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Kurtz Ersa Magazine

For Customers and Business Partners of Kurtz Ersa Corporation

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We dare to strive for more!

Rainer Kurtz,
Chief Executive Officer of Ersa GmbH and the Kurtz Ersa Corporation

The motto of the recently founded Hammer Academy "… daring to strive together for more" seizes on a dichotomy with which our staff are regularly confronted. The security of the existing situation on the one hand, the opportunities and risks of an altered situation on the other. Each individual has to weigh it up for himself. As a company, we are constantly driven by the market and the political-economic circumstances to reconsider our situation and often to make adjustments. And of course this does not pass our staff unnoticed. Change is called for. Some things quickly become outdated; others are uneconomical or simply no longer fast enough. But how is the individual to contend with this situation, how can he overcome shortcomings? This is exactly where the concept of the Hammer Academy comes in. For staff and customers, it creates an opportunity to acquire knowledge, skill and expertise. It is not all about professional expertise either but also covers soft skills and of course topics relating to our health. The Hammer Academy increases the attractiveness of Kurtz Ersa as an employer, serving as a platform for all our staff when conflict resolution is required between line managers and staff, with each party learning something new where necessary or undergoing further professional training in coaching measures.

Working for Kurtz Ersa means being involved in the development of our markets, and in technologies, products and processes. Everything is in a state of flux, moving ever faster. Not to fear! We at Kurtz Ersa are a strong team. We are facing up to the challenges, regarding change primarily as an opportunity to develop even further towards the goal of technological leadership.

In all this, our focus remains on our customers' manufacturing processes, for which we develop further standard solutions and tailored production systems. 2015 was, once again, a very successful year. We would like to express our thanks to our customers and business partners and, of course, to all our staff. We hope you enjoy reading these articles and thank you most warmly for your cooperation! ■

Good luck! Your Rainer Kurtz

Happy Birthday

Kurtz Ersa Historic Center celebrates its first year in existence

At the end of June 2014, Kurtz Ersa opened its historic center at the very site where it all began – it includes the manor house, the museum and the Eisenhammer iron hammer works. Since then, thousands of visitors have come to Hasloch to experience the eventful history of Kurtz Ersa and engineering as it has been lived out since 1779. A review on the occasion of the first anniversary which was celebrated on 5 July.

The concept of partition into industrial monument, museum and event venue also housing the company archives and the Anna Göbel and Otto Kurtz Stiftung foundation has proven successful: As a hub of communications, the historic center shows the origins of the Kurtz Ersa Group while at the same time pointing the way to the future – for customers, staff, business partners and visitors.

The combination of Hammermuseum and iron hammer works has been very well received: Numerous groups headed to Hasloch to call into the Eisenhammer and experience the over 235-year-old history of the company and, of course, the demonstration at the legendary up-thrower hammer. Whether vintage car aficionados, bike enthusiasts, fans of that famous mouse – the WDR Maus, TV teams, school classes or current and former Kurtz Ersa staff. Time and again, three-figure visitor numbers were recorded: For example, in September around 520 cyclists accompanied Landrat (District Administrator) Thomas Schiebel on his "Landrad(t)s-Tour", over 600 came along to the Maus "open-the-door day" on 3 October, 2015 on the Day of German Unity.

The historic center has also proven itself as a professional function centre, for instance for the VDMA Event Week, in which Kurtz Ersa presented itself as an attractive employer in the region, or for Ersa's International Sales Meeting – just two examples of many. As well as these events, a number of Hammer Evenings were held in autumn 2015, inviting participants along to a cosy after-work get-together in the manor house.

The first year has already shown the historic center to be the perfect location for a wide range of events – we may well find that things happen here in the future that still appear unimaginable today … ■

Landrat Thomas Schiebel and over 500 cyclists taking a break at the Eisenhammer.

Vintage cars at the Eisenhammer shortly after the opening.

The Eisenhammer as a glass model.

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HAMMER ACADEMY

Striving Together for more competences

Since autumn 2015, personnel qualification has been gathering speed at Kurtz Ersa. In order to ensure that we also meet the complex requirements in tomorrow´s working environment, the Kurtz Ersa Team has been further upskilling thanks to numerous qualification instruments, training workshops and coaching sessions.

With more than 40 internal and external lecturers, and over 90 seminars, Kurtz Ersa has put together a training package which is unique in the region. The aim of the Kurtz Ersa Hammer Academy is to bundle and structure all activities from the areas of apprenticeship and advanced professional training, staff development, competence evaluation, talent management and succession planning, career development and customer training. It is a major element of the corporate culture, which makes Kurtz Ersa an attractive employer too. Knowledge and skills shall be increased through a culture of positive collaboration between management and personnel. Beside a positive attitude towards learning shall be created among employees, leading to the recognition and development of personal resources. Internal and external lecturers are important multipliers raising the knowledge of the Kurtz Ersa workforce to a new level. In a word: The Hammer Academy makes customers, employees and management fit for the future – and consequently ensures that the Kurtz Ersa Group remains sustainably competitive!

Study programme: Hammer Expert

The Hammer Academy encompasses a seminar programme offering all Kurtz Ersa employees a comprehensive set of courses to gain basic knowledge, technical know how, soft skills, methodical expertise and management competences. The programme also includes courses relating to family, sports and healthcare. In addition, the Professional Academy develops skilled Kurtz Ersa employees to become a Hammer Expert by a special study programme.

The certification course leading to the Hammer Expert qualification is a course of studies conducted in cooperation with the Steinbeis-Hochschule Berlin. Participants acquire credit points and a university certificate. In addition customer training courses and seminars are also available, for example on particle foam processing, soldering and casting techniques. The competence evaluation which is conducted at the time of hiring and every second year thereafter is also an element of the Hammer Academy.

Internships for pupils

- Pupil internships
- Trial days

Pupils without final examination

JUNIOR Academy (Apprenticeships)

- Industrial, technical and trading apprenticeships
- Internships

Pupils with a first final examination

ADVANCED Academy (Dual studies)

- Dual studies
- Project, Bachelor and Master theses
- Internships for students

Holders of university-entrance diploma

Trainee-Programm

- 18-month qualification programme in 5 phases: introduction, qualification, temporary employment abroad and specialization

University graduates

Seminar Programme

- Extensive programme offering a comprehensive set of co
  es to gain basic knowledge, technical know how, soft skill
  methodical expertise and management competences

Kurtz Ersa employees

By taking part in performance coaching, whether individually or in a group context, all Kurtz Ersa employees can specifically enhance their skills. Last, but not least the Hammer Academy also encompasses a programme for talent management and succession planning, in which capable Kurtz Ersa employees are specifically fostered according to an individual development plan, using all available Hammer Academy instruments. The Kurtz Ersa Hammer Academy invites all employees to pass on their own knowledge and skills to others in a function of a multiplier and to participate in the training courses. Let's bravely advance together!

