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Kurtz Ersa Magazine

For Customers and Business Partners of Kurtz Ersa Corporation

Consistently implementing our global footprint

Greater customer proximity through new locations in Mexico, Singapore and Thailand

Actively shaping sustainability

Impressive result in ESG rating honored with silver

Further expanding services

Comprehensive service portfolio from SCHILLER AUTOMATION launched

GLOBAL. AHEAD. SUSTAINABLE.

kurtz ersa

A reliable partner for our customers worldwide!

Thomas Mühleck and Andrea Carta

With our "Global Footprint" strategy, we offer our products and services where they are needed: directly at the customer's location.

The global economic environment is challenging and demanding. Thanks to our global footprint, we at Kurtz Ersa see this as an opportunity. In this issue, we once again present exciting highlights from our business units around the world. We invite you to immerse yourself in the world of our innovations and customer solutions and to see where our expertise can be found with the projects shown.

Another important milestone in our "Global Footprint" strategy was the opening of our new production facility in Ciudad Juárez. This will enable us to further expand our capacities in Mexico and optimize supply chains. The expansion has also strengthened our expertise in Mexico, so that we can now guarantee even more competent support for Kurtz Ersa customers in the region, thanks in part to the expanded Mexican team.

The sales markets in Asia are just as important for Kurtz Ersa. In order to further expand our customer service and support there, we have established our own branch in Singapore, which will be in close proximity to our customers in Southeast Asia from January 1, 2025. We are also offering more and more products from our factory in Zhuhai. We continue to consistently implement our globalization strategy – always with the focus on being able to offer the optimal production, sales and service network through geographical proximity.

For the past few issues, we have been giving the floor to managers from our operational business units – this time Andrea Carta, Managing Director of Kurtz GmbH & Co. KG since July 1, 2024. As a member of the Global Board, the native Italian is also responsible for the global activities of the "Moulding Machines" business unit: "In difficult times, it is crucial to think ahead and be well prepared when the economy picks up. Even if plastic remains a controversial topic, the market for engineering plastics such as EPP continues to offer growth potential. With this in mind, we will be presenting two new products at K 2025 – automatic tool changing and gravimetric dosing. Despite the challenges, we are also optimistic that the future holds new opportunities for casting machines in the automotive sector."

There is also a lot of news about our sustainability campaign "GoGreen250". Here we will keep you up to date on the initiatives that have brought us a step closer to our goal of being CO_2-neutral by 2029. In this context, we are extremely proud of our first silver ESG rating, after receiving bronze twice. All in all, this puts Kurtz Ersa in the top 4 % of companies nationwide that voluntarily contribute to sustainable development above and beyond the legal requirements!

I was very pleased about an event in September: our anniversary celebration. Over 1,500 years of concentrated experience and expertise were on stage. This strong cohesion, which is lived at Kurtz Ersa, makes me proud and confident at the same time that we will master the coming challenges together. Not only in and around Wertheim, but as a global Kurtz Ersa team all over the world, always as close as possible to you, our customers on site!

Personally, I am very grateful for the trust placed in me by the shareholders and the Advisory Board to lead Kurtz Ersa through the economic storm as CEO. However, neither here nor on the following pages is it about me, but rather about you, our customers. And about my management team and every single employee, of whom I am so proud.

Glück auf! Good luck!

Thomas Mühleck
CEO Kurtz Ersa Corporation

Andrea Carta
CEO Moulding Machines

Bernd Schenker and Ulrich Dosch with the digital incorporation certificate in front of the future office building in Singapore

Kurtz Ersa is expanding its "global footprint" in Southeast Asia

With the foundation of Kurtz Ersa Singapore, Kurtz Ersa has reached another important milestone in the continuous expansion of its successful Asian business. This expansion is in line with Kurtz Ersa´s long-term vision of being present globally in all current and emerging economic regions at an early stage with its own subsidiaries, and thus being able to work even more closely with local customers and partners. Bernd Schenker, responsible for Kurtz Ersa´s Asian business, emphasizes the importance of this expansion: "The Southeast Asian market will become increasingly important in the future. Not only because of its enormous consumer market with more than 750 million inhabitants, but also as a fast-growing alternative industrial location for the electronics processing industry. To this day numerous worldwide leading companies have, for widely varying reasons, either transferred their production there or will invest in this region in the future. With our presence in Singapore, we are participating in the dynamic development of these markets and will support our customers operating there with our customized products and services."

The newly appointed Singapore Managing Director Ulrich Dosch adds: "Singapore ranks first in the global 'Index of Economic Freedom' and thus offers an excellent business environment. In addition, the city-state enjoys a high degree of political stability. Operationally, we will build on our existing sales and service-network and expand it with the expertise and professionalism of our team in Singapore. This will enable us to focus even more closely on our customers, sales and service-partners and be on site in the shortest possible time to maintain and expand our customer relationships in a sustainable fashion. Kurtz Ersa Singapore will drive business forward with agility and energy from day one." The regional office is located in an office building with direct access to two metro lines. It is also close to the renowned Changi Airport. The team build-up of Kurtz Ersa Singapore will be completed by the end of 2024, so that the new company can start its business activities in full force on January 1, 2025.


ACRA

Certificate Confirming Incorporation of Company

THIS CERTIFICATE IS PRESENTED TO

KURTZ ERSA SINGAPORE (PTE. LTD.)

OF UEN

202436602E

This company was incorporated under the Companies act 1967, on and from 05 sep 2024, and is a PRIVATE COMPANY LIMITED BY SHARES.

Verify Document Instantly

New factory launched in Ciudad Juárez

Kurtz Ersa México celebrates opening with business partners and colleagues

On September 17, 2024, Kurtz Ersa Manufacturing México S.A. DE C.V. celebrated the inauguration of its new production facility in Ciudad Juárez. The festive ceremony was attended by over 70 guests, including business partners and colleagues from Mexico, the USA and Germany. The following guests of honor were welcomed by name: Cruz Pérez Cuellar, Mayor of Ciudad Juárez, Fernando Alba, responsible for "Innovation and Economic Development" in the Chihuahua region, businessman and building contractor Jorge Bermúdez and Rainer Kurtz, Chairman of the Advisory Board of the Kurtz Ersa Group.

Lined up for the group photo: guests of honor at the new production facility in Ciudad Juárez

Above: part of the new Mexican team responsible for the highest quality of outgoing machines

Representatives of the Kurtz shareholder families at the opening in Mexico (from left): Rainer with his wife Susann and Vincent Kurtz with building contractor Jorge Bermúdez

Handing over the keys in Ciudad Juárez: Landlord Jorge Bermúdez hands over to Albrecht Beck, President & COO Kurtz Ersa, Inc

The new Kurtz Ersa site in Ciudad Juárez, Mexico

It took just over a year from the ground-breaking ceremony to the inauguration of the new site with 4,500 m² of production space, offices and demo center – with the festive inauguration in Juárez, Kurtz Ersa has now established its third major service and logistics center in America after Plymouth (USA) and Guadalajara (Mexico). The new production facility will initially focus on the production of Ersa reflow soldering machines and will also act as a pre-production facility for the US plant. Since 2012, Kurtz Ersa has had a local presence under the flag of Kurtz Ersa México. Due to the rapidly increasing demand in Mexico, the company moved to Guadalajara in 2016 to a larger office including a demo center for Ersa tools and machines, where customer seminars and training courses have also been held since then.

Ribbon cutting at the opening of the new Kurtz Ersa site in Mexico (from left): Vincent Kurtz, Paulina Cordero, Rainer Kurtz, Michael Fischer, Albrecht Beck and Marcelino Espelosin

In 2022, the strategic decision was made to expand our own production capacities to Mexico. Following the expansion in 2020 with a new building in Wertheim, additional growth can be created with the plant in Mexico, which will also benefit the Wertheim production and development site and further strengthen Kurtz Ersa globally. Inspired by the success of the reflow soldering systems in Asia, where around 1,000 machines have been produced annually since 2013, the decision was made to also build the new high-end HOTFLOW THREE model in Mexico in the future. "After careful consideration of various cities and options, including leasing an existing facility, we decided to build here in Juárez, a location that offers proximity to the US border, a talented workforce and excellent infrastructure," said Albrecht Beck in his speech, who in his role as President & COO Kurtz Ersa, Inc. is also Managing Director of Kurtz Ersa Manufacturing México.

At the beginning of 2024, the management team in Mexico had put together a start-up team of highly qualified engineers – six of these engineers had traveled directly to Germany, where they received extensive training, including building their first machine and working on documentation and processes. The aim of manufacturing in Ciudad Juárez is to produce machines that match or even exceed the quality of machines "made in Germany". To ensure this, the same advanced production methods and processes have been introduced.

"I am convinced that this plant will develop into a vibrant center of our production activities and that we have made an excellent choice with Ciudad Juárez – on behalf of the management, I would like to thank everyone involved in the successful implementation of this project. First and foremost, I would like to mention Marcelino Espelosin and his team México, who made the successful realization of this ambitious project possible. Also the entire US team of Kurtz Ersa, Inc. as well as the German Ersa and Kurtz colleagues, who have contributed significantly to the establishment of production here with tireless commitment," said Albrecht Beck, before handing over the microphone to Vincent and Rainer Kurtz, who, as representatives of the Kurtz shareholder families, emphasized the strategic importance of the project for the Kurtz Ersa Group. The words of welcome were followed by the traditional ribbon-cutting ceremony, factory tour, festive buffet and live music from a mariachi band, before numerous customers were able to immerse themselves directly in the performance capabilities of Kurtz Ersa systems on the following Technology Day.

First silver medal after 2x bronze for Kurtz Ersa in its third participation in the ESG rating

Kurtz Ersa wins silver in the ESG rating!

Kurtz Ersa has come a big step closer to its sustainability targets with an excellent result: In a year-on-year comparison, the Group gained 13 points to 69 points – and after twice winning bronze, it has now been awarded a silver medal in the EcoVadis Sustainability Rating for the first time. The bottom line is that Kurtz Ersa is in the top 5 % of our industry in this year's overall ESG rating! A number of measures have been and are being implemented to achieve this – for example in the area of energy efficiency with large-scale conversion to LEDs, the replacement of two heating systems and energy-efficient window refurbishment. We also made significant progress in generating our own electricity by installing and commissioning three PV systems with 1.5 GWp. The excellent result is flanked by additional measures in the area of occupational safety and the expansion of sustainability reporting towards increasing internationalization.

