

July
2016



Kurtz Ersä Corporation

Kurtz Ersä HAMMER ACADEMY opens3

Electronics Production Equipment

High Mix, Low Volume – Succeeding
with flexible production equipment10

Moulding Machines

Kurtz Foundry Machines:
Low-pressure vs. high-pressure die casting ...16

Metal Components

Kurtz Eisenguss
invests in after-treatment of casts23

How are you?



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

With the Kurtz Ersa Magazine we want to offer our customers and business partners a snapshot of current developments in the company. More than that, we are seeking direct contact with our readers. Of course, this is something our magazine can only do indirectly. However, we are in direct contact with our readers through our staff. For this reason, we would ask you to speak openly to our staff about how your company is doing and how Kurtz Ersa can contribute to making improvements - and don't hesitate to challenge us.

In this edition, you will read, in particular, about the positive developments in our Hammer Academy qualification programme. Our continuing improvement process now also incorporates the Six Sigma Method - and there were further prizes for the innovations and personal performance of our staff. Of course this edition could not be complete without a look at particularly noteworthy customer projects or without turning the spotlight on the hobbies of our staff.

At this point, the editorial team and the entire Kurtz Ersa Group would like to extend its congratulations to our shareholder and Advisory Board Member Walter Kurtz on the occasion of his 70th birthday. From the beginning of our customer and staff journal to this very day, he has been actively involved in the existence of our magazine. Thank you!

2016 has got off to a good start at Kurtz Ersa. We are right on target and look forward to doing further good business in the second half of the year. We hope our readers are also doing well - and wish them continued success! ■

Good luck! Your Rainer Kurtz

A handwritten signature in blue ink, appearing to read 'Rainer Kurtz', written in a cursive style.



Kurtz Ersä HAMMER ACADEMY opens

After a test run of 100 days, the Kurtz Ersä HAMMER ACADEMY was officially opened on 25 February, 2016. Many guests accepted the invitation to the Eissenhammer – where the success story of the owner-run family company began 237 years ago.

With the slogan "...daring to strive for more", the HAMMER ACADEMY is an education platform aimed at ensuring that staff remain fit to face global competition in the future, too. "We are proud to be able to officially open this new important element of our vocational education and training here today," said Kurtz Ersä CEO Rainer Kurtz in his opening speech.

With over 70 instructors, 109 courses and 200 dates planned annually, Kurtz Ersä has put together an impressive further education package. Under the virtual umbrella of the HAMMER ACADEMY, the extensive education and training programme has been consolidated to include internships, 14 apprenticeship courses and seven dual courses of studies as well as offers for families, health and sport. New elements such as language

courses, structuring skills and management competence, professional training courses and customer training events (particle foam processing, soldering seminars, foundry techniques) have also been added. The education platform is completed by an 18-month Trainee Programme, which allows graduates to further boost their careers – or to qualify as "Hammer Experts", a three-year course with which Kurtz Ersä intensively prepares its executives for future responsibilities.

The Kurtz Ersä Corporate Division Human Resources is responsible for the entire organisation with all the threads converging at the desk of HR manager and "Chancellor" Verena Alina Bartschat. Kurtz Ersä makes premises available for all the events, covers the instructors' fees and generally gives staff time off – with the exception of yoga, the running club or language courses, which take place outside of work hours. The HAMMER ACADEMY is a genuine milestone for Kurtz Ersä – and a giant step towards the future. Further steps are to follow, such as the constant expansion of the training programme or the closer integration of the customer into the courses. Good luck, HAMMER ACADEMY! ■



From left to the right: Kurtz Ersä CEO Rainer Kurtz with Dr. Paul Beinhofer, District President of Lower Franconia (Unterfranken), and HAMMER ACADEMY provost Verena Alina Bartschat.



Prof. Dr. Wilfried Mödinger stressed that Kurtz Ersä changes with the foundation of the HAMMER ACADEMY from an industrial to a knowledge-based company.

Rainer Kurtz hands over the key to the new ETC to Uwe Rothaug, CTO responsible for new technologies in the Kurtz Ersa Corporation.



Kurtz Ersa celebrates triple

On 1 February, Kurtz celebrated three different events on one day: firstly, the record result of € 235 million, secondly the inauguration of the new development and technology centre, the ETC, and thirdly the 60th birthday of CEO Rainer Kurtz.

In his role as host, Kurtz CTO Uwe Rothaug greeted the guests and congratulated CEO Rainer Kurtz on his 60th birthday before moving on to the topic of the ETC: "Innovation is the central theme when it comes to being successful in Germany and the world – it is the motor which propels the development of our company," says CTO Rothaug. The historic record result of € 235 million in

2015 was only possible with technologically outstanding products, which entered the market at the right time. And this takes the right people, the right resources and the right environment – the ETC! 30 m x 67 m, 5 m effective height, 1,000 m² for development, around 700 m² for automation – this is the key data of the new technology centre, with which Kurtz Ersa is taking on the global



The gift on behalf of the company and staff – a glass model of the iron hammer works – was presented by CFO Thomas Mühleck and Chairman of the Works Council, Joachim Kraft.



competition. The inauguration of the ETC also brings the repurposing of the former aluminium foundry to a successful conclusion.

The third landmark event celebrated was the birthday of CEO Rainer Kurtz – speaking from the lectern, Chairman of the Kurtz Ersä Advisory Board Hans-Jürgen Thaus, Ersä Sales Director Rainer Krauss, COO Albrecht Beck (USA Business) and Bernd Schenker (Asian Business) proffered their good wishes. Kurtz Ersä CFO, Thomas Mühleck, and Chairman of the Works Council, Joachim Kraft, also added their voices and presented him with a glass model of the iron hammer works on behalf of the company and the staff. After over thirty years in the company, Rainer Kurtz can look back on an impressive balance of accounts: At the time he joined it in 1982, the company had 365 staff and earnings of € 20 million – today the turnover is twelve times as high: € 235 million, achieved by 1,200 employees around the world. The realignment of the SMART FOUNDRY iron foundry in 2015 bears the hallmark of Rainer Kurtz. With regards to IT, the introduction of SAP or process orientation in all business areas, “RK” was early to advance the holistic approach – something



from which the entire group still benefits today. “The ETC technology centre is the core of the Kurtz Ersä Corporation, which will bring forth the innovations to power sales in the coming years. At Kurtz Ersä, innovation is to be found in all business areas and in all departments – here, however, it is actually tangible,” Rainer Kurtz told the guests. ■

Hans-Jürgen Thaus, Chairman of the Kurtz Ersä Advisory Board, congratulates Kurtz Ersä CEO Rainer Kurtz on his 60th birthday and emphasizes how important the new development and technology centre is for the corporation.

HAPPY BIRTHDAY!

Walter Kurtz celebrates his 70th birthday



Almost every day Walter Kurtz drops over at the HAMMERMUSEUM. Frequently it ends in a private guided tour of the shareholder, in which he patiently explains everything to the visitors.

On 19 May, 2016 Walter Kurtz celebrated his 70th birthday. For over 35 years the graduate engineer from Hasloch had a leading role in shaping the success story of Kurtz Ersä. Following his studies of Metallurgical Engineering, with main focus on foundry technology, Walter Kurtz was initially engaged in special projects in the Kurtz iron foundry, before involving himself intensively in the area of particle foam machines and making Kurtz GmbH the worldwide leading particle foam machine manufacturer. Based on the Kurtz ideas, many customers around the globe optimised their particle foam production. In July 2009, Walter Kurtz transferred from the operative management into the Kurtz Ersä Advisory Board – but he is by no means taking it easy. The engineer passes on his extensive technical knowledge in the Group's

own Hammer Academy and as a guest lecturer in Plastics Engineering at Baden-Württemberg Cooperative State University.