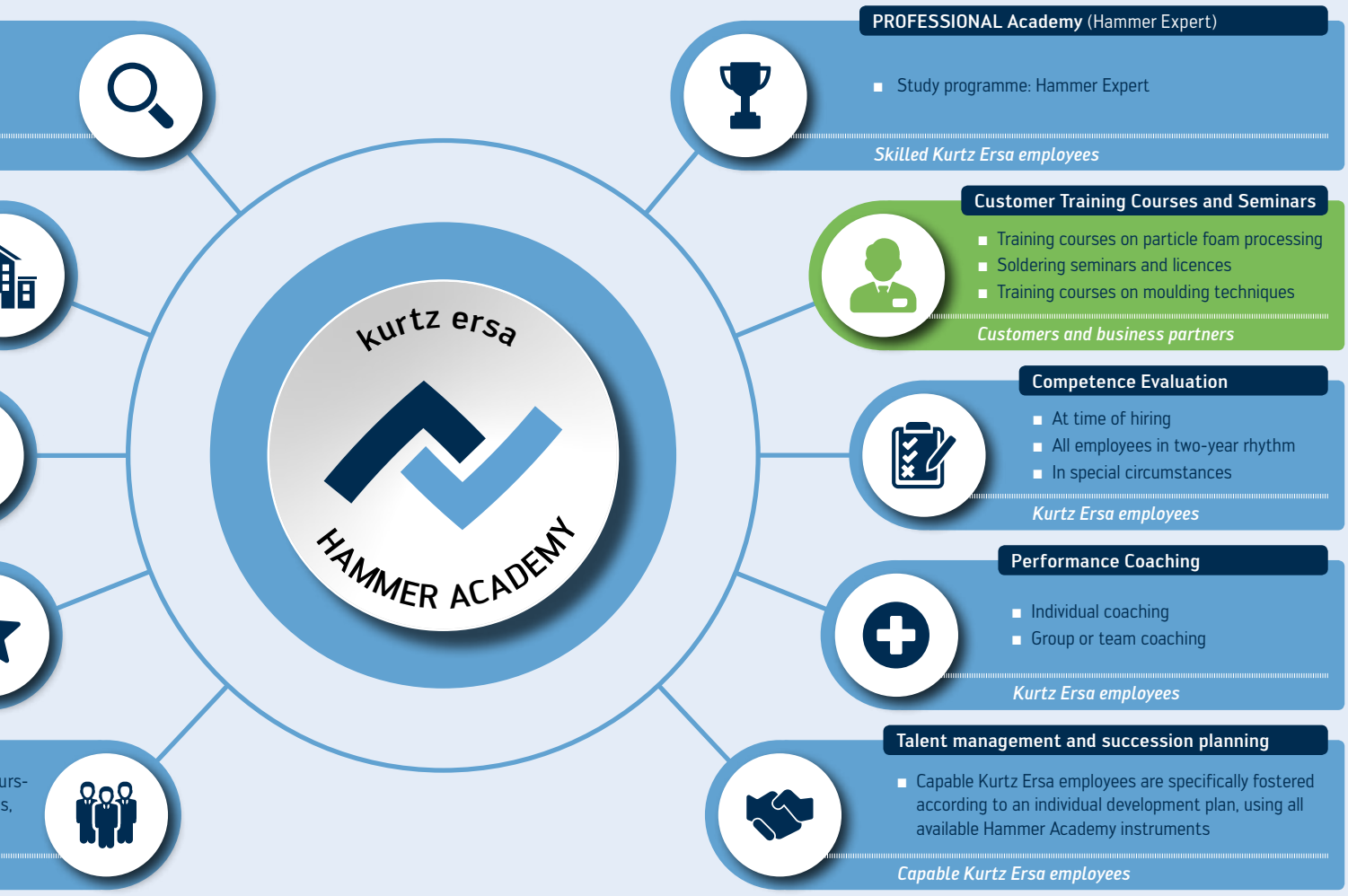
The management of the Hammer Academy is organised through a Chancellor. The tasks of the management are programme supervision and updating, keeping in contact with other academies, selection of internal and external lecturers, administration of events and participants, issue of certificates, administration of the evaluation process and functioning as a central contact person regarding employees questions. At the same time, the Chancellor of the Hammer Academy functions as a consultant for the management board wishing to register their employees for training courses.

Kick-off for the Hammer Academy

The management board, executives, lecturers, managing directors and members of works council of Kurtz Ersa were informed about the Hammer Academy within a special event on 01.10.2015. They learned everything about functions, tools, registration and training courses in the Hammer Academy. Of course there were lots of questions as well as ideas and suggestions. The productive discussions on this day will be the basic fundament for the expansion of the programme in 2016. ■

Chancellor HAMMER ACADEMY: Verena Bartschat, Human Resources Referentin, Kurtz Holding GmbH & Co. Beteiligungs KG

Academic Council Kurtz Ersa Hammer Academy (from left to right): Thomas Mühleck (CFO), Dipl.-Inf. Uwe Rothaug (CTO), Dipl.-Ing. Rainer Kurtz (CEO), Group Works Council Joachim Kraft, Prof. Dr. Wilfried Mödinger external member



Since 15 years successfully in China: Kurtz Shanghai Ltd. – currently more than 60 employees work in the KSL-Team.

15 Years of Kurtz Shanghai Ltd.

In the 2014 jubilee year, Kurtz Ersa celebrated its 235 years in existence and "10 years of Kurtz Zhuhai Machines Ltd." – and 2015 also offers a reason to let the champagne corks pop: Kurtz Shanghai Ltd. celebrates its 15th anniversary!

As far back as the 1990s, machines from Kurtz and Ersa were being sold through distributors in China. The Kurtz Group soon recognised the enormous potential inherent in the fast-growing Chinese market. The key to success: direct cooperation with the final customer. This involved training local product and process specialists and building up a country-wide sales and service network with our own staff.

With the establishment of Kurtz Shanghai Ltd. (KSL) in 2000, a clear signal was sent. From then on, we would look after customers on site, with our own staff – directly, competently, sustainably – in order to take the management of developments in the growing Chinese market into our own hands. A small team with three sales staff and a service technician initially looked after the sale of Kurtz particle foam machines. The office was located in the Wai Gao Qiao free trade zone in west Shanghai. As early as 2002, this was augmented with the sale of Ersa products in the areas of hand soldering, rework and inspection – Ersa soldering machines followed in 2006, and finally moulding machines in 2013.

The importance of Kurtz Shanghai for the Kurtz Ersa Group is clearly demonstrated by the sales figures: Since its establishment, over 2,500 machines and systems have been installed in China. In many product areas, Kurtz Ersa has long become established as the market leader in China; the reference list includes almost all the top addresses in the Chinese market. KSL now employs over 60 staff and has earned an outstanding reputation for high-quality products combined with excellent service. Customers particularly value the stability of the team: Over half the employees have been working at KSL for over five years, with 15 of them actually able to look back on ten years with the company – a rarity in China, a matter of course at Kurtz Ersa. Congratulations to Shanghai and a big "thank you" to the KSL Team! ■

40 years of Productronica

"Ersa Festival of Innovations" inspires Productronica audience

It was the anniversary edition of Productronica, still the most important trade show worldwide for the electronic manufacturing industry, and more than 38,000 visitors from almost 80 countries came to Munich to attend. And since the system supplier Ersa was participating at the exhibition right from the start, it also could celebrate "40 years of Productronica" – and it did so with a spectacular "festival of innovations" covering the complete product range, from hand soldering tools right up to high-end soldering systems.

A large number of visitors from all over the world dropped by at the 400 m² large Ersa booth, where they were overwhelmed by the many world premieres in the form of machines, systems and applications. More than that: unlike the usual experience from other trade shows, many orders were closed at the show – a sure sign that the innovations presented by Ersa have convinced the customers. And it represents a consequent continuation of the business year 2015, which is headed towards record results! At both product groups, the hand soldering units, the "tools", as well as the "machines", numerous highlights drew the attention of the visitors – a definite eye-catcher in the machine division was the collaborative **Ersa ROBOPLACE**, which automatically populates boards with through-hole components for selective soldering (see page 14).

Equally enthusiastically received was the newest generation of the high-end selective soldering system **VERSAFLOW 4**, which is of special interest to the automotive industry (see page 8).

Enthusiasm also in the product range of stencil printing: With the new **VERSAPRINT 3D** stencil printer, Ersa completely surprised the industry with a product, which combines stencil printing and 3D solder paste inspection within one unit for a degree of automation unheard of so far (see page 11).

These innovations were followed by others such as the **HOTFLOW 3/20 VOIDLESS** for virtually void-free inline reflow soldering with high volumes and low operating costs (see page 10).

The new products from the world of rework also fascinated: From the "Rework out of the Box" entry level model **HR 200** over the new hybrid rework platform **HR 550** with computer-assisted component placement right up to the high-end units **HR 600/2** and the VOIDLESS module – they all generated such an interest that it lead to numerous order closings. Strong interest was also raised by the high performance solder unit **i-TOOL HIGH POWER** (see page 12/13).

The feedback received during the four show days indicates that Ersa is on the right track with the products and the technologies it presented – and many projects newly under discussion and many order closings are the just rewards for the Ersa team. For the sales team, this outstanding result means that for the next 12 to 18 month they will be very busy. And then it is almost time again for … correct: Productronica 2017! ■

Rainer Kurtz,
Ersa Managing Director and VDMA Chairman "Electronics, Micro and Nano Technologies" (EMINT).

"There are incredibly many opportunities to advance our business. Industry 4.0 is a new market with an immense potential for growth. And in the field of automotive electronics, driver assistance systems exert considerable pressure on the electronic production."

New Generation: Selective Soldering System

Ersa VERSAFLOW 4 – Making the Best even Better!

With the VERSAFLOW 4/55, Ersa presents the next generation of its worldwide leading VERSAFLOW inline selective soldering system, which offers a number of new features: the new, intuitively operable user interface ERSASOFT 5.0, motorized adjustable Y-axis for fluxer and solder modules, Y- and Z-variability, full convection preheater and a 508 x 508 mm usable process area for inline production. The perfect interaction of all system components further increases the process flexibility and improves productivity.