The first silver medal in the ESG rating marks a great milestone on the way to becoming a sustainably CO_2-neutral* company. In this ESG rating, Kurtz Ersa scored up to 31 points above the industry average in all four categories (environment, labor and human rights, ethics, sustainable procurement). Particularly noteworthy: In the "environment" category, Kurtz Ersa ranks in the top 4 % of the rated companies in the industry with a score of 80 points, and even in the top 2 % for labor and human rights!

"Many thanks for this strong result – this goes to our tireless ESG team as well as the entire workforce, who are strongly committed to sustainability. With persistent pragmatism, we are at the forefront of sustainability – in the top 5 %! This shows that we take the issue seriously. Following the positive development in the 'environment' area last year, we have also made great progress in the area of labor and human rights. This is a strong sign of our culture and values, which will continue to guide us," said Kurtz Ersa CEO/CFO Thomas Mühleck.

More about sustainability at Kurtz Ersa:

CDP rating: In 2024, we took part in the CDP scoring for the third time. This provides participating companies with a snapshot of their environmental reporting and performance as well as indications for continuous improvement. The CDP questionnaire, which was expanded in 2024, covers topics including climate change, water, biodiversity, governance and the disclosure of risks and opportunities. We will receive the result in 2025.

*Related to emissions for Scope 1 and 2 as well as partially Scope 3.

International roll-out of our Integrated Management System

GoGreen250: Supporting Environmental, Social and Governance (ESG) aspects with a lean and efficient management system

What is an integrated management system?

An integrated management system (IMS) brings together several management systems in a uniform and centrally controlled structure. This has the advantage that requirements from different areas can be bundled and synergies can be utilized.

What do we expect from this?

Our corporate processes have been becoming increasingly international and complex for years, and their number, interfaces and effects are growing all the time. For this reason, the management of Kurtz Ersa has decided to integrate the majority of all international workplaces via a standardized IMS – across the Group and regardless of national borders.

Specifically, at Kurtz Ersa this concerns the

- quality management (ISO 9001),
- environmental management (ISO 14001),
- occupational health and safety management (ISO 45001) and
- energy management (ISO 50001).

We hope that this will lead to further standardization of structures and processes, reduced susceptibility to errors and additional synergies in workflows – in short, a management system that is as lean and efficient as possible, covers all four ISO standards mentioned above and also supports us in achieving our ambitious ESG goals.

What is our status quo?

Most German locations have been certified accordingly for many years and decades. By 2025, all international production sites and larger company locations are to follow suit – the only exception currently being our very small sales locations.

What goals have we set ourselves for the roll-out?

By around Q3/2024, 56 % (in relation to ISO 14001 and ISO 45001) and 75 % and 74 % (in relation to ISO 9001 and ISO 50001) of our international employees had been integrated into our existing IMS. By the end of Q4/2024, we will have integrated around 77 % of all employees internationally across all four ISO standards and as many as 86 % (ISO 9001) and 95 % (ISO 14001, ISO 45001 and ISO 50001) by the end of Q1/2025. "The roll-out of the IMS is important for our own goals, but customers and partners will of course also benefit from it, as such a strong commitment is becoming increasingly important in the supply chain," says Anna Hieble, Head of Corporate Quality Management and Corporate ESG at the Kurtz Ersa Group.

	Iso 9001	Iso 14001	Iso 45001	Iso 50001
Q3/2024	75 %	56 %	56 %	74 %
Q4/2024	77 %	77 %	77 %	77 %
Q1/2025	86 %	95 %	95 %	95 %

Target presentation: Proportion of our international employees who will be integrated into our Group-wide IMS at any given time

#	Unit	Iso 9001	Iso 14001	Iso 45001	Iso 50001
1	HD	x	x	x	x
2	Ersa	x	x	x	x
3	GP	x	x	x	x
4	KH	x	x	x	x
5	AUTO	x	x	x	x
6	KESA	x	Q3/2024	Q3/2024	x
7	KEL	x	Q3/2024	Q3/2024	x
8	KEHA	x	Q3/2024	Q3/2024	x
9	KEI	Q3/2024	Q3/2024	Q3/2024	Q3/2024
10	KEMM	Q3/2025	Q3/2025	Q3/2025	Q3/2025
11	KEA	2025	2025	2025	2025
12	KZM	x	2025	2025	2025
13	KSL	2025	2025	2025	2025

Target presentation: Overview of our global locations and by when they will be integrated into our Group-wide IMS

*Existing group certificates.

The VERSAFLOW 3/35 inline selective system offers maximum flexibility and maximum throughput with minimum space requirements (L x W x H: 2,450/1,750/1,650 mm) at an attractive price

TOP QUALITY FROM THE FIRST CIRCUIT BOARD!

No. 2,222 of the successful VERSAFLOW 3 model goes to INOTECH from the Czech Republic

INOTECH electronic s.r.o., based in Kaplice, specializes in the assembly of PCBs for small and medium-sized series, but can also handle the construction of prototypes. With a modern machine park and an experienced team, INOTECH offers its customers services and products at the leading edge of electronics production. In mid-2024, the Czech EMS service provider added an Ersa VERSAFLOW 3/35 selective soldering system to its machine park, which already includes six Ersa systems. For Ersa, this is the 2,222nd machine installed in the successful third generation of machines.

The EMS service provider INOTECH electronic s.r.o. can already look back on 30 years of company history. Shortly after the company was founded in 1994, a business partner from Germany enquired whether INOTECH would also manufacture electro-inductive components. They went into business. This was the basis for today's medium-sized company with 100 employees, which produces a wide range of PCBs for customers from various sectors, such as automotive, smart home and medical technology. Injection molding technology is also part of the production process at INOTECH, meaning that plastic products including packaging can be manufactured in addition to electronic assemblies. This is an invaluable advantage for customers, as INOTECH can become a general contractor for electronics production. For example, INOTECH produces remote controls on a large scale for the leading manufacturer of remote controls – here in Kaplice, 30 km south of Budweis, 20,000 units are produced every

Handover no. 2,222 to INOTECH electronic (from right to left): Managing Director Pavel Goldfinger, owner Karel Mach and Production Manager Michal Mikeš with Ersa General Sales Manager Rainer Krauss

Production Manager Michal Mikeš (right) and Ersa General Sales Manager Rainer Krauss apply the anniversary label to the VERSAFLOW 3/35 with their own expert hands

The INOTECH team with its new machine – with PBT representative Michal Duda (2nd from left) and Ersa colleagues Laura Schulz (3rd from left), Rainer Krauss (4th from right) and Radek Lauer (right)

day. Electronics and housings are manufactured, "married" and packaged ready for dispatch at the company.

That makes 20,000 PCBs a day and 11 million components to be assembled every month. "We can already make an adjustment to our processes during the initial assembly and then offer the associated series production, so that the customer only needs one contact to realize their product," says engineer Pavel Goldfinger, Managing Director of INOTECH electronic since 2004.

Selective soldering – expanding flexibility

Increasingly, there are also projects with smaller batch sizes and special requirements for the soldering process – especially in the Czech Republic. "With the VERSAFLOW 3/35 selective soldering system, we have found the perfect addition to our machine park to also realize prototypes and smaller batch sizes. This has already enabled us to win several projects with Czech customers. Another example is an eight-layer curved circuit board for a German camper van manufacturer, which ensures the vehicle's solar power supply – that works perfectly on the VERSAFLOW 3/35. We're talking about 1,500 assemblies here, so a relatively small number of units," says INOTECH Production Manager Michal Mikeš. Ersa General Sales Director Rainer Krauss adds: "The advantage of selective soldering is the high flexibility and that you can simply stay longer in a place with more copper or where holes are difficult to reach and thus achieve first-class penetration without using a mask. The fact that this technology is a worldwide success model is proven by the serial number 2,222 that has now been reached – it's great that this machine was delivered to INOTECH, where six other Ersa systems are already in use!"

Highest throughput with the smallest footprint

The topic of selective soldering and VERSAFLOW 3/35 was carefully tested using benchmarks – because the INOTECH team wants to ensure that the products ordered from the Czech EMS service provider can be produced in the required quality. This involved extensive tests at the Ersa Demo Center in Wertheim – the Czech engineers' eyes lit up right from the first runs. Test PCB 01: successful, zero rejects! INOTECH was impressed by the modular design of the VERSAFLOW systems, which includes an option for an additional solder pot – allowing cycle times to be shortened and productivity to be significantly increased if required.

For INOTECH and Ersa, this is another milestone in the cooperation that began with numerous Ersa soldering stations and tools and entered the Ersa machine world in 2006 – with an N-WAVE 330 soldering system which is still in operation. This was followed by two VERSAPRINT 2 stencil printers, three HOTFLOW 4/14 reflow soldering systems and now, as the seventh system, the VERSAFLOW 3/35. "Of course, Ersa builds excellent machines, but that would be nothing without the right service. We get this service – either directly from Ersa in Germany or from the Czech distributor PBT Rožnov. I would like to thank everyone involved for the excellent cooperation in the past and look forward to upcoming projects," said engineer Karel Mach, owner of INOTECH electronic s.r.o., at the farewell.

View into the INOTECH electronics production with Ersa reflow soldering systems of the type HOTFLOW 4/14, which is installed three times at the Kaplice location

Attending the handover of the 2,222nd VERSAFLOW 3 to INOTECH in Kaplice (here in Český Krumlov, from right to left): Michal Mikeš (INOTECH), Michal Duda (PBT Rožnov), Rainer Krauss, Laura Schulz (both Ersa), Karel Mach (INOTECH), Radek Lauer and Colin Fischer from Ersa

Sustainable production – sustainable repair.

The future of electronics production relies on sustainable management and efficient repair. With ESG ratings and the "right to repair", companies such as Kurtz Ersa are providing concrete impetus for optimization – among other things, to successfully minimize rejects. Find out how current rework technologies can also sustainably secure your added value!

In the "rework and repair of electronic assemblies" area, Ersa clearly focuses on customer benefits: Maintaining added value in electronics production. Or as one customer puts it: "The future lies in repairing instead of scrapping." This approach is becoming increasingly important on the customer side – whether due to legal requirements or internal company initiatives. Large customers in particular are making increasing demands, for example:

- Participation in ESG and CDP* ratings
- Improvement of scores or achievement of minimum requirements
- Obligation to reduce greenhouse gas emissions – possible cooperation for circular economy/emission reduction

Right to repair

In this context, a number of manufacturers have started to produce regular sustainability reports and strive for a positive ESG rating. At Kurtz Ersa, sustainability is directly anchored in the corporate strategy – the "GoGreen250" initiative aims to achieve the overarching goal of CO_2 neutrality by 2029. Progress already achieved is documented in the current Sustainability Report 2023.
With the "right to repair", the European Union has created Directive (EU) 2024/1799, which focuses on more repair and therefore sustainability in the interests of the consumer. Article 1, paragraph 2 states: "This Directive applies to the repair of goods purchased by consumers in the event of a defect in the goods which arises or becomes apparent outside the liability of the seller in accordance with Article 10 of Directive (EU) 2019/771." Citizens and companies alike are therefore encouraged to have their electronic products – from smartphones to washing machines – repaired in order to curb the ever-growing volume of electronic waste. It is also possible to repair PCBs at component level.