The history of the family company is a matter very close to Walter Kurtz's heart: Thus, in 2014, he played a pivotal role in the conception and realisation of the Kurtz Ersä HAMMERMUSEUM – as well as in the compilation of the 250-page chronicle on the occasion of its 235-year jubilee. In private, Walter Kurtz is proud of his eight grandchildren, although they do not live in the Spessart. It makes him even happier when the extended family comes to Hasloch to celebrate the 70th birthday. At this occasion they celebrate his wife Ursula who is just 5 days older than Walter. Dear Walter, dear Ursula, happy birthday! ■



Happy Birthday!

Ten years ago, the “Hammer Innovation Programme” was launched at Kurtz – the beginning of a true success story. Inspired by discussions with Porsche Consulting on the introduction of the Toyota Production System Elements, a number of modules for safeguarding the future were assembled. The aim: Kurtz Ersä uncovers wastefulness and transforms it into added value. This was preceded by a staff survey with a very open discussion of what needed to be done. A readjustment was also necessary in order to meet customer requirements with regards to technical developments. The Kurtz Ersä Management therefore launched the “Hammer Innovation Programme” in brief “HIP”, on 1 April, 2006. The modules are:

Information

All employees are informed on a monthly basis of turnover, result, quality, occupational safety and special occurrences such as major orders or the topic of the month.

Innovation

Intensive training measures upgraded the methodic skills of our developers – making it possible to determine customer requirements more closely. This was supported with new computer-aided customer relations and idea management. Since then, there has been a binding development roadmap for each business sector.

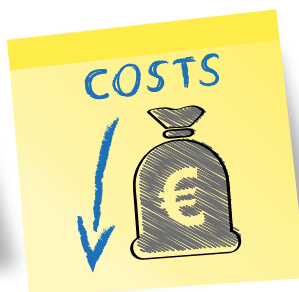
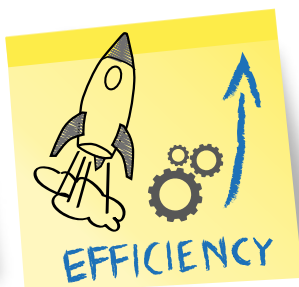
extent, an additional network of contact partners for ideas and

suggested improvements was installed. To date, over 2,500 suggestions have been submitted, for which a sum of over EUR 100,000 has been paid out in bonuses.

As a means of consistently avoiding wastefulness, the management initiated HIP projects – supervised by the HIP coaches project management. Over 300 workshops and projects have been held over the ten years – with a wealth of great results. For example, with the aid of the HIP coaches, smooth synchronised line production was developed and introduced at Ersä. Thanks to consistent further training, the HIP Team is always up to date, providing competent support among other things with the TPS principles, Six Sigma and further coaching tools.

Staff profit sharing

When many things in the company are generating unnecessary costs, they need to be attended to unbureaucratically. Generally these are things which each one of us can tackle, either individually or in a team. The factors deciding on the level of profit sharing have intentionally been kept simple and transparent: turnover high – material usage low – staff costs low – capital commitment low – other costs low. ■



Personnel development

The personnel development concept contributes to making staff fit for their tasks. The main focus is on the selection and deployment of staff, management and further training.

Ongoing enhancement

In order to ensure the constant improvement of the Kurtz Ersä Group, all staff members were motivated to contribute ideas through the HIP suggestion management scheme. In order to implement staff ideas and suggestions for improvements to the best possible

2016 Fabi Prize for Rainer Joas

From September 2012 to February 2016 Rainer Joas trained as an industrial electrician at Kurtz GmbH – and completed his apprenticeship at the Franz Oberthür School with the final grade 1.77. In recognition of this outstanding performance, Rainer Joas received a commendation from the vocational school and a further training scholarship from the IHK chamber of industry and commerce.

As the apprentice who took second place overall, Rainer Joas was also awarded the Fabi prize on 14 April, 2016. Every year, the Firmen-trainingsverbund e. V. Main-Tauber awards the Fabi prize for good or very good examination results in the regional chambers of industry and commerce exams. In addition to the academic results, obvious integration in the training company is also a major consideration. Social involvement is given special consider-



ation when the prize is being awarded. At the end of his training as assembly electrician, Rainer Joas was taken on as a permanent employee at Kurtz GmbH. We wish him all the best and every success! ■

Winner of the Fabi 2nd prize, Rainer Joas (centre) with the trainers Jürgen Schmidt (left) and Marco Brand (right) and Thomas Mühleck, CFO (second from left) and Human Resources Manager Günther Bartschat (second from right).

Kurtz Ersä HAMMERWEIN 2016



Sommelier Christian Reiss at the Kurtz Ersä HAMMERWEIN tasting with interesting insights into the world of Franconian wines.

The Kurtz Ersä HAMMERWEIN (hammer wine) was selected for the third time during the HAMMERWEIN-Probe 2016 wine tasting event on 28 February.

Before compering the actual wine tasting and the voting on the six nominated Franconian wines, sommelier and vintner Christian Reiss treated guests to some interesting insights into the world of Franconian wines. In his talk,

he focussed in particular on the re-design of the characteristic "bocksbeutel" bottle by a star designer, and the opportunities it brings with it, and on the challenges facing vintners and vineyards. When the votes were counted at the end of the wine tasting, the result was astonishingly clear: By a distinct lead, the title of Kurtz



Ersä HAMMERWEIN 2016 went to the 2015 "Würzburger Scheurebe", from the Bürgerspital Wine Estate Würzburg. The fact that the "scheurebe" is celebrating its 100th birthday this year, and that the Bürgerspital wine estate is actually marking its 700th jubilee, is remarkable, but pure serendipity. ■



LAS VEGAS, USA

Ersa wins 4 NPI Awards

On 15 March Ersä was honoured with four NPI Awards at the IPC APEX EXPO electronics trade fair in Las Vegas – a historic victory in the history of the awards! Until this year, no company has ever won more than two awards at any one time – and in 2016 no fewer than four awards went to system supplier Ersä!



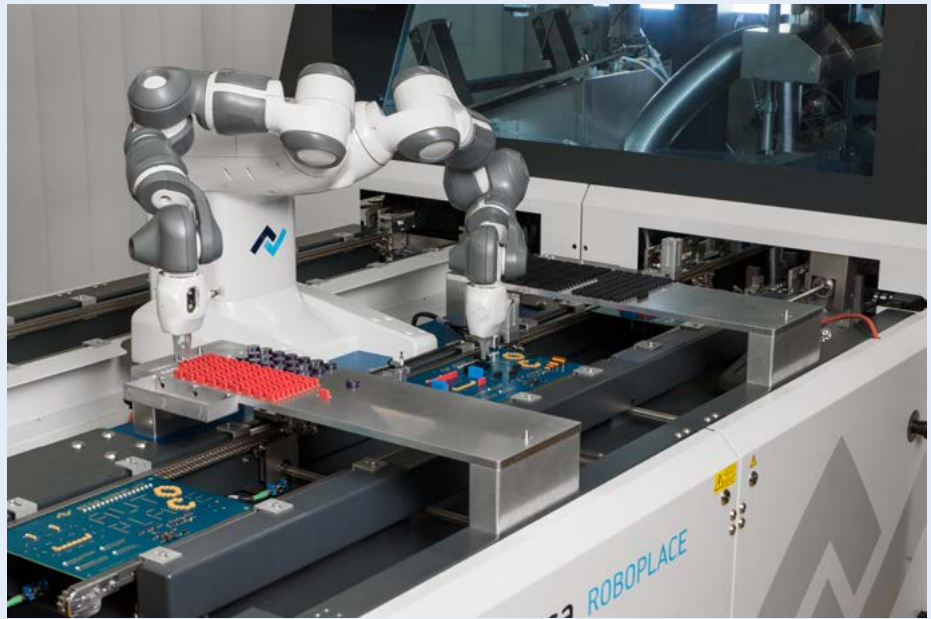
A wonderful achievement, and one which should be made the most of. The perfect opportunity to do so came soon afterwards, when all the awards were featured as central aspects of the "Festival of Innovation", presented by system supplier Ersä at the SMT Hybrid Packaging microelectronics trade fair in Nuremberg at the end of April. From out-