VERSAFLOW 4/55 product video

Ersa's new high-end system **VERSAFLOW 4/55** is the ideal selective soldering system for large and complex board assemblies in electronic manufacturing – particularly the large and up to 18 kg heavy board assemblies for hybrid car batteries can be soldered on this system, in automatic mode and with excellent results. Depending on the mode of operation and on the demands placed on the system, its modular design allows to integrate additional flux, preheat and/or solder modules. All modules run autonomously through their configured program, setup times and operator interventions are eliminated, which means that the system is always operating at the highest level of productivity and process flexibility.

With the VERSAFLOW 4/55, Ersa presented at the Productronica the newest generation of the worldwide leading selective soldering platform. With the new augmented reality tool Ersa IMAGESOFT, the visitors also received a view of the interior of the system – without opening the enclosure!

Saving on Operating Material, Increasing Throughput

Behind the enclosure of the 4/55, the soldering expert will find an environment packed with innovations, the first being found in the board infeed area: Here the "bad board" recognition feature will detect whether on a panel everything has to be soldered. If individual boards are not populated, the system will recognize this and excludes these boards from being processed – saving material and increasing the throughput.

The flux module may be equipped with up to 4 multi-drop spray heads, so that four boards can be fluxed simultaneously. For the preheat section, Ersa now offers a newly developed, rpm-controlled full convection upper heater module, where the components on the top side

of the board receive the best possible thermal protection while being gently but efficiently warmed up. Innovative functions have also been added to the solder module: The options Y- and Z-variable, previously separated in dual bath modules, are in the **VERSAFLOW 4/55** combined and their parameters can be stored in solder programs. The parameter Y-variable adjusts the distance of the two solder bath/solder nozzles automatically to the distance of the individual PCBs in the panel. Different multiple-ups with different offsets can be processed in mixed operation – without manual intervention into the solder module and the attendant downtime. The option Y-variable is also available for the fluxer module. The Z-variable option serves to solder on one PCB with two different sized nozzles. With the new design, the solder bath not in operation can now be lowered to up to 60 mm below the operating level, to allow soldering between very tall components using only one nozzle.

Perfect process safety, perfect soldering quality

To monitor the condition of the wettable surfaces of the nozzles while in operation, an IP-camera is installed in the **VERSAFLOW 4/55**, which controls, looking from varying angles, the process safety of the solder nozzle, and if called for starts the activation process for the nozzle surface. The camera also monitors and controls the solder wave height. An additional highlight in the process monitoring function is the continuous monitoring of the rest-oxygen level at the solder nozzle – the protective atmosphere is an important parameter for achieving superior soldering results. Aside from these hardware improvements, the operator was not forgotten and a user-friendly system operating software has been provided: The completely new, intuitively operable system software **ERSASOFT 5** is based on the newest Microsoft technologies and is operated via a 24-inch touchscreen. It allows for complete monitoring and visualization of all processes, it reduces the time required to configure the parameters, and it enables full process data management and documentation of all system-relevant data as well as providing interfaces to integrate traceability per ZVEI-protocol respectively MES-systems.

Brought to the point: With the **VERSAFLOW 4/55**, Ersa newly defines the future of the soldering technology! ■

Augmented Reality: IMAGESOFT

3D-Views into the System – without opening the enclosure

System operators, service technicians or maintenance teams can now view complex hidden machine components and assemblies directly from the outside – without having to gain access through the system enclosure. By enlarging the image of an individual component, its part number will automatically be displayed. Wear and tear parts that may be required to be replaced can thus be queried from the Ersa web shop and directly ordered, simply by tapping on the touchscreen. Additional information such as installation and maintenance instructions, process parameters and adjustments as well as many other details are directly available to the operator.

If **Ersa IMAGESOFT** is operating online, that is connected to a system, then all system operating parameters are recorded. The wear parts library determines automatically which parts are when to check or when to replace.

Through capturing the bar code of the replacement part, the next service interval will be calculated, always considering the level of system utilization. The data stored can also be accessed in offline operation.

Ersa IMAGESOFT integrates the Industry 4.0 connection as overall communication man-machine-assembly-parameter with feedback. With that, it is possible for the first time to display to a person via a 3D image – similar to an x-ray picture – complex systems and system functions during operation (also possible without system). ■

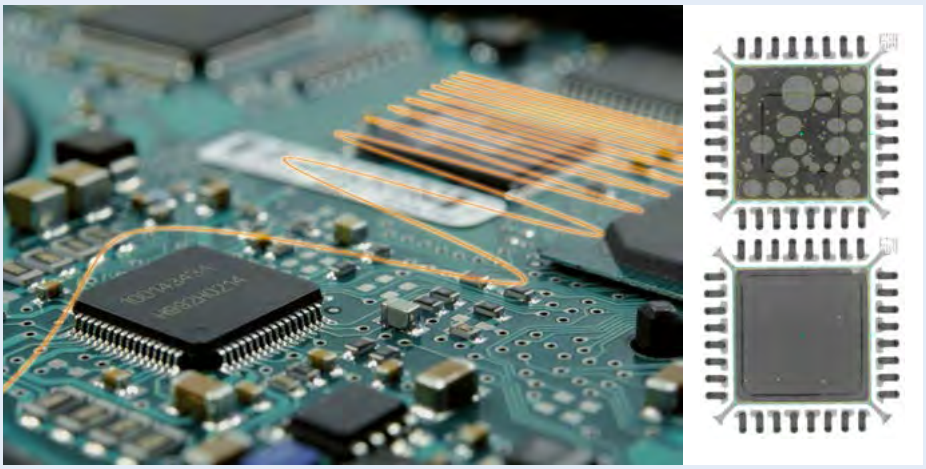
Ersa HOTFLOW 3/20 VOIDLESS

VOIDLESS at line speed with Piezo technology

The trend in reducing the size of power components is unstoppable. As a result of this, and in order to achieve reproducible soldering results at the highest quality level, the loss-free heat conductivity of the solder joints in the SMT process takes on ever more importance.

After the reflow process, voids may be present in the joints which will hinder the effective thermal transfer, thus possibly causing thermal damages to the power components – right up to the complete failure of an assembly. To counter this issue, Ersa has developed, with its VOIDLESS feature, a new method which will reduce the formation of voids during the soldering process down to a bare minimum. The VOIDLESS module is installed as an addition in the peak zone of an Ersa HOTFLOW 3/20 reflow system, ensuring that sufficient thermal energy is available for the solder to reach the temperatures required to form solder joints at high mass components.

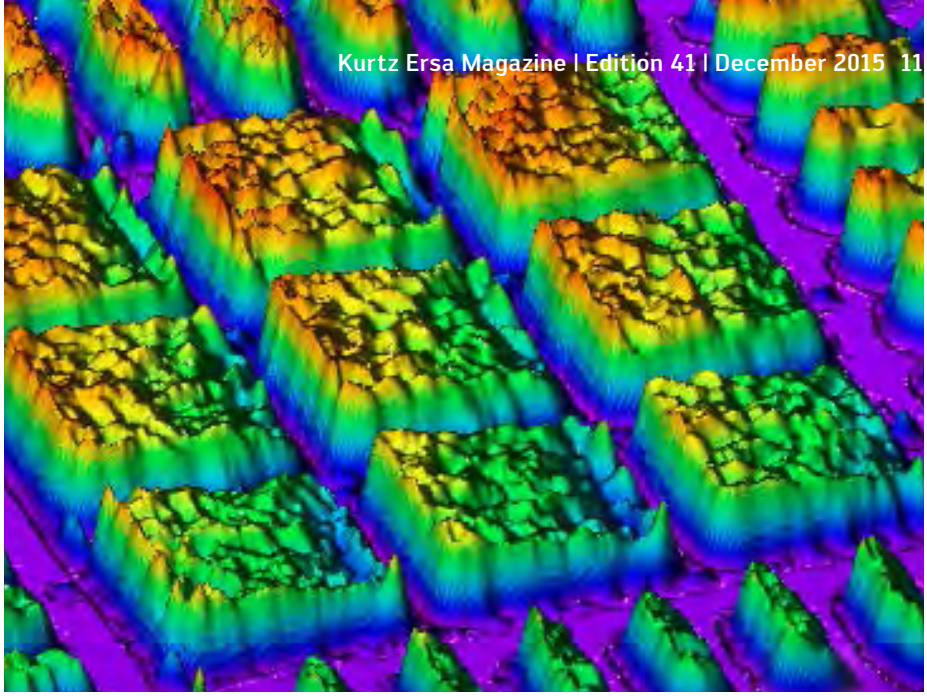
Already during the year 2012, Ersa was looking for alternative processes to reduce the occurrence of voids in solder joints. In cooperation with the Fraunhofer Institute for Silicate Research (ISC), an organization highly competent and with many years of experience in the field of adaptronic, a feasibility study was undertaken to validate some of Ersa's preliminary theoretical considerations with the view on their practical implementation. The development centers around a universal method to minimize voids in the liquid solder between the PCB and the components by a sinusoidal actuation of the PCB substrate, whereby primarily a longitudinal wave with an amplitude of a few µm is actuated on the level of the printed circuit board – independent of the PCB geometry. The low starting frequency of the sweep stimulation ensures a gentle, homogeneous propagation of the vibrations in the PCB, without damaging the molecule chains (e.g. in FR4). The intensification of the frequency causes a stiffening of the PCB substrate, an increase in the elastic modulus and, because of the reduced damping factor, an improved energy transmission of the liquid solder. Thus, areas with low density, so called "voids", are literarily "vibrated" out of the solder joint. As such, the liquid solder is stimulated repeatedly by the vibration propagation in a relative shearing motion leading to the observed reduction of voids in the solder joints. Numerous tests performed at the Fraunhofer ISC have proven the high-degree damping effect of molten solder, which prevents damage to the components.