Optimized use of energy and resources

For electronics production, sustainability means optimizing the use of energy and resources on the one hand and maintaining the added value of goods already produced on the other. Low reject rates lower production costs and reduce waste. Scrapping faulty electronics in particular is not sustainable for a number of reasons:

- Wasted resources/materials
- Unnecessarily consumed energy
- Waste generated

With gentle IR or hybrid heating, precise temperature control and a placement quality of better than +/- 50 µm, a range of components from 1 x 1 mm to 60 x 60 mm can be automatically desoldered, placed and soldered

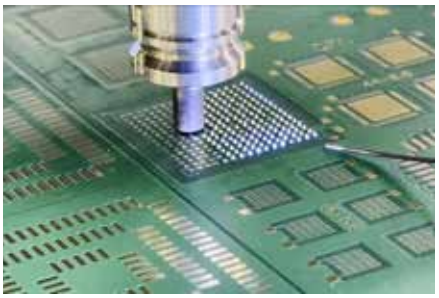
*CDP short for „carbon disclosure project".

The new HR 600P high-end rework system with scavenger delivers the highest level of automation in the extensive Ersa rework portfolio for efficient assembly repair with a reproducible success rate. The only table-top rework system with automatic residual solder removal offers the operator optimum user-friendliness and precise placement accuracy

Production and rework

Production systems available today are becoming ever better and more reliable; at the same time, there is a counter-current in terms of greater complexity and, for example, power or packing density. Progressive miniaturization of assemblies, new components and materials are the order of the day, the end products of the electronics industry accompany people in all areas of life. While standard SMD components are mastered in production today, there are process-related challenges with 01005, QFN, LGA, power modules and large BGA with edge lengths of up to 100 mm. The demands on the accuracy of solder paste printing and component placement are increasing, and the heat process during soldering must be controlled even more precisely. Particularly with very large components, the temperature distribution across the component (△T) can have a decisive impact on the quality of the soldering. Parameters that are often not under the direct control of the user, such as the quality of PCB production, heat resistance or solderability of components, are challenging for production.

In the meantime, industries that have not previously dealt with reworking are also working on corresponding concepts. The aim is to produce assemblies, some of which are of high quality, with a low reject rate and to develop suitable strategies in the event of sensible reworking. Rework systems are increasingly being used during production, but are also used in development and pre-production, in service or for assembly upgrades. Modern rework systems are designed in such a way that the assemblies can be processed with the necessary precision and the rework result is on a par with the production result.



The SC 600 Scavenger Module (optional) automatically ensures reproducible non-contact residual solder removal without the risk of mechanical damage caused by manual intervention

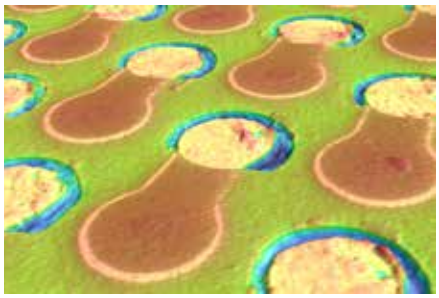


Image of a cleaned PCB with ~20 µm residual solder

This is what Ersa rework systems stand for:

- Solid machine base for the necessary basic accuracy
- Precise and low-maintenance axis systems
- Proven hybrid and IR heating technology
- Closed-loop temperature control with contact/non-contact sensors
- Process monitoring with high-resolution cameras
- Integrated or retrofittable non-contact residual solder removal
- Intuitive software with user support, documentation and possible MES connection

The rework technology leads to process reproducibility with regard to thermal soldering processes, component handling including paste or flux application and residual solder removal. Substantial operator support through intuitive software is an essential component of a pioneering platform for sophisticated and professional repairs. It implements customer-specific requirements so that the systems can grow with the customer´s tasks in terms of sustainable production over many years.

Sources:
Right to repair: eur-lex.europa.eu/legal-content/DE/TXT/?uri=CELEX:32024L1799,
Kurtz Ersa Sustainability Report 2023

Service

… that's esw GmbH's thing!

Stolberg EMS service provider relies on Kurtz Ersa again

Founded in 1985, electronic service willms GmbH & Co. KG (ESW for short), based in the border triangle of Germany, Belgium and the Netherlands, offers sophisticated SMD and THT assembly for medium-sized companies. Over the course of its history, ESW has developed from a simple manufacturing service provider to a competent system supplier for sectors such as industrial electronics, medical and radio technology. Most recently, the Rhinelanders expanded their machine park with an Ersa POWERFLOW PRO wave soldering system.

ESW site in Stolberg-Breinig, just a few kilometers from Aachen

Metal processing has a long tradition in the copper town of Stolberg. electronic service willms GmbH & Co. KG joins this history with modern electronics production. With a team of 100 employees, esw GmbH focuses on comprehensive service in electronics manufacturing and provides its customers a head start in the market by using latest manufacturing technologies.

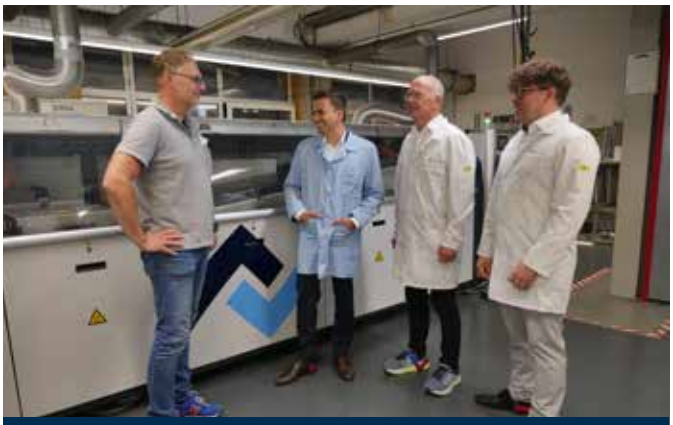
Andreas Korr, Head of Conventional Manufacturing, Final Inspection and Shipping at esw GmbH, joined the company in 1995 and quickly had to deal with the purchase of a new wave soldering system. As usual, the market was sounded out, inquiries were made and machines were inspected – also at Ersa in Wertheim, where an N-WAVE 400 was ordered in the end. Two more Ersa soldering machines followed in 2015 – a HOTFLOW 4/08 reflow oven and an

ECOSELECT 350 selective soldering system. “The procedure was different with the POWERFLOW PRO. Firstly, we were already familiar with the Ersa machines, especially the wave soldering technology. We knew that we were doing very well with Ersa Service because we always have known contacts for different technologies. Ersa does a good job here and responds quickly – even when it comes to procuring spare parts for older, but still 100 % functional systems,” says Andreas Korr.

All it took for the POWERFLOW PRO was a visit from an Ersa Sales Manager in Stolberg-Breinig followed by a few calls. “The ESW team contacted us in May to discuss details for the planned wave soldering machine. The most critical issue was the connection of the new machine to the existing transport system with corresponding frames and aperture pallets, the transfer points were a challenge. Two of our Ersa service technicians solved this problem perfectly on site. Current transport systems run via their own control system and are no longer connected to the control cabinet of the soldering system as they were in the past. The machine at ESW was newly married – without its own control cabinet for the peripherals,” says Ersa Sales Manager Daniel Haubenreich. With the POWERFLOW PRO, ESW opted for a full nitrogen tunnel wave soldering system. Thanks to its compact dimensions of 4,450 x 1,400 x 1,600 mm (L x W x H) it impresses even in tight production spaces. Its spray fluxer with intelligent spray pattern programming ensures minimum flux consumption at high processing speeds. Flexible configuration of the IR emitters combined with convection heating enable perfect machine settings. This allows the user to reliably solder high-mass or temperature-sensitive components. The soldering module relies on the proven Ersa double wave soldering technology which can realize long wetting times and high wave heights.

ESW has upgraded the POWERFLOW PRO compared to its predecessor, for example with a more powerful heating system. Thanks to its modular design, the POWERFLOW PRO could be retrofitted in all process sections. After two months, ESW can state: quality is up, process is stable with reduced consumption values. “Our new wave soldering system covers the wide product spectrum of our customers – we run a complete mix; we get the jobs on track quickly and flexibly with the soldering programs, batches comprising sometimes 4,000, sometimes 100 pieces. If the new machine runs for 20 years like the old one, we have done everything right with our investment,” says Production Manager Andreas Korr.

ESW has already received several inquiries for new projects and prototypes with the potential for series production. “Our capacity is 70 million components per month at full steam. We are running two shifts at the moment, but we can increase this any time. With the POWERFLOW PRO wave soldering system and Ersa as a partner at our side, we are ideally equipped for future tasks and projects,” says Jörg Kreus, Head of Sales & Supply Chain Management and member of the Executive Board.



Expert panel at ESW in front of the POWERFLOW PRO (from left): Production Manager Andreas Korr, Ersa Sales Manager Daniel Haubenreich, COO/CFO Artur Kreus and Sales Manager Jörg Kreus

A look inside the ESW production facility

View of the existing transport system married to the POWERFLOW PRO

Well-structured electronics production at ESW, here a view of the POWERFLOW PRO

Our new eLearning system: *the future of learning!*

Kurtz Ersa eLearning – an innovative platform that makes learning processes flexible and interactive. This allows you to acquire new knowledge and develop your skills in a targeted manner. The eLearning can be conveniently accessed online and is also available directly via Kurtz Ersa CONNECT. In line with the motto "one tool all services", the system offers the greatest possible flexibility and direct access to Ersa know-how.

Current content and future extensions

The eLearning system currently offers comprehensive operating and maintenance training courses to familiarize users with the basics of machine operation and maintenance. Topics covered include, for example, software operation or program creation in the operating area. Under "Maintenance", all necessary maintenance steps are listed with step-by-step instructions and supplementary videos. The video library contains additional instructional videos for operation and maintenance for each machine. This acquired knowledge can be consolidated with the help of tests and certified at the end with an examination.