standing innovation to intelligent technological highlights: machines, systems and manual soldering tools bearing the Ersä logo offer real added value in their respective electronic production sectors – the award-winners are simply the spearheads for a uniquely comprehensive range for electronics manufacturers.



Ersä's HOTFLOW 3/20 VOIDLESS provides an efficient solution for the prevention of voids – with fast, high-volume throughput in inline operation, extremely short process times and low operating costs.

Innovative automation:
The Ersä ROBOPLACE undertakes repetitive component placement tasks upstream of the selective soldering plant. Based on flexible 2-arm technology, the collaborative robot has no need for protective housing and frees up operators for more demanding tasks.



The best gets better!
The VERSAFLOW 4/55 represents the latest generation of the worldwide leading inline selective soldering platform, which has many new features giving ever greater process flexibility, including the ERSASOFT 5.0 intuitive control panel, motorised adjustable Y-axis for flux and solder modules, Y and Z variability, full convection preheating and max. 508 x 508 mm process area for inline production.

The fourth award, in the "Process Control" category, went to the Ersä IMAGESOFT software. This new augmented reality tool, run via tablet, is the first to provide 3D views inside the whole machine, thus opening up a whole new form of process control. It gives machine operators, service engineers and technicians direct access to the inside of the machine from outside, without manual intervention or having to open the machine housing. By enlarging the individual components, IMAGESOFT enables the part numbers to be displayed automatically.

Since their inauguration in 2008, the NPI Awards have been held annually at the IPC APEX EXPO trade fair in the USA. This was the ninth occasion on which a panel of distinguished experts awarded the prizes for the best innovations in the industry. There only remains one thing to say: Congratulations, Ersä! ■

Award-winning categories: "Component Placement", "Soldering" (x2) and "Software"

We give here a brief overview of the awards given to Ersä at the IPC APEX EXPO in the USA. Ersä won the "Component Placement" category with its multifunctional, collaborative ROBOPLACE, which provides automated selective soldering with its flexible 2-arm technology to free up the operator to perform more demanding tasks. This is one way in which the lean concept, which smooths the way towards the SMART FACTORY in conjunction with Industry 4.0, can be implemented.

One of the "Soldering" awards went to the VERSAFLOW 4/55, the new flagship of the worldwide leading selective soldering sys-

tems. This has many new features giving ever greater process flexibility, including the ERSASOFT 5.0 intuitive control panel, motorised adjustable Y-axis for flux and solder modules, Y and Z variability, full convection preheating and 508 x 508 mm process area for inline production. A second award in the "Soldering" category was won by the HOTFLOW 3/20 VOIDLESS reflow soldering system. This is an efficient solution for minimising voids which gives top results with inline operation, ensuring all-round satisfaction with fast, high-volume throughput, short process times and low operating costs. The VOIDLESS module, which can be activated or deactivated at any time, reduces the void rate by about 98 % compared with standard soldering processes.





ERSA SOLDERING SYSTEMS

High Mix, Low Volume – Succeeding with flexible production equipment

Local industry producing electronic products faces ever more global competition. While mass production of electronic products takes place in Asia, Europe focuses on high quality industrial products – often in low volumes and many versions. This calls for flexible production systems which can handle frequent changes and still economically produce small batch sizes with high quality.

Despite apparently equal demands, optimal solutions substantially differ in their details. To approach the subject “high mix, low volume” manufacturing, it is best to look at different solder processes – on these it is possible to demonstrate how important flexible production technologies which satisfy the specific demands are for gaining a competitive advantage leading to economic success.

The leading processes such as selective, wave and reflow soldering will be rated – with a particular view on the widely varying customer demands. For suppliers to the automotive industry, “high mix, low volume” could mean a product change every 600 assemblies, whereas an industrial supplier changes after every 50 and up to 1,000 assemblies and, for a contract assembler, batch sizes of 1 to 250 are not uncommon.

This flexibility which is called for is Ersa's daily business: More than 80 % of the 600 systems annually built by Ersa are considered “customized”, so as to conform to a customer's specific demands. This flexibility applies to the complete product range of Ersa, starting with soldering stations, rework systems and right up to the high-end soldering systems.

Even though today's electronic manufacturers cannot really predict the demands called for in 10 years, fact is: a manufacturing line in 2016 will need flexibility, both in order to maintain the unit costs at a low level and to be able, for a manageable period of time, to produce all future products. At the same time the system needs to be of modular design to allow for easy future expansion, without incurring a long down time or an excessive amount of manpower.



How does a manufacturing tool for “batch size 1 to infinity” actually look like? With the bad-board recognition feature VERSASCAN, defects are recognized already prior to soldering – even if each assembly looks different. Multi- or Mini wave, if wanted with the “on the fly” set-up option, variability on the x-, y- and z-axes, up to ten system modules..... All is possible; each configuration is justified by its application and is mirrored in the Ersä product world.

Continuing with wave soldering: Two different solders with 60 to 80 °C temperature difference are to be used, and up to ten board assemblies should be soldered in mixed production, one after the other. No problem for Ersä!

On a recurring basis, one or two assemblies are to be manually soldered – on the Ersä i-CON VARIO work station up to 4 tools can be operated in parallel and an additional 6 tools need to be only connected. This man-

ual soldering process should now be elevated to the next step and be replaced by an automated soldering process. With Ersä, this transition is easy – whether it is batch size 1 or a multitude of assemblies which needs to be processed one after the other. Regardless of whether a high degree of flexibility is called for, or a high throughput rate or both – with its broad range of selective soldering systems (there are the SMARTFLOW, the ECOSELECT, the VERSAFLOW and the ECOCELL systems), Ersä always offers an optimal solution. Being the common theme, this encompassing range of products can be found also in the other soldering processes, from reflow soldering right up to Rework & Inspection.