The bottom QFN component, soldered with the VOIDLESS feature activated, shows almost no voids. On the upper – processed without the VOIDLESS feature – a large number of voids are clearly visible.

With VOIDLESS: a void rate of less than 2%

Summarizing it can be said: The **HOTFLOW 3/20 VOIDLESS** combines the established and well trusted Ersa reflow technology with the innovative and patented VOIDLESS optional feature, which can be simply turned off and on if so required, and which offers our customers the highest degree of flexibility in their production process. Compared to the standard reflow soldering processes, a few seconds only are required to reduce the void rate by up to 98%. Additional positive side effects of the sweep stimulation are the centering of the components on the pad and the optimized spreading of the solder. Delamination of the substrate or the popcorn effect of component bodies do not occur during the Ersa VOIDLESS process. And no additional specifications concerning components or MSL are needed, as they are for alternative processes. The **Ersa HOTFLOW 3/20 VOIDLESS** convinces with short cycle times, almost maintenance free operation, an ideal energy balance and optimized process control at the highest system uptime – and especially: with a rest void rate of under 2%! ■



Graphical image of the VERSAPRINT 3D-SPI showing the paste deposit for a QFN component, recognizable is the typical formation of ramps.

Stencil Printing: Ersa VERSAPRINT S1-3D

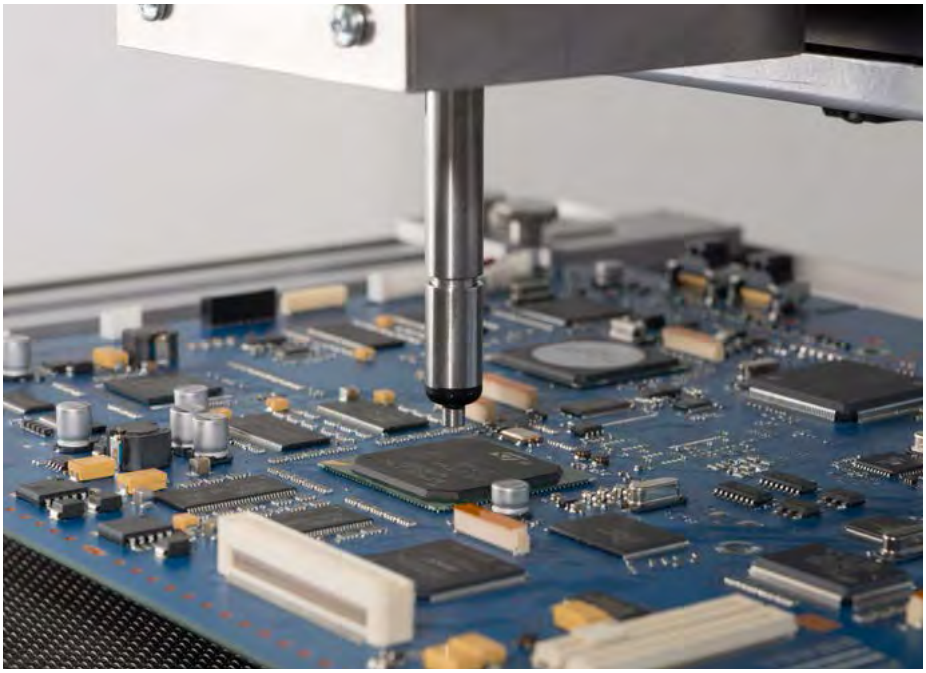
World´s first stencil printer with 100 % integrated 3D-SPI solder paste inspection

The VERSAPRINT stencil printers with integrated 100% post print inspection have successfully established themselves on today's market for electronic manufacturing equipment. The VERSAPRINTs have long since outgrown the status of being "only a simple printer" and have transformed themselves into full-fledged multifunctional systems. Extending 2D inspection, Ersa now presents the VERSAPRINT 3D-SPI – with even more process control and still minimal floor space requirements.

The idea for the integrated **3D-SPI** (SPI is short for "solder paste inspection") was around for a while, but it needed a viable system base to be realized, which Ersa found in the printer platforms **VERSAPRINT P1** and **S1**. When selecting a suitable method to integrate into the existing printer concept, it became apparent that only the laser triangulation method was suitable. In 3D-SPI systems, the object to be measured is scanned by a laser line and all relevant height information along the line scanned is determined.

Only with this method it is possible to place, in the limited space between printed circuit boards and stencil, a compact camera. In this position, the camera has two functions to perform: firstly, the alignment of the printed circuit board to the stencil, and secondly, the 3D inspection. The advantage here: Ersa's development engineers are, through the line scan technology already applied in 2D inspection, familiar with scanning the PCB – perfect preconditions for building the third dimension on this know-how. The 3D inspection assesses properties such as volume, area, height, shorts and offset. Inspection takes places exclusively with laser triangulation and it will record, in case a failure is detected, an additional 2D image for both, a better presentation and to facilitate the analysis. The 3D image can be rotated whichever way and allows for a quick and safe analysis – height indications are highlighted in color and, when approaching the limits, they are colored red and yellow.

The combination of stencil printer and 100% inspection in a single system is the core feature of the Ersa model range **VERSAPRINT 3D-SPI**. With the 3D inspection, Ersa complements the previous 2D inspection not only with a further version, but offers its customers an important step-up to even better process control and safety. The system promises to deliver a degree of automation in the stencil printing process that has not been achieved so far, thereby ensuring a constant process quality, virtually independent of the operator. Are you ready for the third dimension? ■



Ersa Hybrid Rework System HR 550

High Performance Rework for Professionals!

The completely new Ersa Hybrid Rework System HR 550 features high-performance rework for professionals – with camera and software-assisted component placement, highly precise mechanics and a completely new, user-friendly operating software.

During the last two decades, rework and repair of electronic assemblies was one of the most fascinating and demanding subject being talked about in the industry. On account of its wide application range and the reliably repeatable results, be it on mini-0201-chips, 120-mm-SMT-connector, SMT-Flip-Chips, THT-Pin-Grid-Arrays, BGAs, shrouds, plastic processor sockets etc., Ersa rework systems find themselves uncontested at the top of the market.

Highest Demands on Precision and Safety

With the Hybrid Rework System HR 550 Ersa makes available to professional users a high-performance unit, which fulfills the highest demands on precision and safety during rework of electronic assemblies. Its 1,500 W hybrid high-performance heating element can solder and desolder SMD components of up to 70 x 70 mm. The 2,400 W infrared lower preheater ensures a homogeneous warming of the complete assembly. And when combined with the contact-free and the positive-contact temperature acquisition as well as the optimized process guidance, ideal conditions are in place for the desoldering and soldering process. In the HR 550, component removal and component placement deploys a highly accurate vacuum pipette, integrated into the heated head, which is controlled – as is the interchangeable heated head – by a stepping motor.

An integrated force sensor recognizes contact with the component and the board. Particularly appreciated by the user of the HR 550 is the optimal ergonomic design of the operating elements and the program supported component alignment with high-contrast, high-resolution images – the user-friendly operation of the system is further assisted by the newly developed operating software. The **HR 550** is also ready for the use of the **Ersa Dip&Print station**, as it is for miniature components and removal of residual solder.