The range is constantly being expanded to cover process knowledge, troubleshooting and other practical topics. In this way, Ersa generates individual training solutions that are optimally tailored to customer needs. Thanks to the annual subscription model, new or updated content is easily added and can be accessed by all users without any further investment. This means you are prepared for future challenges in your production!

What distinguishes our eLearning system?

Flexibility

The system makes it possible to access content at any time and from anywhere. This means that employee training courses can be customized. The structure of the courses with re-entry at any time means that they can be optimally adapted to everyday production. This saves valuable time and reduces costs.

Interactive and practical learning with certification

Kurtz Ersa eLearning offers interactive learning methods such as videos, conversation simulations with digital avatars and exams that make learning more varied and the acquired knowledge directly applicable. After completing the content, it is possible to obtain certification for the content learned in a final test.

Updated and expanded content

The eLearning system is constantly being expanded with new content so that users are always up to date and benefit from the latest developments. The Ersa machine portfolio is already stored in the system with extensive content, and all updates are made available to users free of charge.

Available machines:

- ***Selective Soldering***
  - VERSAFLOW 4
  - VERSAFLOW 3
  - VERSAFLOW ONE
- ***Wave Soldering***
  - POWERFLOW ULTRA
  - POWERFLO PRO
- ***Reflow Soldering***
  - HOTFLOW THREE
  - HOTFLOW ONE
  - EXOS 10/26
  - HOTFLOW 4
  - HOTFLOW 3

Learn more about Kurtz Ersa eLearning

Impressions from the 5th Electronics Production Technology Forum at Ersa in Wertheim

Great response at the

5TH ELECTRONICS PRODUCTION TECHNOLOGY FORUM

The Ersa team was delighted to welcome numerous customers and business partners to the 5th Technology Forum in Wertheim on September 25 and 26. 18 exhibitors from all areas of electronics manufacturing took part in the 2024 edition of the "TechForum Electronics Production with in-house exhibition", which focused specifically on digital services along the electronics production line. After a brief welcome, the event kicked off the day with various specialist presentations – ranging from data-driven services and a rework technology update to soldering technologies of the future and requirements for production equipment. In addition to the attractive lecture program, all participants also had the opportunity to take part in hands-on sessions in the exhibition area and ask questions directly to the experts.

The second day also began with highly motivated participants and exciting specialist presentations on topics such as "Next Level Service" and "Line Controller". During the lunch break that followed, the guests took the opportunity to visit the accompanying in-house exhibition. There, the participating business partners presented their latest machines and systems and answered the questions of the knowledge-hungry participants in detail. The event concluded with two further interesting presentations – one on perfectly networked inspection and the other on the new Ersa i-CON MK2 soldering station series, which uses Tip'n'Turn technology to improve performance. At the end of the two days, the Ersa team thanked all participants and business partners who once again made the Electronics Production Technology Forum and in-house exhibition an inspiringly successful event with their expertise and contributions!

IINNOVATIONS FOR ELECTRONICS PRODUCTION

Kurtz Ersa at the electronica 2024

From November 12 to 15, electronica once again attracted the entire electronics manufacturing industry to Munich. The world's leading trade fair celebrated its 60th anniversary in 2024 and underlined its global significance with 3,480 exhibitors and 80,000 visitors as well as an impressive range of technologies and solutions that will pave the way for the "All Electric Society".

As a leading system supplier for electronics production, Ersa was represented with an attractive stand in Hall B1. There, the business unit for soldering tools presented its high-performance and efficiency-oriented solutions for rework, inspection and hand soldering. An outstanding example of this is the Ersa hybrid rework technology, which is suitable for all conceivable applications in repair soldering and always keeps an eye on sustainable added value. It makes no difference whether manual or automated processes are involved. The absolute highlight was the presentation of the new high-end model HR 600P, the first Ersa table-top rework system with automatic residual solder removal, which sets new standards in automation.

Many visitors were looking for comprehensive process data documentation in hand soldering – and found what they were looking for at Ersa in the intuitively operated IoT soldering station i-CON TRACE, which impresses with its seamless traceability, MES connection and strong performance. The response to the new i-CON MK2 series soldering stations was just as positive, with their high performance (20 % more performance), resource efficiency and innovative tip'n'turn concept for changing tips in no time at all.

"We would like to thank all visitors to electronica – we had many exciting discussions with customers and interested parties. Our development presented exactly the innovative solutions that our industry will need in the future," said Hansjürgen Bolg, Head of Ersa's Tools, Rework & Inspection business unit.

The joint trade fair team from Ersa, ASYS and Viscom

Dietmar Wolpert (2nd from left), Ersa Sales Engineer for soldering tools, explains to visitors how the HR 600P rework system works

New Delhi

Productronica & Electronica India with strong response

Founded at the turn of the millennium, Productronica & Electronica India has matured over the course of more than 20 years to become the leading international trade fair for electronics development and production in South Asia. The 2024 edition in New Delhi from September 17 to 19 attracted 46,000 visitors who came to see innovations and product highlights from 566 exhibitors from 25 countries. The trade fair was opened by India's Prime Minister Narendra Modi. This year's Ersa stand concept directly integrated the business partners Viscom and ASYS – which was very well received by the visitors. Over the course of the three-day trade fair, there was a lively exchange between the stand team and visitors – among other things, an order was confirmed for a long-awaited project, and many other business discussions led to deals. Overall, it was a successful trade fair that reflected the continuous growth of the electronics industry in India. See you at the next Productronica & Electronica India – then in Bangalore!

Intensive discussions at Productronica & Electronica India – here in front of the Ersa Reflow Soldering System HOTFLOW THREE

Ersa Product Manager Theresa Dengel presents the IoT soldering station i-CON TRACE

TechDays India 2024 – Summer Edition, start on July 23 in Kochi

TechDays India – Summer Edition July

The summer edition of TechDays India kicked off on July 23 in Kochi under the motto "Shared knowledge is double the knowledge". It is always a highlight when customers share their positive experiences about Ersa soldering machines, rework systems and tools with others. This continued seamlessly two days later in Bangalore – here too there was a lively exchange between speakers and participants. Thanks to all the participants in Kochi and Bangalore for making TechDays India another success!

TILT CASTING

Tilt Casting: **Proven Technology taps into New Markets**

Metal Foundry Brückner invests in Kurtz Tilt Casting Machine AK01

The company Brückner from East Thuringia approached Kurtz Casting Solutions with a special request. The company itself has decades of experience with gravity casting. Due to a new customer inquiry, there was a need for more precise filling and maximum quality. Kurtz Ersa supplied the right solution with a tiltable casting machine.

The Brückner Team – from left to right: Dominic Schmidt, Michael Müller (Kurtz), Ina Schmidt, Dustin Schmidt, Thomas Schmidt

A customer relationship between Kurtz Ersa and a foundry often begins with a special customer inquiry. In this specific case, the company "Metal Foundry Brückner" received an inquiry for five different cast parts weighing between three and five kilograms in the summer of 2023. As their new customer held out the prospect of an annual order volume of at least 2,000 pieces each, the previous manufacturing process using sand casting was called into question and the company considered manufacturing with a permanent mold. Permanent mold casting is ideal for producing large quantities economically. As the cast parts are produced in outstanding, reproducible quality, this type of manufacturing is particularly suitable for parts that have to meet highest standards of dimensional accuracy. This was the case for Brückner's new customer, as the cast parts in question had to meet high quality requirements for drive technology in boat building.

Brückner lands the deal

The strengths of the Metal Foundry Brückner are short delivery times, high quality, and flexibility. The main areas of application for the cast parts manufactured by Brückner are pump technology, electrical engineering, the furniture industry, as well as railroad technology. In October 2023, the Metal Foundry Brückner was able to convince their customer after several preliminary discussions and also by presenting their references and received the order for the first three cast parts for boat building. Brückner proposed to produce the cast parts using the tilt casting process. The main advantage is the controlled filling via the tilting movement of the machine. The mold is filled at a moderate speed, thus reducing foaming. Less gate and feeder weight are required, which has a positive effect on the amount of aluminum required and results in a significant reduction in costs. Furthermore, higher unit weights with high complexity and with lower wall thicknesses can be realized more easily. The improved venting in tilt casting results in fewer air inclusions.

Up to 2023, Brückner always used the gravity casting process exclusively. The idea of expanding their own foundry to include tilt casting had been on the company's mind for some time. So far, however, orders for cast parts demanding this procedure and therefore justifying this investment where missing. A reliable tilt casting system with a monitored and controlled casting process not only increases the efficiency and quality of the parts produced, but also opens the door to new markets thanks to the expansion of the machine park.

