engineer at SCHILLER AUTOMATION and responsible project manager, at work

From the idea to early delivery

The project started in February 2024 and was originally scheduled for completion in calendar week 05/2025. Our customer´s request to start sample part production at the final production site ahead of schedule meant that two out of three machines were delivered in the 50th calendar week of 2024. How was this possible? Answer: Engineering skill and an innovative approach to digital transformation.

Success factor virtual commissioning

In a world where time is money, we rely on technological innovation to meet our customers´ expectations. We created a digital twin of the system, which enabled us to carry out a comprehensive virtual commissioning of the software – long before the physical assembly.

In phase one, the digital twin was coupled with a simulated PLC in order to extensively test the PLC program. This was followed by the integration of the physically available PLC, which was implemented in the final system configuration, as well as the connection and remote setup of the customer´s MES system. The extensive preparatory work meant that the entire PLC process could be tested against the digital twin in advance, allowing the actual commissioning to be carried out with excellently prepared software. This significantly shortened the commissioning process.

Front view SCHILLER part for the production of a power unit for electric drive axle

Successful error prevention and cost savings

The simulation in virtual space enabled us to identify and eliminate potential sources of error such as collisions, faulty assembly details and discrepancies in the circuit diagram in advance. This avoided time-consuming rework, which is often associated with physical installations. Software-related challenges could also be identified and resolved at an early stage in conjunction with the digital twin. Using VR glasses, the system could be experienced immersively and the ergonomics assessed in advance, making subsequent physical adjustments unnecessary and guaranteeing an optimized user experience.

Stations of the system

The machines delivered in calendar week 50/2024 include innovative handling systems for feeding blister stacks with trolleys, which offer a high degree of flexibility. Both machines have dynamically configurable input/output chutes and blister quick-change systems, which ensure short changeover times. Trolley handling enables an autonomy of over two hours, which can be extended further depending on the blister configuration. In addition, the assembly stations are fully automated and equipped with gantry robots, conveyor belt systems, component turning units and NIO & SPC trays, including MES connection.
A plasma cleaning process, which is controlled by a dynamically programmable path specification depending on the product, forms the core process of the first station. The second station also integrates a printing process for customer labels and an intelligent camera system for quality assurance of the labels. Both machines were successfully subjected to the acceptance criteria and achieved a degree of completion of over 95 %. In March 2025, SCHILLER delivered the third station, which includes a laser welding process with downstream, high-resolution AOI for quality assurance of the weld seams.

View through VR glasses at station 3 (laser welding)

Forward-looking perspectives

In order to speed up sample part production and support order acquisition at the end customer, early delivery was made at the customer´s request. Following the successful market launch of our customer, further replica projects are on the horizon.

Many thanks to all those involved, whose outstanding work and commitment made this success possible. We are proud of our strong team and look forward to future challenges in modern mechanical engineering!

Rear with operating terminal for the three stations

Together for inclusion & sustainability:

Kurtz Ersa and AfB launch partnership in the IT sector

Sustainability, social responsibility and economic thinking – these three pillars not only characterize the strategic orientation of Kurtz Ersa, but also the new partnership with AfB GmbH (Arbeit für Menschen mit Behinderung). Kurtz Ersa has recently started purchasing IT hardware from Europe's largest non-profit IT company – and is thus sending a clear signal for future-oriented, responsible purchasing.

AfB specializes in refurbishing used business IT and returning it to the cycle with at least a twelve-month guarantee. This creates real added value for society: AfB employs around 650 people at its 20 locations in five countries – around half of whom live with a disability. All processes, from technology and logistics to sales, are designed to be barrier-free and inclusive.

For Kurtz Ersa, this combination of sustainability, inclusion and cost-effectiveness was a convincing argument.

"I am particularly proud to run a company in which people and the environment count more than short-term economic gain. I am delighted with the success we have had with our concept and the recognition we have received for it. And I hope that our basic idea will become established in society," explains Paul Cvilak, founder of AfB. The new collaboration shows how companies can not only make their IT sustainable through conscious decisions, but also assume social responsibility. For Kurtz Ersa, AfB is therefore much more than just a supplier: it is a genuine partner on the path to greater sustainability, active inclusion and entrepreneurial future viability.
















POWERED BY YOUR IMPACT.

Kurtz Ersa

Creating Innovation Together!

An Employer Value Proposition (EVP) is a central statement that highlights the unique advantages a company offers its employees and lays the foundation for a strong employer brand. For Kurtz Ersa, our new EVP represents a key step in attracting talented professionals and promoting the long-term retention and satisfaction of our employees.

> Our EVP clearly communicates what sets us apart in the marketplace: ***„Your strengths are the foundation for our innovations that make an impact globally. At Kurtz Ersa, we combine the values of a family-owned business with the strength of a global player – and offer you the freedom to truly make a difference.“***

With this focus, we highlight what Kurtz Ersa stands for: innovation, value-driven actions, and the genuine creative freedom our employees experience daily. Our EVP is both an internal commitment and a clear message to our customers and partners: Kurtz Ersa fosters a culture of collaboration and continuous innovation. This approach makes us an attractive employer and, above all, a reliable, forward-thinking partner for our customers. Together, we shape the future – in line with our claim: “Powered by your Impact.”

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