Summarizing, it can be said: Lived flexibility is our most important product. As of to-

day, Ersä offers more than 1000 possibilities to configure systems to suit individual needs. The extensive process knowledge of the contact partner and the singular Ersä i-CCS System Configurator ideally support the customer in selecting the correct production system. Clearly arranged, this multi-lingual tool shows the optimal system configuration, which can then be printed out. ■



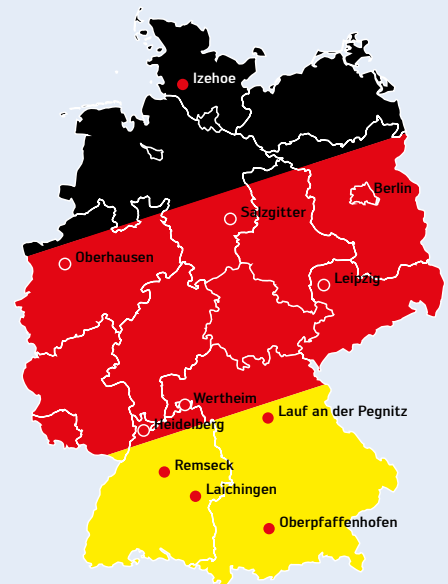
KNOW-HOW TRANSFER – SUCCESSFUL REWORK

Ersä Tools on tour in Germany

The Ersä Workshop Demonstration Tour took place again in 2016, this time with the focus on hand soldering and entry-level rework systems. Just 24 hours after the invitations were sent out in February, four out of the seven events in Germany were fully booked, and a little later www.ersa.de declared the whole tour to be “sold out”. The popular one-day events provide anyone from newcomers to experts with hands-on information on the basic principles and application techniques needed to make their own products even better. As well as theory, there was ample opportunity to try out reworking and correction stations, from the latest soldering tips, including the new 0.2 mm soldering tip for the Ersä i-TOOL for soldering the finest component connections, through to thermal power soldering tips for heavy mass and more substantial soldered connections with up to 40% faster soldering times. The X-TOOL VARIO with its externally wetted desoldering tips gives improved desoldering results. The solder container, from which the residual solder can be cleaned in seconds, was met with amazement. There

was also an appreciative response to the latest Ersä HR 200 “Rework out of the Box” system, with its intuitive operation and Ersä’s typically high rework quality, which can be used on densely grouped components, including those with a very high number of connections. One workshop, one day – nowhere is so much soldering expertise packed into a single event!

The show is back on the road in the autumn. The latest rework system is already in the starting blocks – look forward to seeing the HR 550 and book for your local event in plenty of time! ■



Upcoming appointments in 2016

- | | |
|---------------------------|-----------------------------------|
| ■ 22.09.2016 Oberhausen | ■ 27.10.2016 Lauf near Nürnberg |
| ■ 29.09.2016 Heidelberg | ■ 01.11.2016 Salzgitter |
| ■ 06.10.2016 Laichingen | ■ 29.11.2016 Remseck |
| ■ 20.10.2016 Wertheim | ■ 01.12.2016 Oberpfaffenhofen |
| ■ 25.10.2016 Leipzig | ■ 08.12.2016 Iztahoe |



New Ersas EASY ARM video



*Ersa EASY ARM
product page*

EASY ARM 1 + 2

Ersa solder fume extraction – essential for health!

Ersa solder fume extraction systems ensure a healthy climate around the workstation. Harmful particles and gases produced by soldering are extracted and filtered, protecting employees' health on an ongoing basis.

Depending on the solder wire and flux used, substantial quantities of solder fumes can be generated during repairs and manual soldering work. As well as fine dust particles, these contain microparticles and gases that can enter the lungs and be harmful to health if they are inhaled over any length of time. Back in 2004, the Professional Association of Precision Mechanics and Electrical Engineering (Be-

rufsgenossenschaft der Feinmechanik und Elektrotechnik – BGFE) studied the effects of solder fume inhalation and concluded that workplace extraction systems (extraction hoods) combined with appropriate filter systems offered the best protection and the lowest concentration of harmful substances.

EASY ARM 1 and 2 – compact, modular, quieter than ever before!

Ersa presents the new EASY ARM 1 and EASY ARM 2 solder fume extraction units, two highly effective extraction and filter systems that are also extremely energy-efficient in their operation (rated power: 40 W, 80 W). The solder fumes are caught as they are produced by

nozzles and extraction arms, and cleaned in a three-stage filter. Dust, microparticles and gases are filtered out of the solder fumes, and the cleaned air then gently fed back into the ambient air. Each extraction arm has a filter and a fan (110 m³/h). Each fan can be switched and controlled separately, or actuated from an Ersa soldering station simultaneously with stand-by operation. This means that extraction only takes place when soldering work is under way, to cut down on filter costs and reduce even further both the energy consumption and the noise level, although the units are already very quiet (50 dB). Ersa solder fume extraction units are essential for health – at any hand soldering station! ■



SOCIAL SPONSORING

Ersa supports flagship project

In the spring of 2015, the first workshop for the handicapped in China was put into operation in the German small-firm centre at Taicang near Shanghai under the initiative of the European companies settled there. Based on the model of the German "Lebenshilfe" association, mentally handicapped people in China are also to be purposefully supported, occupied and integrated into society as a result of this institution.

The opening of the workshop for the handicapped was also taken note of beyond the Chinese borders and even reached Germany – for example, Gerlinde Kretschmann, the wife of the Prime Minister of the State of Baden-Würt-

temberg, Winfried Kretschmann, visited the workshop last autumn and gained a personal impression on site.

Important contribution to inclusion in China

Production is done in the workshop at modern workplaces with modern production devices. Everything has been optimally adapted to the employees' individual skills, with the result that components of the highest quality can result at the end. The current status is that about 250,000 mechanical and electrical components per month are produced by twelve workers and supplied to the local hi-tech industry. In this context, the system supplier

Ersa as the sponsor of an i-CON VARIO 2 multi-channel soldering and desoldering station combined with an EASY ARM 2 solder smoke-remover has made an important contribution to the production of cable packagings (amongst other things for the automotive industry). But something much more important – this kind of support contributes to employment and inclusion of people who are still a long way away from social acceptance in China. For a short time now, the workshop for the handicapped in Taicang has also been in possession of an Ersa soldering bath, which has found its new purpose under absolute special conditions. Good luck and great success for production in Taicang! ■



Close to the customer: KSL Manager David Chen (right) and Ersä General Sales Manager Rainer Krauss (2nd on the left) with Kimball employees in Nanjing (China).

KURTZ ERSÄ IN ASIA

Well established in the Middle Kingdom

Even with seven percent growth, China remains the biggest and most important German trading partner. Despite the cautious economic activity, there are many flourishing business branches with outstanding future perspectives, like the field of electronic production equipment. This is a report from the Middle Kingdom, where the 100% Kurtz Ersä daughter – Kurtz Shanghai Limited, is successfully doing business for 15 years.

Anyone who starts nowadays to put out feelers in Asia to become established there has a hard job to do. Kurtz Ersä on the contrary has been active there for many years: Already in 1988, Kurtz Far East was founded in Hong Kong – since 1990s, the Kurtz and Ersä systems were sold via distributors on the Chinese market. Soon Kurtz Ersä realized the multifold opportunities of the Chinese market – but in order to use them it was necessary to have direct contact to the customer. However, this is impossible without local products and application specialists or a nationwide distribution and service network with one's own employees. Therefore Kurtz Shanghai Ltd. (KSL) was founded in 2001, starting with a small sales and service team for Kurtz forming

machines. One year later the KSL portfolio was extended by the Ersä Tools range with soldering irons as well as rework and inspection systems, followed in 2006 by Ersä machines.

KSL Manager David Chen who is heading the operative business for Ersä in Shanghai, was an essential part of the Kurtz Shanghai Ltd. success story from the beginning: "We are positioned very well in China and cover nearly the whole electronic manufacturing market from the distribution office in Shanghai, a nationwide support with our Chinese application engineers, up to our manufacturing site in Zhuhai, the Kurtz Zhuhai Manufacturing Ltd., where the reflow soldering system **HOT-FLOW 3/20** is built."