Kurtz Ersa is taken on board

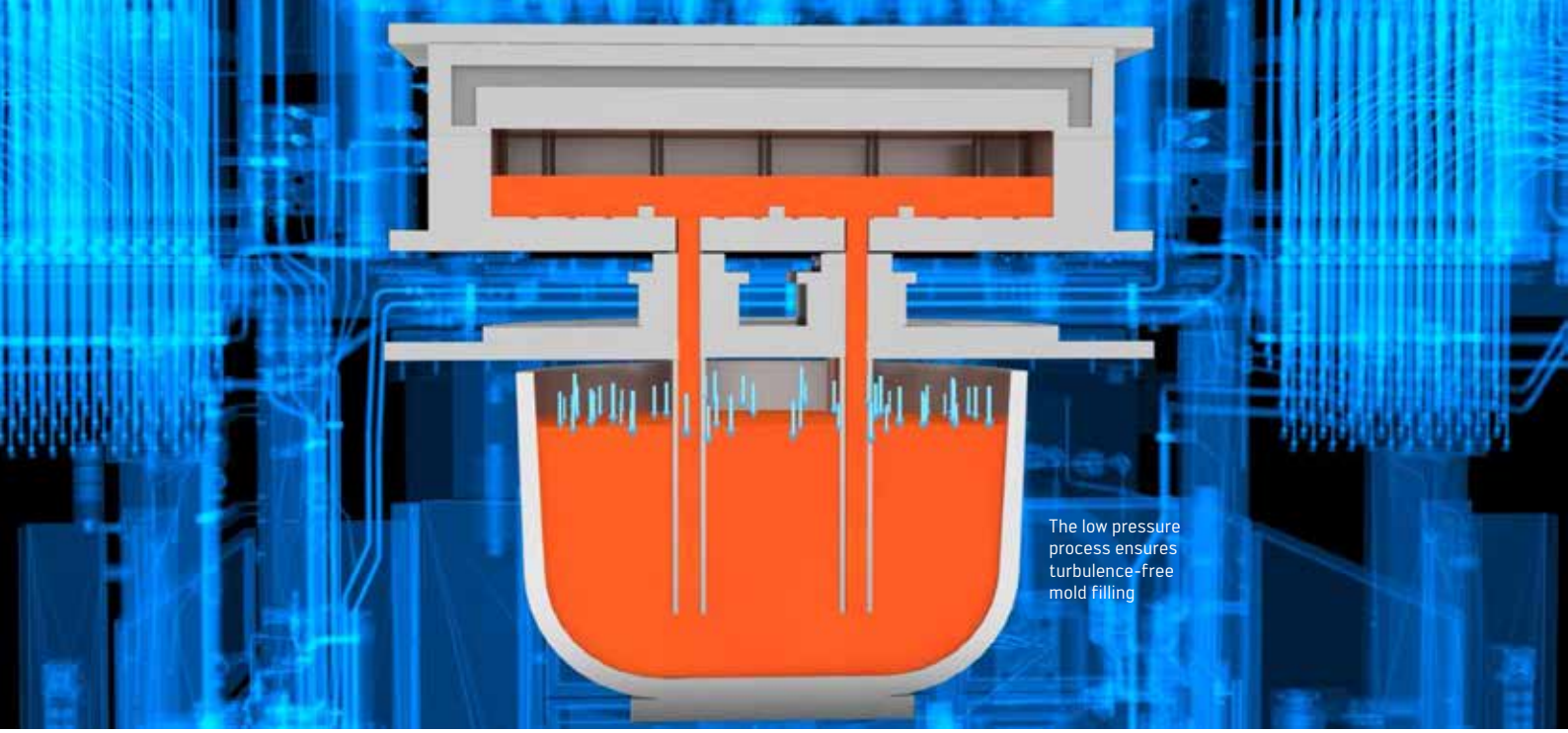
In December 2023, Brückner contacted Kurtz Ersa, described their needs, and communicated the exact casting requirements of their customer. An intensive exchange about the requirements for the tilt casting machine began, with the desire to be able to produce very quickly. In the new year, the realization of the project started at full speed. Numerous meetings between Brückner, their toolmaker and Kurtz Ersa were necessary to determine the optimal casting design. At the same time, the machine was produced at Kurtz Ersa's main plant in Wiebelbach. In mid-June 2024, the time had finally come: the new tilt casting machine was delivered to the Metal Foundry Brückner. The machine was aligned, anchored to the floor, and put into operation. Following the successful casting of the first samples in July, series production could begin seamlessly.

The Kurtz Casting Solutions team would like to express its appreciation for the excellent cooperation and trusting relationship during the project phase. We look forward to a long-term business relationship with many more projects of this kind.

View of the tilted Kurtz Tilt Casting Machine AK01

The new home of the Kurtz AK01 at the Metal Foundry Brückner in Zeulenroda-Triebes: Production area for future castings using the tilt casting process

The Metal Foundry Brückner is currently managed by the second generation of the family: Ina Schmidt and her husband Thomas. The company was founded in 1967 in Zeulenroda-Triebes in East Thuringia, located in the former GDR, by her father, master toolmaker Heinz Brückner. The Metal Foundry Brückner specializes in aluminum gravity casting with subsequent machining. It has its own fettling shop, a machining department, and a heat treatment system.



The low pressure process ensures turbulence-free mold filling

Kurtz Casting Solutions

Low Pressure as an Example of a Sustainable Process

To produce in a sustainable manner is becoming increasingly important in our society. The main reasons are the effects of the climate change, such as severe weather disasters as well as the global rise in sea temperatures. New laws are enacted to ensure sustainable business practices and also set the rules for future production processes. Developments regarding "clean" technologies are necessary and promoted, and they are replacing previous standards in many sectors.

Lightweight construction plays an important role in the aviation as well as the automotive sector. An aircraft or a vehicle optimized for lightweight construction will have a reduced energy and fuel requirement. For aluminum cast parts, which are often used, the following requirement applies: the same or even yet a greater stability of the parts with reduced weight. This can be achieved either by saving material or by using hollow casting technology via sand cores and after de-coring of the cores. The continuing development towards minimizing component weight and therefore reducing CO_2 emissions still drives this trend. The Kurtz low pressure process can make a significant contribution to saving resources. Not only thin-walled parts of 3 mm or even thinner are feasible, but also parts in combination with material accumulation and in connection with high mechanical properties and with reduced recycled material.

The key factors for a successful casting:

1. **Perfect mold filling**
2. **Cooling technology**
3. **Furnace technology**
4. **Intelligent and flexible machine design**

KEY FACTOR Perfect Mold Filling

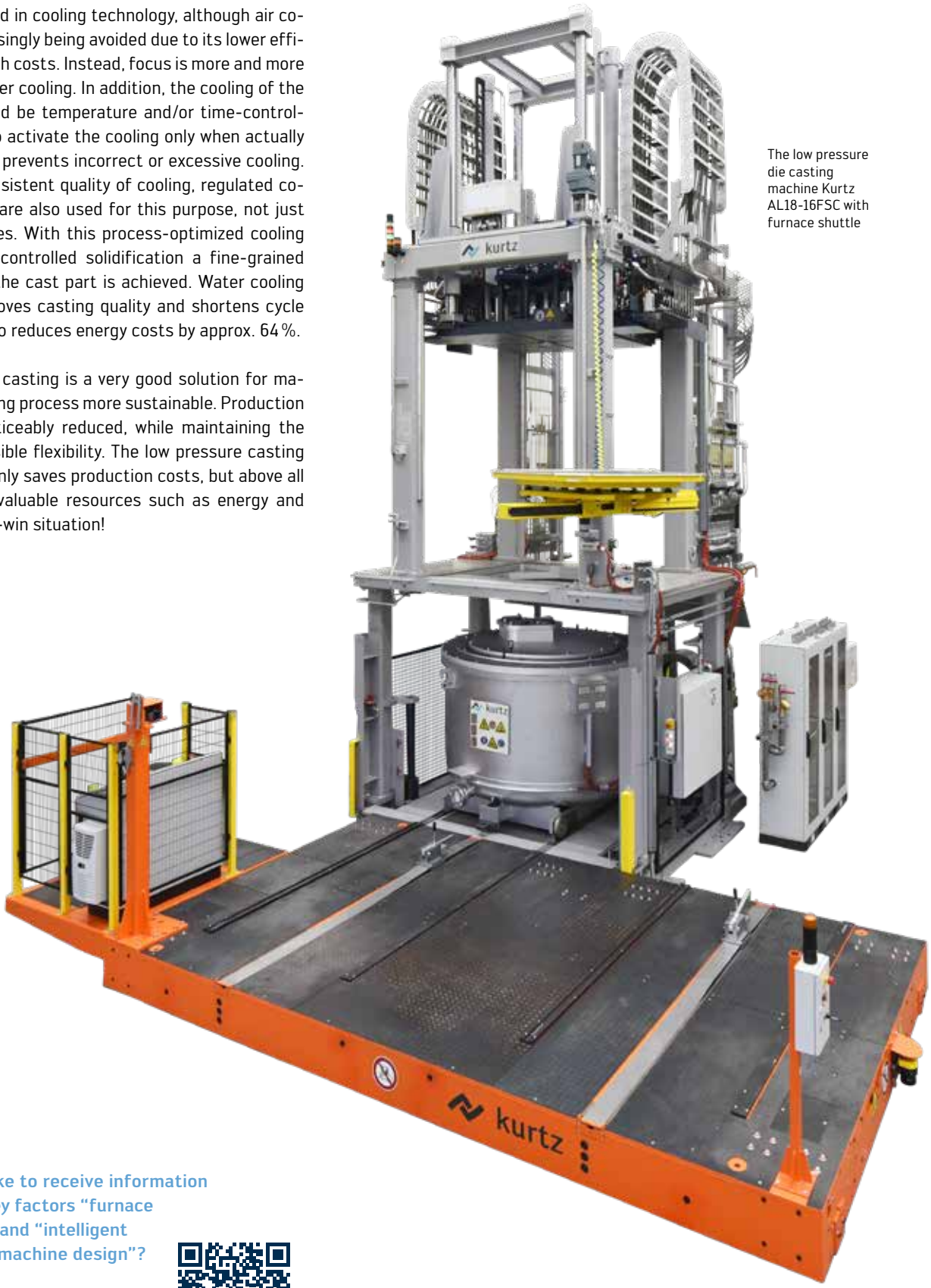
The heart of the low pressure process is the turbulence-free filling of mold. The aluminum melt is protected from environmental influences inside of the furnace. By pressurizing the furnace in the range of millibar up to a maximum of 1 bar, the aluminum melt is poured into the mold cavity, usually a permanent die-cast mold, by means of a riser tube. After filling of the mold, the edge shell starts to solidify, whereas the feeding pressure is increased again to densify the cast part.

Compared to gravity casting, it is not uncommon to save up to 70 % on recycling material (depending on the size of the part) and to achieve a higher output of cast parts as well as fewer scrap. As air is the most expensive medium in the foundry, there is also great potential for savings here. The Kurtz pre-pressure technology reduces the air consumption required for the casting process to a minimum and at the same time optimizes the cycle time for mold filling by always maintaining the same casting starting point. The furnace is not completely vented after a casting, which leads to energy savings of approx. 80 % and at the same time shortens the cycle time and improves the quality of the melt.

KEY FACTOR Cooling Technology

Air is also used in cooling technology, although air cooling is increasingly being avoided due to its lower efficiency and high costs. Instead, focus is more and more placed on water cooling. In addition, the cooling of the process should be temperature and/or time-controlled in order to activate the cooling only when actually required. This prevents incorrect or excessive cooling. To ensure consistent quality of cooling, regulated cooling circuits are also used for this purpose, not just controlled ones. With this process-optimized cooling concept and controlled solidification a fine-grained structure of the cast part is achieved. Water cooling not only improves casting quality and shortens cycle times, but also reduces energy costs by approx. 64 %.

Low pressure casting is a very good solution for making the casting process more sustainable. Production costs are noticeably reduced, while maintaining the greatest possible flexibility. The low pressure casting process not only saves production costs, but above all it conserves valuable resources such as energy and water – a win-win situation!



The low pressure die casting machine Kurtz AL18-16FSC with furnace shuttle

Would you like to receive information about the key factors "furnace technology" and "intelligent and flexible machine design"?

Find out more about the two key factors online or send an email to info@kurtz.de

Kurtz Systems

New Quality Standards

The quality demands of the customers of the two Moulding Machines divisions are constantly growing. Our customers can expect the exceptional without having to compromise. With this in mind, we have launched a quality offensive at Kurtz.