With the **Hybrid Rework System HR 550** Ersa is once again confirming its market-leading position in the rework technology – with a high-performance unit which convinces rework professionals and will support them in their work on the highest level. ■

Ersa Hybrid Rework System

Rework out of the B

With the compact Ersa Hybrid Rework System HR 200, surface mount components up to a size of 30 x 30 mm can be soldered and desoldered. Unpacking, placing, soldering – that's how easy rework functions today!

15 years ago, with the introduction of the first IR system, Ersa entered into the challenging field of rework. This meant no less than having to continuously adapt to the changing demands placed on the rework technology by the ever more complex boards and assemblies. Today, with over 6,000 installed units, from simple solutions for individual work places up to semiautomatic systems, Ersa offers a worldwide unique range of systems and is, undoubtedly, the current leader in rework technology.

New in the Ersa world of rework is the **HR 200**, weighing in at only 3.7 kg and, because of its small footprint, usable almost anywhere. And to start reworking, it does not need much preparation: unpacking, placing, and soldering – and that is why Ersa calls this version of rework system "rework out of the box". The **Ersa Hybrid Rework System HR 200** features a 400 W hybrid high-performance heating element, with which SMT components of up to 30 x 30 mm can be soldered and desoldered. Also

HR 200

ox!

Product video

available for the system is a powerful 800 W IR bottom heater, which ensures that the assembly is being warmed right through. The necessary power of the upper and lower heaters can be adjusted via a selector switch in four heating levels, with the activation being per foot switch. Thus, both hands stay free and unencumbered, so as to be able to safely remove with the proper tooling a component during desoldering. Depending on the type of assembly and on the power settings, components are soldered or desoldered in about 60 to 180 seconds. During work stoppages, the underside heater will automatically switch into the standby modus, saving precious resources. The assembly is positioned by the integrated board holder at the correct height between the heaters. For an optimal configuration of the system, Ersa recommends an optional cooling fan, a thermocouple and a temperature measuring unit. As a further option, a reflow process camera is available.

With the "out of the box" version **HR 200**, Ersa complements its rework family by a very compact model, which just as the larger units convinces with top technology and an attractive price-performance ratio, and which delivers excellent results on even demanding rework applications with a high degree of repeatability. ■

i-CON VARIO with i-TOOL HIGH POWER

Solder Iron – Power pur!

Product video

A singular success story started in 1921 when Ernst Sachs, the founder of the corporation, registered the patent for the first electric soldering iron. Today, soldering irons and soldering tools, quick-soldering units and gas-driven soldering tools manufactured by Ersa have proven themselves worldwide and in the millionth, always offering a fitting solution to the most diverse applications.

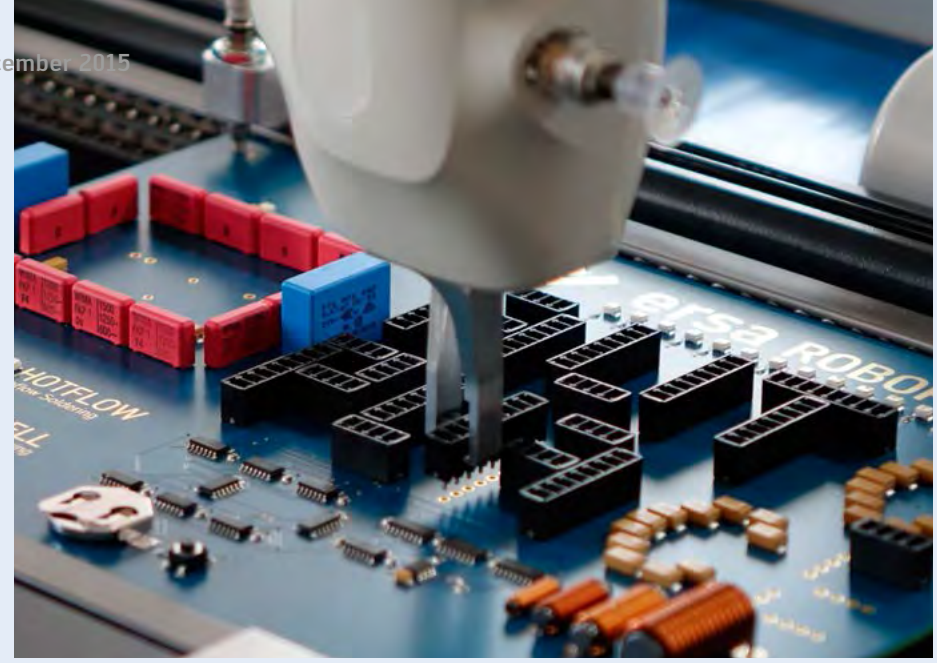
The new member in the program for soldering stations is the **Ersa i-TOOL HIGH POWER** with a rated power of 250 W. After a heat-up time of 40 seconds, the handy soldering iron, weighing no more than 110 gram (without the power cord), is ready for soldering high-mass soldering connections and for applications in power electronics, with a temperature range of between 150 and 450 °C. Prerequisites for optimal soldering results are factors such as the correct shape of the tip, perfect heat transfer, flawless condition and reliable durability – just as the Ersa iron 15+, 25+ and 35+, the **i-TOOL HIGH POWER** relies on a tip which is internally heated, a factor which raises the efficiency level by up to 20%.

Highlights i-TOOL HIGH POWER:

- Easy to handle and very light: appr. 110 g (without power cord)
- 250 W nominal rating
- Heat-up time: 40 s
- 150–450 °C temperature range

For the new high-performance soldering iron, featuring a detached heater element, a broad assortment of exchangeable standard or special tips is available. The **i-TOOL HIGH POWER** also features an automatic standby sensor, so that it will switch to the standby mode for longer interruptions, conserving energy.

Last but not least, the new power solder iron can be connected to the successful Ersa multi-channel soldering and desoldering stations **i-CON VARIO 2** and **4**. With this tool added, there are now a total of ten different tools for soldering and desoldering deployable from these stations. What is your soldering issue today? With the **i-TOOL HIGH POWER** you will have no problem solving it! ■



Innovative Automation Solution: With its flexible 2-arm gripper technology, the Ersa ROBOPLACE takes over the repetitive tasks of populating THT components before the selective soldering system – without requiring safety enclosures.

Automation – Ersa ROBOPLACE supports selective soldering

"Colleague Robot" assumes insertion for THT components

The ROBOPLACE rings in a new era of man-machine collaboration in the soldering process. With its flexible 2-arm technology, it frees up the operator to assume more demanding tasks – and that without requiring a safety enclosure!

So far, very few manufacturers are deploying a "colleague" robot in their board assembly process. With the **ROBOPLACE**, Ersa cuts short a seemingly never-ending discussion and presents the actual practical application. In technically demanding electronic assemblies for industry and for the automotive section, THT components are still an integral part – connectors, capacitors, chokes or other special components, very often just a few components per assembly, were up to now manually inserted prior to the selective soldering system. In order to keep up with the short cycle times of an inline production environment, this frequently required a number of employees performing the work. The **ROBOPLACE** will now take on the repetitive task of inserting components for small to medium production volumes. It will not replace the operator, but it rather frees him up to perform other, more demanding tasks. Ersa is basing this man-machine collaboration on the YuMI™ robot technology from ABB.

Twice as fast, twice as flexible

The **Ersa ROBOPLACE** is installed prior to a selective or wave soldering system and does not require any safety guarding. Since upon making contact it stops movement or moves away, it is, as are all collaborative systems, slower than robots operating behind safety guarding. This seeming disadvantage is compensated by the **ROBOPLACE** through its two arms, which allows the unit to be twice as fast and twice as flexible. Both arms are controlled independently from each other, and they also move independently from each other. As a rule, the components are picked up by finger-type grippers, so that centering the components is already ensured during the pick-up. Components are presented to the grippers from either quick change trays or from common sticks or tape-and-reel packaging.

The complete communication – multi-code capture of the board assembly, SMEMA interface to the loading system, communication **ROBOPLACE** plus transfer to the selective system including product tracking – is via the **ROBOPLACE** system control. The motion sequences are taught via smart devices, i.e. tablet-PC or smartphones. Component placement software is available for the teach-in, from which basic sequences, already optimized for robotics, can be called up. Also, the operator can program, easily and intuitively, his own motion sequences.

With the **ROBOPLACE** Ersa sets new standards in board assembly production, and lastingly improves the production process for the benefit of the employees!

Ersa Soldering Tools and Solder Fume Extractions

Ersa Supports Young Racing Team

How can today's students best apply the theoretical knowledge acquired in their studies in a practical way? The best and most exciting possibility is offered within the framework of Formula Student – where young engineers single-handedly build racing cars!