Who's who of Chinese Electronic Manufacturing Industries

Since 2001 the KSL team has installed over 2,500 machines and systems – so it is not surprising that the KSL customer list is the who's who of Chinese Electronic manufacturing industries. Among them global players like Kimball Electronics with its production site in Nanjing, with 17 Erska systems installed worldwide. The initial contact of KSL and Kimball Electronics took place in 2008 and today four **VERSAFLOW** selective soldering systems and one **HOTFLOW** reflow soldering system are installed in the Kimball Electronics production. Asked for the main reasons for investing in Erska systems, Kimball Electronics Engineering Manager Avis Zhang answered, "Leading technology and good service" adding, "Concerning reflow soldering we achieve the best temperature stability and a low N₂-consumption with the **HOTFLOW**. Also in selective soldering with the **VERSAFLOW** the closed-loop function and live monitoring are features to achieve a stable process for a high-level output." As Engineering Manager, Avis Zhang regularly visits the trade fairs NEPCON and Productronica to

keep track of the latest trends in electronic productions that are developed in the Erska headquarters in Wertheim, Germany and which are then introduced in cooperation with Kurtz Shanghai Ltd. on the trade fairs in Shanghai. Besides the catchpenny performances on Asia's trade fair stages Avis Zhang appreciates the possibility to experience the Erska systems in a production-like surrounding and to put assemblies through their paces in the Erska demo centers. This is possible in Shenzhen and since spring 2016 also in Shanghai, where the performance and flexibility two selective soldering systems, either a **VERSAFLOW 3/45** or a **SMARTFLOW 2020**, can be tested. Of course, both Erska demo centers are ideal places for workshops on soldering specific topics or for systematic

staff trainings, too. These services are widely accepted therefore further machines will extend the Shanghai demo center and the upgrade to an application center with flexible office workspace is already in progress. Furthermore Engineering Manager Avis Zhang is convinced of the "the fast responses of the KSL engineers and the absolute determination to continuously improve alongside their customers." The extended networking abilities of the service engineers, who communicate in real time via chat to be able to establish a fast solution in one of the largest and most populous regions of the world, contributes to this strength. One can eagerly look forward to the further developments in the Middle Kingdom. Good luck to the KSL team! ■



Insight into the demo center in Penang.



Opening ceremony at the demonstration center on the island of Penang.



15 years of Kurtz Shanghai Limited – the KSL team and the Kurtz Erska top management had good reason to celebrate.

KURTZ FOUNDRY MACHINES

Low-pressure vs. high-pressure die casting



Aluminium components have been used in the automotive industry since the early 20th century. For almost as long, automotive experts have been comparing the different processes for manufacturing these parts in terms of their economic efficiency and suitability. Here, we present a comparison between low-pressure and high-pressure die casting.

An important point to begin with – both low-pressure and high-pressure die casting have situations where they are the most suitable process. This strongly depends on the component complexity, the number of parts and the manufacturing budget. It therefore makes sense at this point to compare how the low-pressure and high-pressure die casting processes work.

High-pressure die casting

One half of the die is attached to a fixed machine plate and the other to a movable one on a die-casting machine that is horizontally aligned. Because of the high pressure used when pouring – up to 1,200 bar – the bolts holding the two halves of the die together must have a high locking force. As these have a relatively high melting point, cold-chamber

die casting machines are mainly used for aluminium alloys. Here, the casting assembly is located outside the melt. The molten metal is fed to a shot chamber, from where a piston drives the metal into the die. Once the metal has cooled and solidified, the two halves of the die are opened and the casting is automatically ejected from the die by ejector pins.

Low-pressure die casting

As with high-pressure die casting, here too the halves of the die are attached to a fixed and moving machine plate, but the machine is aligned vertically. The holding furnace for the molten metal is located beneath the fixed plate. Applying pressure of up to max. 1 bar to the furnace pushes the molten metal (usually aluminium, but also magne-

sium) up through an intake port into the die chamber – usually a permanent mould, although sand moulds are also possible. The upward movement of the molten metal is against gravity. After filling the die, the pressure is maintained as the metal cools to enable the addition of further molten metal to counter any volume deficits (shrinkage cavities) as the metal passes from its molten to solid state. This naturally ensures solidification that is as even as possible from top to bottom.

Requirements for the automotive world

As everyone knows, the sector is being forced to increase efficiency and reduce CO₂ emissions. In engine technology, low-pressure die casting is able to use sand cores to implement what is known as a closed deck design for an engine block – this means that the openings on the cylinder head surface of the engine block, previously needed in die casting for demoulding the cooling jacket contours, are not needed in the low-pressure die casting process. This enables a more rigid engine block to be produced; taken together with the improved material properties, this saves weight and improves performance – a substantial contribution to

downsizing. The same technology is applied for parts used in the structure and the chassis, where large framework parts can be “hollow cast” using a sand core, thus substantially reducing the component weight.

From the luxury class to the mass production sector

Due to its outstanding material properties, the low-pressure die casting process has been well-known in the automotive industry for decades, but until a few years ago its relatively long casting cycles meant that it was only used in the luxury class, where low quantities and higher unit costs are the norm. Despite the quality achieved in the low-pressure process, the mass production sector was forced to continue with high-pressure die casting because of its extremely fast cycle times. The fact is that a high-pressure die casting machine costs around four times as much as a low-pressure system – until a few years ago, however, the former's casting cycles were around 4 to 6 times faster. Ways were therefore sought to make the low-pressure process more economical, i.e. faster. A major step forward came with the increase in size of the whole machine. As low-pressure die casting does not need the massive clos-

ing forces required by high casting pressure, the machine size is not dictated by the weight of the cast part – for example, 110 kg can be cast in the die of a low-pressure die casting system.

The Kurtz team has been able to increase the plate dimensions needed for the die, enabling tools with multi-layer charging to be used. Today, for example, engine blocks are cast twice – corresponding to an impressive 50 % reduction in the casting cycle! With other additional optimisation of aspects such as the machine's cooling circuit to accelerate solidification, a further 25 % cycle time saving could be made. Low-pressure die casting also scores in terms of the space requirement of the machines, since the vertical arrangement of the system enables two low-pressure die casting machines to be installed in the space required for a single high-pressure machine. As a side-effect, this also leads to reductions in return materials, thus saving money. These developments make the low-pressure process more than competitive in many areas. Talk to us and together we can design the optimum system to meet your specifications! ■

low-pressure die casting

- Very good strength values
- Complex geometries possible as sand cores can be used
- Higher material utilisation, no need for feeders
- High dimensional accuracy
- Whole process well-suited to automation
- Less complicated machine and die technology



- Slower casting cycles
- Minimum wall thickness approx. 3 mm (in die)



high-pressure die casting

- Short casting cycles
- Suitable for thin-walled components
- Smooth surfaces
- Well-suited to automation



- High investment and operating costs
- Complicated, expensive dies
- Only for die-cast parts without undercuts, as sand cores cannot be used
- Lower strength values
- Die-cast weight limited by the locking force of the machine





The eye-catching Kurtz booth was like a magnet to visitors at the EUROGUSS fair in Nuremberg.

KURTZ FOUNDRY MACHINES

Up, up and away at the EUROGUSS 2016

Kurtz GmbH started the 2016 business year impressively at the EUROGUSS with the motto "PROefficiency. Expect more! – Get more!". For the 11th time, the international pressure-casting branch met up in Nuremberg in mid-January in order to inform themselves about the latest technologies, processes and products and to exchange information.