Shop Floor Meeting: Important discussion between core departments to ensure the best quality for the customer

In discussions with customers, Kurtz employees learned that the demands on the quality level of production systems are increasing – and we want to and will meet these demands! The increased requirements led to optimization measures being tackled. With a new head of quality assurance and a strong and motivated team, the quality standard has been significantly raised in recent months – and will continue to be optimized. The aim is to consistently offer Kurtz Ersa customers the flawless quality that is expected from one of the leading manufacturers of foundry and particle foam machines.

What was actually done?

The topic of quality is now reflected in all areas and processes. It is also reflected in customer communication in the form of an irrepressible desire for continuous improvement. The focus was and is on establishing sustainable development, supplier and procurement quality. Improved assembly, test field and service quality will also ensure corresponding customer satisfaction. In 2023, there was a large-scale quality offensive in all previously mentioned areas with the reorganization of quality assurance and machine commissioning. With the aim of uncovering optimization potential, there was an open exchange with suppliers with whom Kurtz Ersa works in partnership. Since then, so-called quality assurance agreements (QAA) have been used to develop and promote quality. There are also audit visits with defined, measurable and target-oriented key performance indicators (KPI).

Furthermore, it has been worked on the job's identification to ensure that everybody associates more strongly with the tasks at hand and approaches the work with the appropriate care and performance. Shop floor meetings form the interface to all project-related departments. In addition, "quality tools" are now in use which constantly put process performance up to machine cycle optimizations to the test. So-called "cause and effects" with influencing variables such as man, machine, method, measurement, material and the environment also play a role here. Since the quality offensive, attention has been paid to the sustainable optimization of the machine acceptance quality.

Examples of the quality offensive

With regard to machine acceptance, the following measures have been defined for every system that is handed over from Kurtz:

- Short Life Tests – 4-digit test cycles under real conditions
- Video records
- Tests for mechanics, electrics, and software come along with a safety matrix, i.e. in-depth testing of the system under real conditions including the testing of steam and mould simulations, customer tools and original materials
- Ensuring "robust design" in line with maximum functionality, utility value and reliability
- Defined process operations as permanent "Q-gates"
- Quality reviews: everyone involved fully identifies with all processes
- Promotion of individual responsibility with defined assembly checks
- Deviations are consistently classified and processed to avoid error repetition and "not added value"
- Digital acceptance protocols that evolve and which consider the exchange of experience with appreciation
- Claim to 0-defect machines after all service life tests as a "win-to-win" team effort

A new level of quality was achieved thanks to the great willingness of all employees to approach all quality issues together and to continuously optimize the quality level. At the same time, the team effort promoted an open communication and strengthened cohesion among and within the departments. The quality of the Kurtz machines was the starting point – the winners are the customer and the entire team at Kurtz GmbH & Co. KG!

KURTZ

The Service department within the Moulding Machines division has undergone a structural realignment this year and has been strengthened in terms of human resources. A new Global Head of Customer Service has been contributing his many years of experience since May, and Kurtz Ersa customers will benefit from optimized remote support from 2025.

The Moulding Machines Service department has been managed by Jan Backes, Global Head of Customer Service, since 01.05.2024. The customer-oriented manager spent many years in Latin and North America, worked in Europe, Asia and Africa, and has many years of experience in the areas of sales, after sales and service, which he gained in several mechanical engineering companies. In addition to increasing incoming orders, establishing international service cooperations and sales responsibility, Jan Backes has made a significant contribution to optimizing internal processes at his previous employers. He has already tackled this at Kurtz and is in the process of setting an important course for the future. He is passionate about constantly optimizing communication with customers and making it more transparent for both sides. The introduction of a fee-based Kurtz Remote Support on 01.01.2025 is primarily aimed at improving customer communication, improving availability for the customer and better handling of quotation requests and complaints. In the future, Jan Backes will address the development of field and office service, develop new service products and work on linking the Kurtz Service department to the Kurtz Ersa CRM system in order to create transparency in customer management. Jan Backes is currently still in the internal process analysis stage. However, his assessment is already positive: "The team grew beforehand of my arrival and will continue to grow to be able to offer customers the best possible service. By specifically expanding the strengths of each employee and individual developing measures through a structured package, I am confident that we will be able to approach our customers in the Casting and Protective Solutions divisions with exciting new service products as early as 2025." The vision: Kurtz is a partner throughout the entire life cycle of a machine. To this end, a new team of experienced application specialists will be formed to provide "lifecycle solutions".

Jan Backes, Global Head of Customer Service at Kurtz GmbH & Co. KG

SERVICE UPDATE

Kurtz Remote Support from 01.01.2025 – the focus is on the customer!

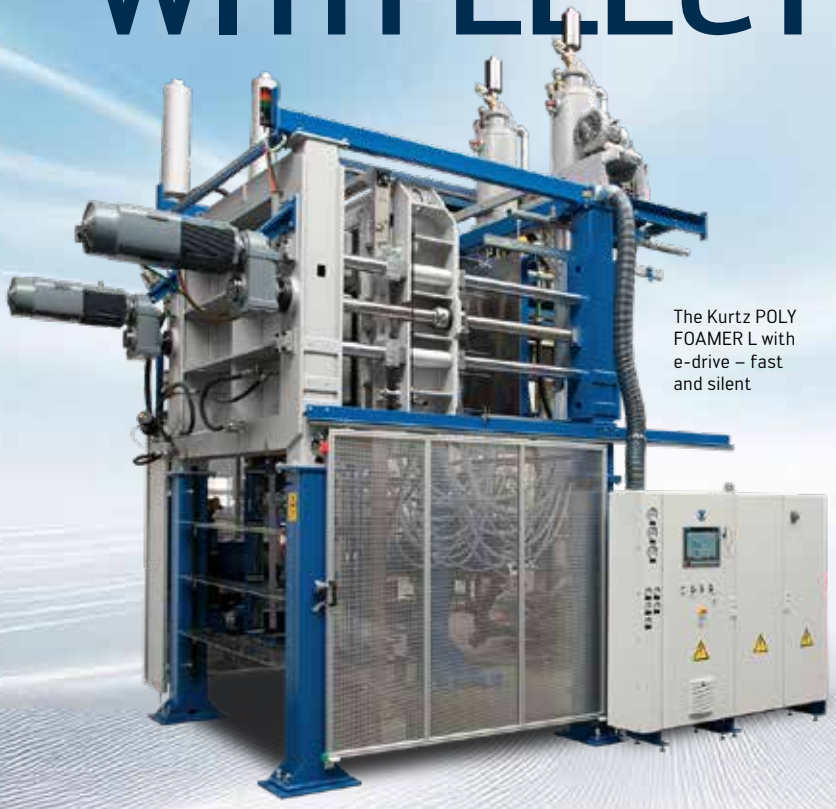
As of 01.01.2025, Kurtz Service is repositioning in terms of expertise and personnel and is offering fixed remote support times to help customers even more effectively. For example, a new e-mail address has been set up to which Kurtz experts have access and which customers can use to receive comprehensive answers to any technical questions they may have. The hotline will have more staff and will be available at defined times. The Kurtz Service will be professionalized. To enable this optimized offering and to keep experts on hand, remote support services used will be invoiced from January 2025. If a machine is still under warranty, all hotline services will of course be included. Also important: Only services used will be invoiced in accordance with the valid installation and service conditions of Kurtz GmbH & Co. KG, which can be viewed at www.kurtzersa.com/gtc

Advantages of Kurtz Remote Support in brief – customers benefit, for example, from ...

- improved response times and fixed support times for concrete availability
- a "single point of contact" through a fixed telephone number and e-mail address
- transparency for every call thanks to a clear reporting in the form of a short status report

If you, as our customer, would like to find out more about the remote support offer for foundry machines and particle foam machines from 01.01.2025, please contact the Kurtz Service Team at service-kurtz@kurtzersa.de or call +49 9342 807-112.

KURTZ POLY FOAMER WITH ELECTRIC DRIVE



The Kurtz POLY FOAMER L with e-drive – fast and silent

Another highlight at the Grand Opening of the Kurtz Ersa Manufacturing México production facility in mid-September (see article on page 4) was the Kurtz POLY FOAMER shape moulding machine with e-drive. The "L" version was introduced to the Mexican guests on site.

On the occasion of the opening of Kurtz Ersa Manufacturing México in Ciudad Juárez, Mexican customers from Kurtz Protective Solutions were introduced to a shape moulding machine with electric drive. Kurtz shape moulding machines with e-drive, i.e. purely electric drive, are now in use in many markets. However, not yet in Mexico. The electric drive replaces the machine's hydraulic system. The e-drive is particularly popular with companies in the food packaging industry. This is because the e-drive version is perfectly suitable for the food sector due to its oil-free operation. Kurtz machines with e-drive can of course also be used without restriction in the classic areas of application. The systems with e-drive are very quiet compared to a hydraulically operated machine due to the electric movement. In addition to the low noise level, the system impresses with its fast movements.

EPS processing up to 1.5 bar processing pressure

Kurtz shape moulding machines of type POLY FOAMER with e-drive are available in sizes M and L and are designed for EPS processing up to 1.5 bar processing pressure. The Kurtz machines can be optimized with all common handling options. The customers and business partners of Kurtz Protective Solutions in Mexico responded very positively to the development of an alternative to the hydraulic drive. The system from the Opening Day has meanwhile been sold. In the weeks that followed, it was still available for customer demos and went into production on the customer side at the end of the year.

The Mexican guests were very inquisitive and asked many questions about the e-drive

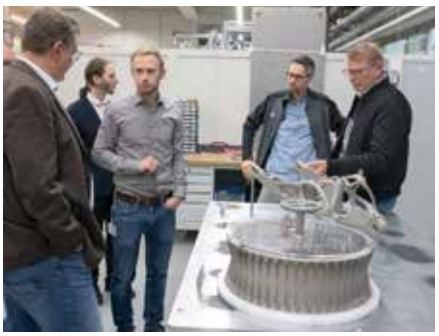
Stephan Gesuato, General Manager Protective Solutions and fluent in many languages, did the presentation of the Kurtz POLY FOAMER L in Spanish



Transformation Talk at the Kurtz Ersa headquarters in Wiebelbach with focus on Additive Manufacturing

Transformation Talk at Kurtz Ersa

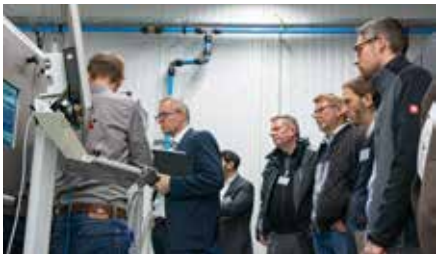
Status Quo of Additive Manufacturing



On November 6, the 6th Transformation Talk 2024 took place at Kurtz Ersa – an event that focused on additive manufacturing and brought together 20 experts from the regional industry. The event was hosted by the Transformationsoffensive Regiopolregion Mainfranken (Transform.RMF), a partnership between Region Mainfranken GmbH and Würzburg-Schweinfurt University of Applied Sciences. The initiative gathers SME to promote the transfer of know-how between business and science. The aim is to actively shape the transformation of mechanical engineering and automotive, create room for innovation and develop a transformation roadmap for Mainfranken.