For years now, the KA RaceIng Team from Karlsruhe Institute of Technology (KIT) has been up among the front runners. The group consisting of 70 students from different fields of study design and make two Formula racing cars every year – a racer with an internal combustion engine and one with four electric motors. The vehicles have long been equipped with specially developed and produced control units which, as a result of the low lot size, involve elaborate hand-crafting for the soldering of the circuit boards.

In addition to consumables such as solder, desoldering braid, fluxing agent and soldering tips, the system supplier Ersa also supported the racing team with high-quality soldering accessories, the most helpful of which was undoubtedly an EASY ARM fume extraction system. Thus equipped, the young engineers are ideally prepared for the numerous challenges which racing teams will face in the coming years, both on and off the track. We wish the KA RaceIng Team every success for the upcoming Formula Student starts! ■

The young engineers of the KA RaceIng Team from Karlsruhe Institute of Technology with their racing car.

New Kurtz trimming press

Larger – faster – KPS 2000/25-12 SKT

2,000 kN pressing force with 2,500 x 1,800 mm clamping surface and increases of speed in all movements

A look behind the automotive scenery: some of the thin-walled cast parts are produced on die-casting machines with closing forces of up to 4,400 t. An essential part of the system in fully automated die-casting cells is, alongside the die-casting machine and the automation components, the trimming press, on which complete door segments or the right or left parts of the chassis are processed after casting – the tool clamped onto the clamping surface removes bulky sprue, overflow and vacuum channels. With the new **KPS 2000/25-12 SKT** in push-and-tilt finish, Kurtz has developed a trimming press which is the new standard in size and speeds for all movements. Characteristics: 200 t pressing force and a clamping surface of 2,500 x 1,800 mm, with which deburring tools weighing up to 16 t can be clamped and cast parts can be deburred process-safely. Careful cleaning of the underpart of the tool is ensured by the finish of the clamping table as a push-and-tilt table. With the enlarged clamping table, trimming tools which even debur large body parts or multiple occupancies can now be clamped. Increasingly faster process times are being demanded in casting, the consequence: multiple occupancies in casting and in deburring. All this is fulfilled by the new **Kurtz KPS 2000/25-12 SKT** trimming press – with completely new hydraulics, new drive engineering when turning the push-and-tilt table, large clamping surface, large clear width and the latest PLC controls from Siemens. Not only the mechanics, but also the hardware and software have been revamped: new features provide operators with new possibilities, simplify the handling and programming and pro-

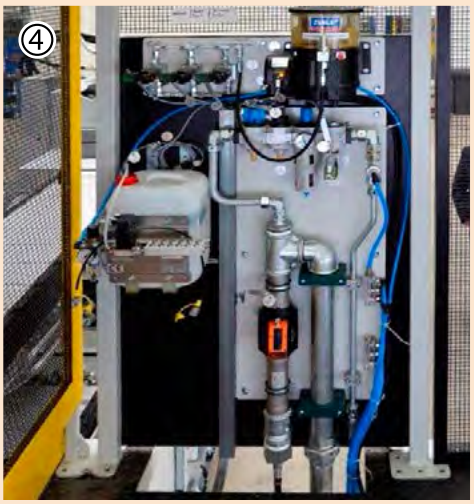
tect the deburring tool. In addition to the 15" touch panel firmly attached to the machine for the input of the machine parameters, the press also has a mobile input appliance with all the programming and input fields. Set-up of the machine and the control of the cut are considerably simplified by the use of the mobile panel, as operation and adaptation of the press can be done directly on site.

The KTC 4.0 press control, which has been further optimised, provides users with new additional functions for faster set-up of the tool and programmable tool and machine functions. A specifically programmable auto-home programme moves the trimming press back to a secure starting position after an unplanned standstill of the system, paying attention to required tool sequences. The worker no longer has to know the complex sequences inside the tool in order to move the press back to the start position manually for the automatic sequence. The function imitates the required sequence of the trimming tool and thus protects it against damage. In this way, the casting cell also starts more quickly after a machine stop in the cell.

The new move-box with touch-up function for the take-over of the cylinder positions and the new add-on override to influence the speeds make it easier for the operator to produce and adapt the tool programmes. Communication within the cell – i.e. to the die-casting machine, automation, periphery – is via ProfiNet. It also functions directly between the parts of the system or via a superior control desk. "Safety first" in all cases is guaranteed by a fail-safe control. Standardised or customer-specific interfaces are not a contradiction, but are implemented according to customers' requirements. Equipment for consumption measurement is also a part of the catalogue of options. Fast fitting of deburring tools becomes possible, amongst other things, by the use of multi-couplings – that means: no individual connections for hoses and plugs, but one central coupling for all the connections. This accelerates fitting and avoids connection mistakes. When the machine and deburring programmes have been input, they can be stored and accessed again in the formulation administration – a function which customers with Kurtz low-pressure casting machines have appreciated for a long time.

The **KPS 2000/25-12 SKT** trimming press in the push-and-tilt table finish, with its enlarged clamping surface, revised control engineering and intelligent software functions, provides a strong package of services, ensuring process safety and high system availability in the implementation of die-casting cells for the production of aluminium die-cast parts. ■

① *Mobile panel.*
② *Multi-coupling on tappet in parking position.*
③ *Holder with automatic switch-over.*
④ *Central place for operating supplies.*
⑤ *Cutting blow attenuation.*



Invitation to EUROGUSS 2016

12. – 14. January 2016, Fair Nuremberg

Intrigued?

Larger – faster – Kurtz KPS 2000/25-12 SKT

The new trimming press provides the following facts: 40 % less cycle time, 15 % more total admissible weight of the deburring tool (16 t) and 14 % more clamping surface.

Convince yourselves of the outstanding output data of the new Kurtz trimming press – best of all **live in Nuremberg at the Euroguss** from 12 to 14 January 2016 at the **Kurtz Stand 341 in hall 7A**!

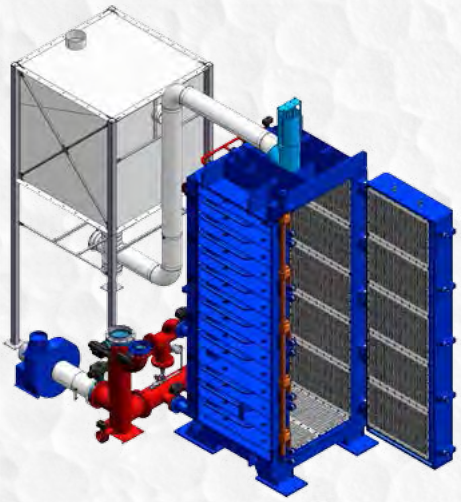
Kurtz presents trimming press in Indianapolis

Together with the american substitute Versevo Kurtz Foundry Machines exhibited from October 5th to 8th at this year's NADCA Exposition (NADCA short for North American Die Casting Association) in Indianapolis.

As it is the american leading fair for the die casting industry and our partner Versevo elaborated a corresponding concept, we could show the audience an energized deburring cell with a robot and KPS 1000/16-8.

The shown automation workflows and the movements of the press generated big interest and so the name Kurtz in the area trimming presses was internationally strengthened. So we took the chance to inform our existing customers and talked to many prospective customers. ■

American-german cooperation: the Kurtz NADCA fair team.



Kurtz sends new BLOCK FOAMER onto the market

Maximum productivity, flexibility and profitability with top quality, those are the characteristics of the Kurtz block moulds. In close cooperation with an experienced partner, the Kurtz foam machine team has developed the new generation of BLOCK FOAMER – with a lot of innovations and advantages in block mould processing.

Constructional limitations in the parent factory, in particular the height of the hall and design of the lifting gear, motivated us to look for a partner to build our block moulds in future. We found the partner in the firm of Thermaloc in North Italy, who will exclusively manufacture our product. An important selection criterion for us was the fact that this company has its own know-how, as some of the workers were active in EPS block mould construction for a number of years.

But simply finding new clothes for the old technique was not enough for us. But what could be innovative if you are talking about block manufacturing? In the end, a lot of things occurred to us together. The outcome is the **BLOCK FOAMER**. There follows a brief outline for all block processors who wish to extend their competitive advantages even further …

An optimised media guidance accelerates vaporisation. In combination with specific slotted sheets, which manifest a large free surface, the mass is reduced on the surface of the blocks and the vapour can do its job on the foam immediately. This results in higher productivity and lower energy consumption. The drive system of the movable side wall is infinitely adjustable and unique. In the design, importance was placed on the greatest possible freedom from maintenance. At the same time, it provides the possibility of compacting blocks, which can be used in the processing of regenerated materials and to reduce cupping. The **BLOCK FOAMER** has been designed for a maximum block density of up to 70 kg/m³.