The Kurtz casting machines business area was also represented in the city and presented one of the highest systems at the event with the new KPS 2000/25-12 SKT trimming press – from top to toe, the Kurtz power trimming press in the sliding tilting table version measures eight metres. The new Kurtz machine is even more impressive thanks to efficient technology and remarkable output data: 2,000 kN pressing force, a clamping surface which has grown to 2,500 mm x 1,800 mm, on which trimming tools weighing up to 16 t can be clamped and cast parts can be de-burred process-safely – with 40 % less cycle time! With a perfectly balanced trade fair mix, the Kurtz foundry machines were presented on a 65 m² stand,

which became a real magnet for the visitors in the course of time.

Europe's most important pressure casting trade fair

With just under 600 exhibitors, more than half of them from abroad, and around 11,000 knowledgeable visitors, this year's EUROGUSS underlines its status as Europe's most important trade fair in the area of pressure casting. The Kurtz trade fair team with Managing Director Uwe Rothaug and Lothar Hartmann, Head of the Foundry Machines Profit Centre, was very satisfied with the three days at the fair, in which there were numerous qualified contacts with existing customers and potential new customers. "With an enlarged clamping surface,

revised controls and intelligent software, our new trimming press is a genuine power-pack, ensuring maximum process efficiency and plant availability in the implementation of pressure-casting cells for process-safe production of aluminium pressure-cast parts. We successfully informed customers and also interested parties about this in a number of exciting 1:1 discussions. This will certainly result in numerous projects in the 2016 business year," Lothar Hartmann said after the fair. Alongside the Kurtz trimming presses, the Kurtz low-pressure technology for aluminium and magnesium ingot casting and the Kurtz gravity and tilting casting machines became the focus of customer discussions – where there was consultancy on individual machines, but also on turnkey, fully automated complete solutions. Conclusion on the EUROGUSS: three good trade fair days, many qualified contacts to existing customers and potential new customers, a lot of work for the current business year! ■

A cheery air and an atmosphere of concentration in the discussions at the Kurtz fair stand at INTERPLASTICA in Moscow.



KURTZ PARTICLE FOAM MACHINES

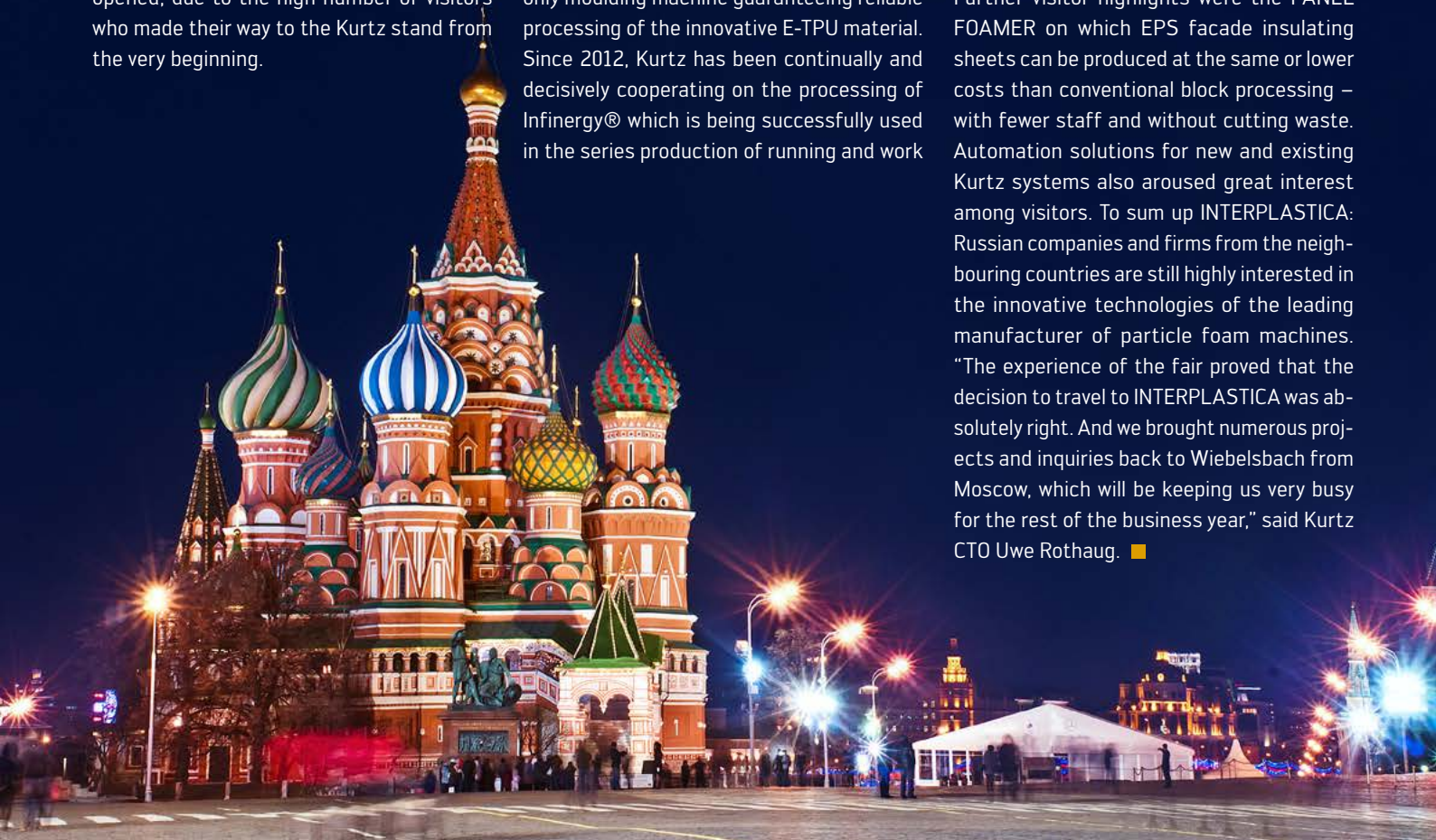
Fair greetings from Moscow

At the end of January, Kurtz GmbH presented its particle foam machines business area at INTERPLASTICA 2016 in Moscow. Due to the general economic situation, the fair team led by CTO Uwe Rothaug and Department Manager Harald Sommer set off to Russia with mixed feelings. The mood among the Kurtz stand team – Wiebelbach staff and colleagues from the Moscow subsidiary Kurtz Ost – lightened almost instantly once the fair opened, due to the high number of visitors who made their way to the Kurtz stand from the very beginning.

Many customers and potential customers from the region were delighted by Kurtz fair presence and showed their appreciation with detailed technical questions. Compared to the previous year, Kurtz registered a sharp increase of trade visitors with detailed questions and specific issues. Views were intensively exchanged, offers firmed up, solutions found. Particular excitement was generated by the Kurtz ENERGY FOAMER – the first and only moulding machine guaranteeing reliable processing of the innovative E-TPU material. Since 2012, Kurtz has been continually and decisively cooperating on the processing of Infinergy® which is being successfully used in the series production of running and work

shoes. With a high degree of elasticity over a wide range of temperatures, high ultimate elongation, low water absorption, tensile strength and a high level of abrasion resistance and resistance to chemicals, the innovative material offers great potential in the most varied of areas – consequently, the Kurtz Team is constantly on the lookout for new possible uses.