After welcoming words of Thomas Mühleck, host in his capacity as CEO of the Kurtz Ersa Corporation, Transform.RMF introduced its initiative. Dr.-Ing. Astrid Rota, Managing Director of Additive Manufacturing (AM) at Kurtz Ersa, followed with an overview of additive manufacturing and discussed various additive processes. She showed how 3D printing is integrated into the Kurtz Ersa product range, introduced the Kurtz Ersa machine types and the Perfect Angle Printing process, and finished by presenting application examples. Her expertise and passion for innovative manufacturing technologies inspired the participants.

Another presentation was given by Gerhard Müller, Managing Director of Speedpart GmbH, who provided exciting insights into the world of industrial contract manufacturing. He highlighted the advantages and efficiency of 3D printing in the production of small quantities and series and explained how additive manufacturing works with traditional processes such as injection moulding for the fast, cost-effective implementation of product ideas. Moreover, the guests were able to test the "AR glasses" from XRify GmbH, which can be used to optimize production and value creation processes. A guided tour of the AM area in Kreuzwertheim-Wiebelbach followed. During the exclusive look behind the scenes, the 3D metal printer Flying Ray was showcased. The machine impressed the participants with its unique, modular design and maximum scalability for large build volume dimensions, multi-laser applications and system-independent process parameters. "The Transformation Talk demonstrated how important exchange and collaboration within the industry are in order to pave the way to a digital and more sustainable future," concluded Dr.-Ing. Astrid Rota and thanked the attendees for their active participation.



This year's Kurtz Ersa booth personnel with Flying Ray axis system

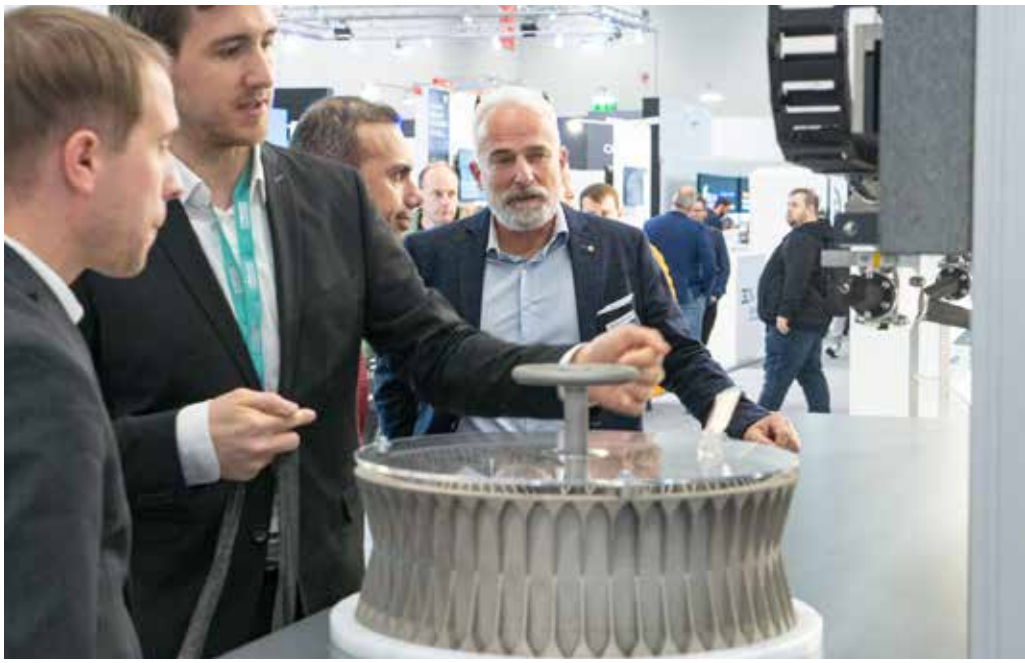
Formnext 2024

LARGE-SCALE INNOVATION

BENCHMARK IN 3D PRINTING

An open booth design offered perfect conditions to exchange with the customer

With the trade show motto "Maschinenbau is our Business", Kurtz Ersa Additive Manufacturing (AM) made an impressive appearance at Formnext 2024. The message was clear and concise: The German mechanical engineering spirit is at the center and shapes the innovations that Kurtz Ersa brings to the world of industrial 3D printing. The Formnext trade fair remains the leading stage for additively manufactured solutions. For Kurtz Ersa Additive Manufacturing, it was the perfect opportunity to showcase the latest technology status and the in-house expertise to an international audience.



Parts such as the planetary gear provided the ideal start and led seamlessly into process discussions

Flying Ray axis system as a technological highlight

The highlight was the axis system of the Flying Ray: two swivel arms that position themselves with the highest precision and at the ideal angle above the powder bed. With this concept, Kurtz Ersa is taking large-scale 3D metal printing to a new level and demonstrating the progress that industrial mechanical engineering is making in additive manufacturing. The technical interest in this unique solution was evident in the discussions at the booth, where the functionality, performance and advantages of the technology for industrial production were enthusiastically discussed. Factors that play a decisive role in large-scale 3D printing for industrial applications. The schematic illustration enabled visitors to understand the functional principle of the advanced system and get to know the potential of the Flying Ray.

Focus on cooperation: synergies within the Kurtz Ersa Group

Moreover, cooperation and interaction between the Kurtz Ersa Business Units played a major role in Frankfurt. Together with the Electronics Production Equipment, Moulding Machines and Automation divisions, Kurtz Ersa Additive Manufacturing demonstrated how synergies within the Group can set new standards. Examples of applications illustrated the successful collaborations that result from the interaction of these areas of expertise. The collaboration not only encourages technological progress, but also creates solutions that meet the specific requirements of industrial customers. The diverse competencies under the Kurtz Ersa umbrella strengthen the innovative power as a machine manufacturer and, above all, generate added value for customers.

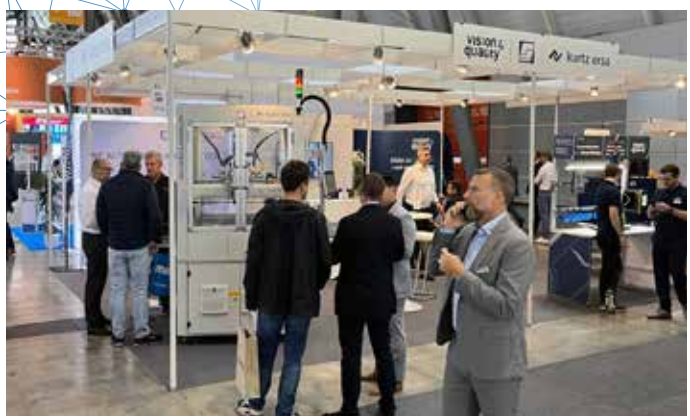
Successful trade fair with a look into the future

Formnext 2024 revealed that Kurtz Ersa Additive Manufacturing is up to date and even ahead with its products and corporate philosophy. The striking trade fair motto "Maschinenbau is our Business" set a clear accent that was very well received by visitors and potential customers. The concise motto strengthened the image as a reliable and innovative partner. The constant dialog and the feedback during the trade fair confirmed that the AM division will continue to pursue its chosen path with vigor and set new standards in industrial 3D printing. Managing Director Dr.-Ing. Astrid Rota: "The positive reactions, the intensive exchange with trade visitors and the promising prospects for future cooperation make Formnext 2024 a complete success for Kurtz Ersa. We look forward to continuing this success story and are excited about the next steps in additive manufacturing, which is redefining mechanical engineering."

Customer-specific part requirements were discussed in a relaxed atmosphere

The structure of the Flying Ray axis system aroused curiosity and invited visitors to stop by

The joint booth was enriched by the plant assistance systems from Vision4Quality



The centerpiece of the trade fair booth in Stuttgart: The dispensing station from SCHILLER AUTOMATION

Kurtz Ersa Automation

Positive Conversations at Motek 2024

Motek, the international trade fair for automation in production and assembly, took place for the 42nd time in Stuttgart from October 8 to 11, 2024. A total of 409 exhibitors from 19 countries presented their new systems and solutions – one of them was SCHILLER AUTOMATION with co-exhibitor Vision4Quality.

This year, our Sonnenbühl-based subsidiary SCHILLER AUTOMATION booked a booth in Stuttgart at relatively short notice. Together with our partner Vision4Quality and with the support of colleagues from the entire Automation division, we developed a small but attractive trade fair appearance. The three displayed exhibits arouse curiosity to the walking public and attracted many interested visitors. SCHILLER AUTOMATION presented the dispensing station, an automated component handling station for high-precision contours of various adhesive and sealing materials. Vision4Quality exhibited two factory assistance systems that are used, for example, in final inspection and assembly control or order picking.

The inquiries from trade visitors mainly revolved around increasing productivity, reducing unit costs and optimizing performance. It turned out that the choice of Hall 5 was just perfect to attract the right visitors with the dispensing station on display. Fellow competitors, partners and customers were all in the immediate vicinity. This resulted in an unexpectedly good trade fair situation with an astonishing number of high-quality leads. Despite the current tense economic situation, it was possible to meet numerous well-known exhibitors in Stuttgart and thus set the course for the hopefully imminent upswing.

The trade fair was well attended with just under 19,000 trade visitors on all four days. Jochen Meinhof, Managing Director at SCHILLER AUTOMATION and responsible for sales and service: "We went to Motek with relatively mixed expectations, but were pleasantly surprised in a very positive way. Obviously, there are still some projects on the market. Now it's time to turn these into orders!"

You can find further information at:
www.schiller-automation.com/en/
www.youtube.com/schillerautomation1

Four days flew by for the mixed booth staff from the Automation division and partner Vision4Quality

Positioning unit of the complex automotive project

Kurtz Ersa Automation as General Contractor

Successful Automation Project in the Field of Soldering Process Automation

Our business unit Kurtz Ersa Automation successfully completed a complex automotive project for an Austrian customer with a production site in Slovakia. As general contractor, the Automation division assumed overall responsibility for the planning, design, procurement, assembly and integration of a complex inverter production system.