Infinite adjustment – fast, low on maintenance

If both the height and the length of the blocks are to be changed, there are very complicated solutions on the market at the present – demanding specific constructional measures such as a pit. Others change the upper side of the block mould and impair the block quality. All of them are subject to very high wear and tear. Here too, we set new standards: with the **BLOCK FOAMER**, we offer a comfortable possibility of infinite, fast and low-maintenance adjustment. A new control concept reduces errors in operation and also make it possible for beginners to find an efficient process. Professionals find more leeway for design on a second user level. In combination with further innovations such as the **PANEL FOAMER** and **ROOF FOAMER**, Kurtz is your contact for systems for the production of insulation applications made of EPS.

Kurtz Particle Foam Machines

Kurtz Webshop online!

Kurtz is now also present on the internet with its own online shop. The range on offer comprises all the major spare parts and parts subject to wear and tear from the moulded parts machinery and pre-expander product families and is aimed primarily at customers, subsidiaries and sales representatives.

In the Kurtz Webshop, users will find over 6,000 parts, divided into machines and subassemblies, many with 3D illustrations and product pictures as well as brief descriptions for clear identification.

The shop is integrated into the Kurtz SAP system, thus offering considerable advantages: customers worldwide can now access extensive information on the products around the clock and are no longer bound by office hours.

In the Members Area of the Kurtz Webshop, additional information on part availability and customer-specific conditions can be called up. Detailed order overviews with an archive function can also be retrieved.

The process-optimised processing now means that parts can be delivered even faster. Dispatch ensues from our headquarters in Kreuzwertheim or from our distribution partners and subsidiaries. ■

More at: www.kurtzshop.com

24/7, always on: the Kurtz Webshop for particle foam machines.

PTO Conference USA

PTO Conference USA

"Production", "Technics" and "Organization" were the watchwords at a one-and-a-half day conference in early November in St. Louis, the "Gateway to the West". This was once the starting point for the wagon trains heading into the "wild west", hoping for a better life. One or other of the around 160 participants may have come along with similar expectations, hoping to discover new tricks and processes in the world of particle foam processing.

The main point of focus was the pre-foaming of expandable polystyrene, one of the most important processes in the manufacturing chain of moulded parts and blocks. Further topics were compliance, quality assurance and internal advanced training in the company in view of the still considerable fluctuation in the North American operations. Lectures on successful tool-making, cutting techniques in block processing and conservative recycling rounded off the conference. During his lectures, Walter Kurtz called on his decades of experience in North America, highlighting the different developments of European machine manufacturers for the particle foam market and posing the question of whether they have really arrived in the North American market – a question which he could only partially answer in the affirmative.

The Kurtz Ersa shareholder referred to the still unexploited potential and listed possibilities for overcoming these deficits. Furthermore, he provided an overview of the latest Kurtz solutions such as PANEL FOAMER and BOX FOAMER, both of which perfectly comply with the standards Kurtz Ersa sets itself: halving the cycle times and requiring only half the energy input for the same product. ■

Particle foams with a future

Just like so many other areas, the classic industry sectors as well experienced changes during the past years which could not be imagined only a short time ago. Meanwhile, Industry 4.0 has become a reality for machines and plants of Kurtz, whereas we are still standing at the beginning of a development whose progress cannot yet be anticipated in all of its details.

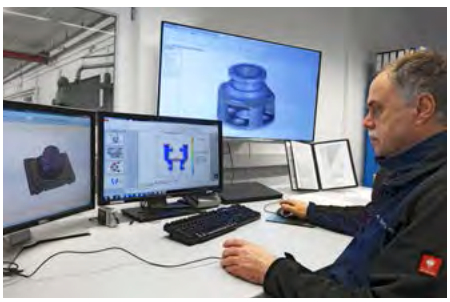
Every three years, an international meeting takes place, at which there is an exchange about the further developments in the field of particle foam processing – the 2015 meeting of "Particle Foam" was held in Heidelberg. With the cooperation of the European umbrella organisation, EUMEPS, the VDI knowledge forum succeeded in obtaining top-class speakers from the Netherlands, the USA, Japan, Belgium, Italy and Turkey. With Walter Kurtz chairing the meeting, current questions from the areas of processing, recycling and energy efficiency were asked and answered. Contributions from Asia, North America and Europe dealt with the global market, with special attention being given to subjects such as sustainability, fire protection, standardisation and efficiency of insulations.

Since the previous meeting, new kinds of particle foams such as expanded thermoplastic polyurethane (ETPU), a hybrid particle foam, or a PMI particle foam for high-temperature applications, have entered the market and were presented extensively. There was also discussion of the "classics", new possibilities of increasing productivity were presented, as were the new things which manufacturers have up their sleeves with a view to machines and equipment. During the breaks and at the end of the first day of the event, the more than 150 attendees had the opportunity of making contacts or intensifying them again and of exchanging valuable information and experience. At the exhibition stand of Kurtz Ersa, who were represented at the "Particle Foam" with two talks, interest was particularly high as a result of the contents of the talks. ■

Training on offer at SMART FOUNDRY

The Future is in Iron!

Iron casting has been carried out at Kurtz Ersa since 1852 – an important core competence in the Group! With the opening of the SMART FOUNDRY in spring of 2015, iron casting at the Hasloch site has been secured for the future. Now, the Kurtz foundrymen are presenting a training programme which maps out the path of iron into the future.



In the coming year, Kurtz Eisenguss GmbH & Co. KG is rolling out its training programme on the company's own apprenticeship and advanced training platform, the HAMMER ACADEMY. The central focus of the training courses will be on engineering with casting materials. The programme is aimed at staff of the Kurtz Ersa Group on the one hand, who are involved professionally with foundry technology, or are simply interested in the topic. On the other hand, the programme is also intended for customers of the foundry and for school and university students. To this end, Kurtz Eisenguss plans two sets of three course events for 2016. The aim is to show school pupils and students the manifold possibilities in the casting process in a clear and entertaining way. In addition, the event will point out possible apprenticeships and advanced training options offered by what is probably the worldwide most modern hand-mould foundry.

Iron Symposium at the Eisenhammer

Aimed specially at its customers, the SMART FOUNDRY is currently designing a one-and-a-half day symposium – this too under the title "Engineering with Casting Materials". The main focus here will be on the structural properties of cast-iron materials and how they can best be exploited. An in-house exhibition is to be held within the framework of the event, rounded off with a visit to the historic Eisenhammer iron works and the Hammermuseum. Of course this also offers the opportunity to visit the SMART FOUNDRY, so that the know-how imparted in the course of instruction and the application in day-to-day business in the foundry fuse perfectly together.

You have questions on the instruction courses? Please contact our colleagues at Kurtz Eisenguss who can be reached by telephone under 09342 805-0 or by e-mail to smart-foundry@kurtzersa.de. Here too you will find out how to arrange an in-house session on the topic "Engineering of Casting Materials". One way or the other: When it comes to iron casting, you should speak to your SMART FOUNDRY! ■

Organisation SMART FOUNDRY

Staffing Boosted at Kurtz Eisenguss

With the implementation of the SMART FOUNDRY last year, Kurtz Ersa made the biggest investment in the history of the company and at the same time created the conditions for the successful reorientation of the foundry which has been in operation since 1852. The aim now is the fastest possible ramp-up of production – observing the quality and grade requirements of the customer.

In order to meet these challenges, numerous positions in middle management at Kurtz Eisenguss GmbH & Co. KG have been either newly-filled or boosted. Matthias Hofmann – up to then head of the process department in Kurtz GmbH – has assumed the plant management and the management of administration in the SMART FOUNDRY as of 1 August, 2015. The Bachelor of Engineering thus bears overall responsibility for the areas of production, process engineering, maintenance, process control and logistics.

Since 1 October, 2015, Sebastian Martensen has been responsible for production in the foundry. His outstanding knowledge of the production sequence processes and his many years of experience in the automotive industry ensure improved procedures and process reliability in implementing customer orders. Another position with was newly-filled at the same time was the management of the company´s own logistic department: Logistics expert Hans-Jürgen Ehehalt has taken on the responsibilities and looks after the projects in the area of material flow and optimisation – a restructured department supply logistics concept is already in the works.