Further visitor highlights were the PANEL FOAMER on which EPS facade insulating sheets can be produced at the same or lower costs than conventional block processing – with fewer staff and without cutting waste. Automation solutions for new and existing Kurtz systems also aroused great interest among visitors. To sum up INTERPLASTICA: Russian companies and firms from the neighbouring countries are still highly interested in the innovative technologies of the leading manufacturer of particle foam machines. “The experience of the fair proved that the decision to travel to INTERPLASTICA was absolutely right. And we brought numerous projects and inquiries back to Wiebelsbach from Moscow, which will be keeping us very busy for the rest of the business year,” said Kurtz CTO Uwe Rothaug. ■



AHEAD COMPLETE GLOBAL



KURTZ PARTICLE FOAM MACHINES

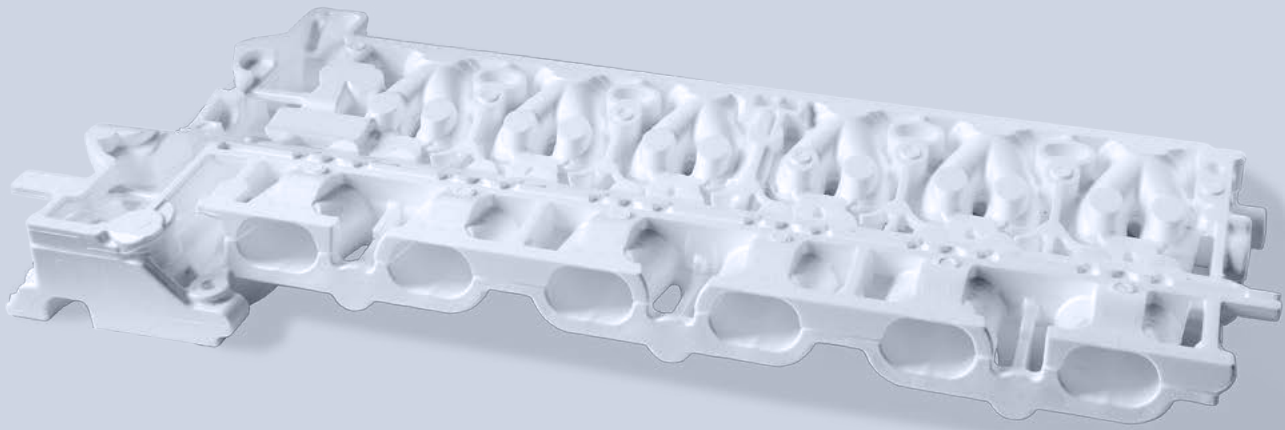
World market leader prepares spectacular trade fair appearance

Once again, Kurtz GmbH, world market leader for foam machines, presents innovative solutions to an international specialist audience. When and where? From 19 to 26 October at the K 2016 in Düsseldorf, the leading trade fair for the plastics and caoutchouc industry – make a note right now of the most important date for the plastics processing branch.



Every three years, the K Fair opens its doors and becomes the benchmark for forward-pointing product, process and problem solutions in plastics processing. The Kurtz foam machines are also represented at the K – with a 200 m² trade fair stand matching our ranking. Alongside favourably priced production and optimisations in handling, possibilities of process improvement are demonstrated, also with a view to efficient

and responsible dealings with energy and resources. Under this year's motto for the fair "AHEAD, COMPLETE, GLOBAL", Kurtz is presenting its range of services and innovative solutions, with one focus being on software solutions – be it virtual commissioning, intelligent process control or central management system. But naturally, there will also be Kurtz machines in live demo operation. We don't want to give too much away just yet – only this much: the Kurtz foam machine trade fair team is already working at full steam to provide an exciting time at the fair. Come to the K in Düsseldorf and experience our innovations from close by – live at our stand in Hall 13, stand 13B27. See you at the K! ■



KURTZ PARTICLE FOAM MACHINES

Lost-foam series casting for high quality engine components

The greatest challenge facing EPS moulded part machines lies in the niche lost-foam industry, where requirements are encountered such as maximum moulded part precision, individual control of process parameters over several tools simultaneously, and high reproducibility and system availability.

At its engine plant in Landshut, the BMW Group produces components using the lost-foam series casting process. Casting models are made from EPS particle foam, with several layers hot-glued together until the foam model is identical to the part to be produced from aluminium. The foam parts are smoothed, then embedded in sand in casting ladles, ready for pouring in the molten aluminium. The EPS is burned out as the aluminium takes its place. As is to be expected, the manufacture of engine components requires the maximum possible precision, and this requirement is reflected in the parts and components that comprise the foaming plant. The precision of the systems that control the process pressure are also subject to very tight tolerances. One particular mechanical requirement on the moulded part systems was to ensure that the parallelism of the enclosing sides deviates by only ± 0.15 mm. In addition, the machines were to provide double the output of previous models – even though no additional space was available.

Digitally controlled process pressures, variable-speed hydraulic drive

Using these challenges as the basis, the Moulding Machines Team at Kurtz GmbH developed bespoke K1210 LF type moulding machines, to which two tools from the previous machine generation could be fitted. Both

tools can be operated with individual sets of parameters; only the closing movement is common to both. A fully digital PID control system for process pressures and our i-DRIVE variable-speed hydraulic drive are further elements that were used to comply with the demanding specifications. Overall, the job was a real challenge for our team, especially since the short implementation time, together with comprehensive operating media

regulations, gave this the status of a real key project. In order to transport the machines to their final location, they had to be completely dismantled after production, an essential factor in ensuring as little disruption as possible to the on-site production procedures. We would like to thank the BMW Group for this fantastic opportunity and look forward to more projects in the future! ■

Kurtz shape moulding machine K1210 LF for lost-foam series castings.





AISTECH IN PITTSBURGH | USA

SMART FOUNDRY goes West

With the restructuring of the iron foundry to the SMART FOUNDRY, Kurtz Ersä has set new standards in the branch with regard to the effectiveness of processes and the management of production steps. The image of the iron foundry has changed fundamentally since the refurbishment.

Interest is enormous – as demonstrated, among other things, by the large numbers of customers and potential customers from all over the world who visit Hasloch. In addition to the markets already catered to in central Europe, the SMART FOUNDRY sales team has now turned its attention to North America. This is home to numerous mechanical engineering companies producing primarily for the US market and increasingly faced with difficulties sourcing cast iron products in the required qualities. Motivated by the positive experiences of the iron foundry in the US business since 2008, the SMART FOUNDRY team decided to take part for the first time with a stand of their own at the AISTech in Pittsburgh from 16 to 19 May. For their first US fair appearance, they benefitted greatly from the active support of their American colleagues from Kurtz North America.

at the four-day AISTech and compare notes on the latest trends in the branch. Why Pittsburgh? The city is a major centre of heavy industry and is commonly known as “Steel City” or “Iron City”. Even on the first day of the fair it became evident that the American market needs considerable quantities of moulded products.