Complete system consisting of brushing station, X-ray station and soldering system

After the order was placed at the end of 2023, the Kurtz Ersa project team quickly began processing all the necessary tasks for the plant project in the field of soldering process automation. Technical highlights in the overall system environment included the VERSAFLOW 3/45 selective soldering system from Ersa GmbH and the integration of a heavy-duty X-ray module, which checks the quality of the electronic assemblies from both sides. This inspection was carried out using a turning station from Kurtz Ersa Automation's modular system.

Once the design phase and component procurement had been completed, the assembly of the components and subsequent marriage of individual modules took place at the Reinhardshof site in Wertheim. The initial commissioning of the entire system and subsequent factory acceptance test (FAT) was the milestone that led to delivery approval and relocation to the Slovakian production plant. From the start of the project, weekly online team meetings ensured that the customer was continuously informed about the progress of the project. In addition, customer visits to the Wertheim production plant helped the customer to get to know the system in detail at an early stage of the project and to develop the necessary feel for the processes and operating functions.

"This challenging project was joyful and fun from day one. Everyone involved was highly motivated and committed, which is reflected in the satisfactory production results and positive feedback from our contacts on the customer side," says Markus Dosch, responsible Project Manager at Kurtz Ersa Automation. The successful completion of this project marks another milestone in the trusting partnership with our Austrian customer and once again underlines the expertise and reliability of Kurtz Ersa Automation in the field of industrial automation technology.

Comprehensive Support for Customers of SCHILLER AUTOMATION

Service in a Nutshell!

SCHILLER AUTOMATION is a specialist for individual automation technology in special machine construction. The great challenge for the service team lies in supporting the individual, usually highly customized systems.

Service covers a wide range of tasks. The office staff takes care of spare parts supply, offers for reworks, extensions and training as well as after-sales support. The field service employees are directly at the customer for maintenance and repairs, commissioning, hotline services and training.

The SCHILLER AUTOMATION Service Team currently consists of three colleagues for internal service. The need to position classic service beyond pure system availability has been recognized many years ago by SCHILLER. For this reason, the internal service team proactively approached the customer with classic replacement and wear parts, conversion projects, offers and trainings. This means that SCHILLER Service is also close to the customer as an after-sales partner.

There are currently six highly qualified service technicians in the field. They are the technical backbone and ensure that maintenance, repairs and commissioning are carried out professionally and with great commitment. The team is always on hand to ensure that everything runs smoothly – for larger or smaller challenges, in the office or on site. Together, the team ensures that customers can rely on SCHILLER at all times. The field personnel rotate through the SCHILLER Service Hotline. This means that customers always have a technical contact with the necessary know-how available, including the hotline.

The SCHILLER AUTOMATION Service Portfolio covers the following areas:

TRAINING: Tailor-made system training by service experts

HEALTH CHECK: Inspection of all system components by service experts. Detailed logging of all conspicuous components. Development of an individual health check plan to ensure system availability.

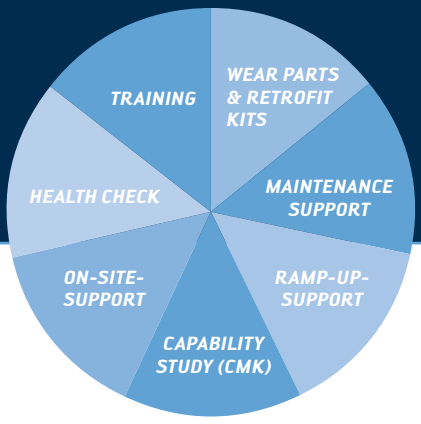
ON-SITE-SUPPORT: Experienced service or software experts are available via remote access or on-site at the system.

CAPABILITY STUDY (CMK): Experienced service experts check axle systems or assembly systems using a CMK protocol. If deviations are identified, the customer is given a retrofit offer for the affected components.

RAMP-UP-SUPPORT: Experienced service or software experts are available at the customer´s plant and support the successful ramp-up of the SCHILLER system.

MAINTENANCE SUPPORT: Technical maintenance of the SCHILLER system by service experts based on a maintenance plan.

WEAR PARTS & RETROFIT KITS: Creation of a precisely fitting and comprehensive spare and wear parts package for the customer´s system.



The SCHILLER SERVICE TOOL is available to help customers quickly in the event of a malfunction. The basis for this is a clear identification of the system. This has been done for 40 years now using unique system and project numbers. With this information, the hotline can access all information from all the trades in a system. This means that in addition to the software, the technicians also have CAD models, circuit diagrams and assembly documentation at their disposal in addition to the SERVICE TOOL. However, all tools are only as good as the employees who tackle and solve problems even in "unclear situations".

Back row (from left): Mike Reichhold, Markus Haug, Robin Leibfritz, Hartmut Bez, Henry Schempp; front row (from left): Herbert Speidel, Jürgen Schaupp, Matthias Grauer, Ralf Huber (Head of Customer Support) – missing from the picture: Besim Rekic

The SCHILLER SERVICE TOOL contains the following functional modules:

Ticket-system

All work on a service case is recorded here and can then be billed to the customer down to the minute. Search for same or similar errors and their solutions in the digital system database.

Digital Asset Database

SCHILLER e-Logbook – in here you can find all knowledge aids, error patterns and associated solutions that have ever been occurred and recorded for a system. Important information and clues for any new or recurring error patterns can be found at any time. Important information is saved and can be accessed very quickly using the system and project number, individual search criteria or keywords.

SCHILLER Remote Service via VPN

Remote access to the customer's system via VPN routers, all of which are IEC 62443-4-1 certified with the highest security standards, in order to obtain a comprehensive picture of the reported problem. Effective system service begins with a thorough analysis either over the phone or via a remote VPN connection to the system. The service employees evaluate the condition of the system and use this to develop a tailor-made solution. Here we network the system with the knowledge of our employees and the knowledge of the digital system database.

SCHILLER machines also connect, control and monitor third-party machine components, e.g. with SCHILLER's own Line-Controller system. Using this optional Line-Controller, SCHILLER service technicians can obtain additional information and analyses on the system status. Connections to MES/ITAC are also no problem for SCHILLER systems.

With the entire portfolio and the SCHILLER SERVICE TOOL, our team in Sonnenbühl is available to its customers in a cooperative partnership to ensure the best system throughput, highest machine availability and optimal technical support.

You can reach the SCHILLER AUTOMATION Service Team at +49 7128-386 372 or by email via service-schiller@kurtzersa.de

Kurtz Ersa honors 75 company jubilees

Machine builder celebrates its jubilees for the fourth time at Bronnbach Monastery – around 1,500 years of professional experience on stage

For the fourth time, the Kurtz Ersa Group held its annual anniversary celebration at Bronnbach Abbey. The festively decorated Bernhardsaal of the former Cistercian abbey was once again the festive setting to honor the impressive number of 75 company anniversaries for their many years of loyalty to the company. CEO Thomas Mühleck welcomed the jubilarians as well as numerous members of the management team, advisory board and shareholders.

Thomas Mühleck is the new CEO

At the annual anniversary celebration, Kurtz Ersa CFO Thomas Mühleck was not only honored for 30 years of service by Advisory Board Chairman Rainer Kurtz, but was also appointed CEO and thus Chairman of the Management Board of the Kurtz Ersa Group.

45 years with the company (from left): Dr. Michael Fischer, Dr. Astrid Rota, Massimo de Vivo, Andreas Dressler, Thomas Mühleck, Rudolf Albert, Andrea Carta, Hubert Baren

40 years with the company (from left): Dr. Michael Fischer, Massimo de Vivo, Michael Weiss, Thomas Mühleck, Dr. Astrid Rota, Jochen Diehm, Andrea Carta, Dieter Häfner, Herbert Kuhnert, Hubert Baren

35 years with the company (from left): Massimo de Vivo, Stefan Ludwig, Dr. Michael Fischer, Thomas Mühleck, Dr. Astrid Rota, Klaus Schmid, Andrea Carta, Hubert Baren

30 years with the company (from left): Rainer Kurtz, Thomas Mühleck, Dr. Michael Fischer, Dr. Astrid Rota, Andrea Carta, Massimo de Vivo, Hubert Baren, Thomas Hartung, Markus Sendelbach, Christian Schwab, Nicole Schneider, Lothar Schwab, Holger Gey, Rosi Ott

25 years with the company (from left): Dr. Michael Fischer, Thomas Mühleck, Massimo de Vivo, Andrea Carta, Dr. Astrid Rota, Hans-Peter Blum, Eugen Jabs, Sonia Rei, Hubert Baren, Martin Menz, Stephanie Lohmüller, Dirk Beyersdorf, Sigrid Wolf, Ralf Walk, Claudia Rosha, Rainer Kurtz, Johannes Stahl

20 years with the company (from left): Dr. Michael Fischer, Thomas Mühleck, Dr. Astrid Rota, Andrea Carta, Massimo de Vivo, Hubert Baren, Hermann Beck, Egon Spachmann, Karl Wennes, Radek Lauer, Elmar Hefter, Monika Volk, Viktor Reiswich, Christoph Löffler, Lena Seifert

15 years with the company (from left): Dr. Michael Fischer, Thomas Mühleck, Andrea Carta, Philipp Günzelmann, Dr. Astrid Rota, Hubert Baren, Jan Bundschuh, Massimo de Vivo, Michael Semmel, Christian Diehm, Sebastian Schwab, Simon Grasmann, Patrick Spengler, Alexander Drach, Sebastian Nitschky

10 years with the company (from left): Massimo de Vivo, Rene Fellinghauer, Dr. Michael Fischer, Alexander Steinhöfer, Thomas Mühleck, Benedict Fleischmann, Andrea Carta, Stefan Müller, Kevin Schmidt, Astrid Rota, Hubert Baren, Johann Salzseiler, Julia Kellner, Klaus Fischer, Sebastian Amthor, Werner Hegmann, Victor Romanov, Nico Emmerich, Yevgeniy Budnik, Sebastian Albert, Eduard Renschler, Tobias Schütz, Linda Schumacher, Tobias Liebler, Colin Fischer, Lara Hurta, Frank Kappel, Frank Weber, Susanne Trabel, Gabriele Stumpf, Dietmar Borgards, Cornelia Grundler

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Technology fan?
In the HAMMERMUSEUM the history of Kurtz Ersa comes alive – experience the enthusiasm for technology with which we are also successfully on the move in the 21st century. Please refer to our website for current opening hours.

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