Since the beginning of September, two further personalities are strengthening the SMART FOUNDRY Team: Florian Thome plans and coordinates the production processes in his position as head of production management and control – following the redesign of the overall process in the course of the reconstruction project, all the strands merge here. Thomas Zeibig, graduate foundry engineer, is responsible for the process engineering and thus for the technological implementation of the orders. With an extraordinarily wealth of know-how, he supports the SMART FOUNDRY team, assisting them in meeting taxing customer requirements to their utmost satisfaction.

In addition to his overall responsibility as Managing Director, Graziano Sammati will increasingly be involved in sales. With this realignment of the organisational structure, Kurtz Eisengießerei is now ideally staffed for the future, and ready to meet the demanding challenges of the market in every respect! ■

MBW powder coating system

We love it colourful!

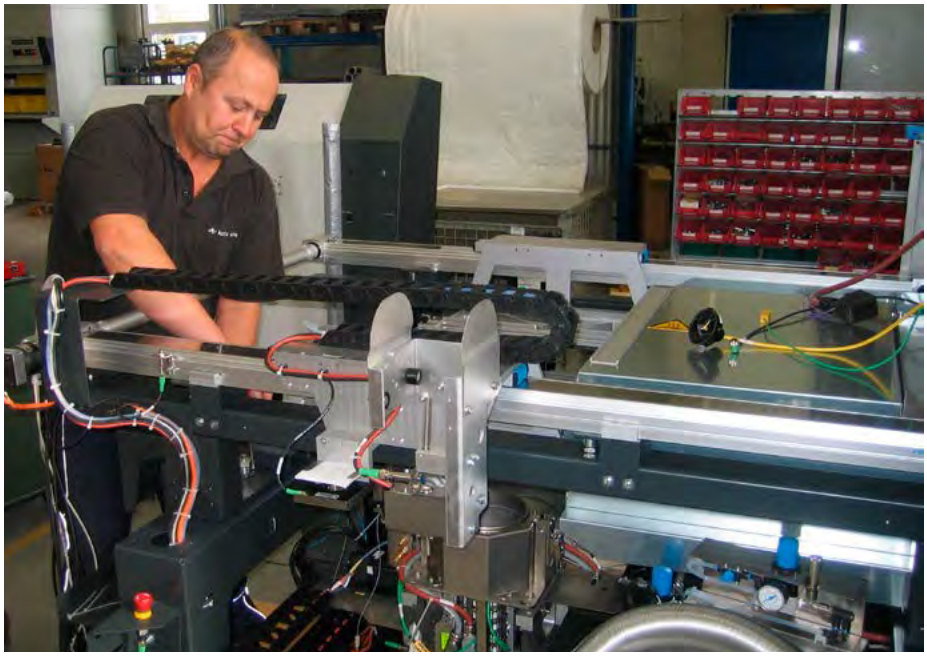
Ideal for a top-level finish of metal surfaces. In addition, the modern plant features an extremely environmentally friendly operation.

At MBW Metallbearbeitung Wertheim GmbH, things are sometimes very colourful – which has been possible since August 2012, when a new automatic powder coating system went into operation at the Reinhardshof production location with the new assembly hall. MBW has been reaching new dimensions since then with the extended depth of manufacturing ...

... with a view to part dimensions and surface qualities, but also with a view to cycle times and environmental compatibility. With the pre-treatment and powder-coating system, MBW can surface treat parts up to a size of 1.60 x 1.80 x 4.00 m in the highest of qualities. The parts, which can weigh up to 400 kg, are transported through the system by means of "power & free" conveying. In a watery, wet chemical de-greasing and iron phosphating sequence, they are pre-treated to start with before they are optimally coated when passing through the powder spraying cabin.

After this, the powder coating is baked in the baking oven. When the parts have cooled down sufficiently, they go on to delivery or to assembly, where they are processed further. As a result of the extension of the range of services by a powder coating system, the MBW team has been able to reduce the cycle times by four to five working days, and the necessary logistics were also considerably reduced. With the powder coating system, the fine sheet metal specialist MBW has extended its range of services to do with fine sheet metal technology by a highly capable, process-safe component which provides the customers with flexibility and products in the highest surface quality – no matter which colour! ■

Complete assembly of the Ersa SMARTFLOW at MBW including final inspection.



Ersa SMARTFLOW: winner of "GLOBAL Techology Award" 2015.

MBW "All inclusive" services

Complete assembly in series

The Kurtz Ersa Group is a highly diversified global player active all over the world in the three business fields of Electronics Production Equipment, Moulding Machines and Metal Components. Naturally this results in numerous overlaps, which can be used profitably. A current example: for electronics production system supplier Ersa, the fine metal sheet specialist MBW takes on complete assembly of its uncompromisingly compact SMARTFLOW selective soldering system, which can find a space in practically any production environment with its set-up area of less than 2.5 m^2. Complete assembly does not simply end with the housing, but also includes the powder coating with RAL lacquering and the complete electrical installation. In this case, even the complete final inspection takes place – i.e. including documentation, test certificates and test run. MBW and Ersa supply a team performance crossing company borders here, which is part of the agenda at Kurtz Ersa. And the best thing is: you as a customer can make use of these services! ■

Process optimization: MBW introduces paperless order processing

The thin sheet metal experts at MBW know from years of experience how much depends on quality, reliability and adherence to delivery dates in the sheet metal field. As a system supplier for the sheet metal process chain, MBW offers its customers a flexible complete service from demanding sheet metal products down to perfect, completely fitted system solutions.

In detail, this includes extensive consultancy, design and construction of value-analytical solutions matching the user and also implementation and final assembly of complex complete systems. If required and needed, naturally also worldwide on site. The MBW team is continuously working on improving its processes, which are always orientated to the individual customers' requirements. This is where the intelligent order handling via SAP comes in, which has been changed to a paper-free process in the customer's order, order confirmation, delivery note and invoice work steps. This saves time, paper and costs – and contributes to the customers being able to receive their goods more quickly than up to now at the end of the day. ■

Kurtz Ersa staff

Game in the Forest

Bettina Jux

born 09.12.1978, star sign Sagittarius; 1997–2000 training as translator, in the company since 02/2015 and right-hand woman to Kurtz Ersa CEO Rainer Kurtz.

Hunting is an age-old activity – at one time it was crucial to survival. And a matter for the men. All this has changed radically – now, more and more women are grabbing their guns and setting out deer-stalking. Among them is Bettina Jux who, in her day job, is assistant to Kurtz Ersa CEO Rainer Kurtz.

Even as a child, I was fascinated by the forest with all its flora and fauna. As an active member of the scouts, I was often involved in building camps in the forest or hanging up nesting boxes. It was the contact with active hunters and nature conservationists that led to me getting the hunting bug at 36 – initially just because I wanted to find out if the roe deer really was the hart's mate and because of increasing opposition to factory farming. Today, ca. 20% of participants in the hunting courses are women.

The first steps are always the hardest

I did the course required for obtaining a hunting licence in the Dr. Fellmer Hunting School in Wertheim. There is a good reason for calling it the "green degree", as the subjects range from farming and forestry to a knowledge of different species of animals, to the laws relating to wildlife and hunting, firearms laws and techniques and nature conservation. The material covered is very extensive: I spent many an evening studying and many weekends in the hunting school, in the training grounds or at the firing range.

Shooting with a rifle or shotgun takes a lot of practice. An important part of the examination is hitting a moving boar disc, shooting the fall-flat hare and hitting a buck target. But it is only after you pass the written, oral and practical examinations that the real learning begins!

I took my first steps as a guest hunter with the experienced huntswomen Karin Fellmer. Once you have taken everything into consideration, such as the direction of the prevailing wind, or the preferred location of the game at a specific time, and settled comfortably into the raised hide, peace descends and you get to see things that remain concealed from the normal visitor to the forest: badgers, foxes, wild boar and roe deer roam up close. In contrast with individual types of hunting, such as the raised stand, late autumn and winter is the time for the driven hunt. The aim is to bag the quota of hoofed game – i.e. the ungulates that may be hunted – but also to prevent the animals being constantly disturbed.

Inseparably coupled with the hunt itself is the obligation to care for the game: The task of the hunter is to ensure a healthy and stable native game population, protect endangered species of wild animals, maintain their habitats and ensure effective forest management. When we speak about hunting, we also have to mention the kill itself. Killing an animal is not easy, and never should be! ■

KURTZ ERSA *inside*

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Technology fan? Passionate interest in industrial history?
The story of Kurtz Ersa comes to life in the new HAMMERMUSEUM – let yourself be infected with the enthusiasm for technology that still marks us out in the 21st century. We´re looking forward to your visit!

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