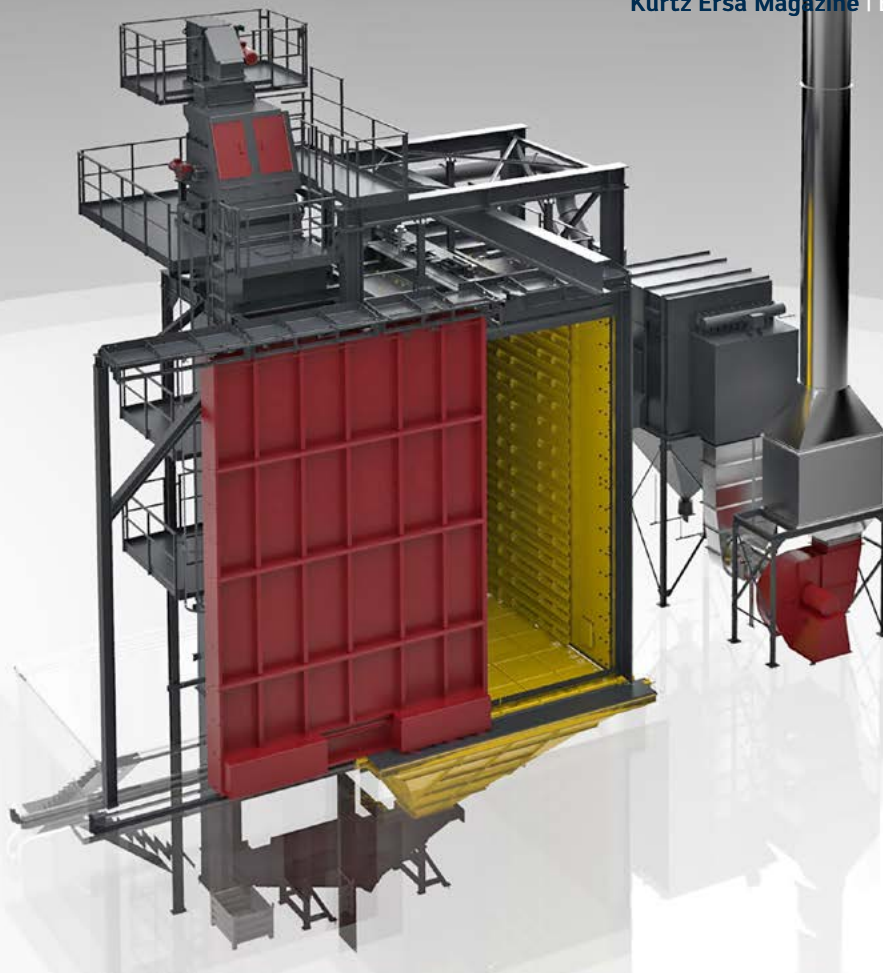
Numerous interested visitors and exhibitors approached our colleagues from the SMART FOUNDRY and found out about the “Industry 4.0 Foundry”. Right after the exciting fair days, the SMART FOUNDRY sales team set off for the first customer calls and followed up on the initial discussions at the fair. Here too it was evident: The demand is there!

However, a first fair visit in the US is just the beginning when it comes to intensifying sales activity in North America. Further fair participation and customer calls are already in planning – and soon we will really be able to say: “SMART FOUNDRY goes West”! ■



Exciting fair days in the “Iron City”

A vast number of the big names from the North American steel and iron industry exhibit



Kurtz Eisenguss invests in after-treatment of casts

Larger component dimensions and increased requirements made by the customers for the surfaces of the cast products make an investment in new equipment in after-treatment of cast products necessary. The project team of SMART FOUNDRY has set itself the task of putting the "Industrie 4.0" idea, which runs through the entire production in iron foundry, into practice in the area of blasting as well. For this reason, Kurtz Ersä is investing in a new chamber blasting system and is thus increasing the blasting capacities to double the amount.



Effective blasting – key to the best possible after-treatment

The blasting process step directly follows unpacking the cast parts from their moulds. By means of high-carbon steel blasting agents, remainders of sand, tinder and contaminations are effectively removed from the surface of the cast part. The following applies to blasting: the more effective the blasting picture, the less efforts are needed in scarfing.

Gigantic dimensions

The project's characteristics are impressive – the chamber blasting system will be 7.5 m high, 6 m long and 5 m wide. Thus, the SMART FOUNDRY is in a position to blast the entire range of parts effectively and distinctly more quickly. Up to 16 tons of cast parts can be blasted at the same time with a maximum cluster diameter of four metres. In the blasting process, eight turbo blasting turbines throw the blasting agent onto the cast part at more than 300 kilometres per

hour and remove all the residue which the moulding agent has left on the part.

Smart solution within the process chain

Kurtz Ersä integrates the blasting process step into the electronically controlled process chain of the SMART FOUNDRY. The production orders are displayed with SAP control on monitors in front of the blasting cabin and show the current status to the operator and the following process steps at any time. The new systems are electronically connected to the maintenance module. The transmitted output figures are connected with maintenance plans, which ensures that parts subject to wear can be replaced within the required maintenance cycles. Kurtz Ersä is consistently pursuing the path of Industrie 4.0 foundry work and is creating the basis for more capacity and quality in surface treatment with the investment in the new blasting system. Lower throughput times and more efficient systems generate a genuine added value for the SMART FOUNDRY production! ■



MBW – SYSTEM PARTNER IN SHEET METAL

Taking sheet metalworking to a new level

MBW Metallbearbeitung Wertheim GmbH has successfully commissioned the new Tru-Matic 6000 universal combi machine. Since its final acceptance, fine sheet metalworking specialist MBW has raised the possibilities for sheet metalworking at the Reinhardshof site to new levels – with synergy effects from laser and punching technologies that now mesh into one another like finely tuned cogs, allowing for optimum utilisation. The speed benefits for punching (900 punching strokes/min) and marking (2,800 strokes/min) – combined with the option of generating any geometric form with the laser, and equipping the machine for scratch-free sheet metalworking – make MBW every bit the equal of the competition in the area of sheet metal cutting. “Our new machine

brings various manufacturing stages in MBW production together into one, such as laser cutting simultaneously with thread cutting – and in addition, the parts produced are far freer from scratches. Taking all this together, we now have a high-performance tool for optimising many production jobs. This saves time and money, both for ourselves and our customers,” says MBW Production Manager Günter Lambrecht. MBW’s investment in the laser punching machine brings it into line with the vision of the Kurtz Ersa Group, with the constant optimisation of its customers’ manufacturing processes from start to finish. Most recently, this includes the fact that the new combi machine is equipped with automation components, so that it can be operated in an unmanned third shift. ■

Overview performance data

- Laser capacity: 2,700 W
- Cutting structural steel with oxygen: 8 mm
- Cutting stainless steel with oxygen: 6.4 mm
- Cutting aluminium alloys: 4 mm
- Max. sheet size: 3,000 x 1,550 mm
- Sheet thickness: 8 mm
- Max. workpiece weight 230 kg
- Max. X-axis speed 180 m/min
- Max. Y-axis speed 90 m/min





KURTZ GMBH | MBW | KURTZ EISENGUSS

Strategic solidarity of Metal Components

The Metal Components business field is combining its business activities and is thus supporting closer cooperation of Kurtz Eisenguss GmbH & Co. KG, Metallbearbeitung Wertheim GmbH and Kurtz GmbH in the Kurtz Ersä group. The mixture of range of services and variety of material provides new chances of fulfilling customers' requirements in metal processing across company borders.

Since 2016, the companies in the Kurtz Ersä group have been cooperating even more strongly across company and also branch borders.

The combined service portfolio of the "Metal Components" and Kurtz GmbH ranges from light to heavy machine construction: system construction for solar engineering, plastics processing, the textile industry, automation, transport and military technology as well as ship and wind power system construction – the range of services covers everything from construction via software, procurement, assembly and electrical fitting down to worldwide supply and technical documentation. In order to connect the areas even more strongly and to make use of synergisms, the three companies will be appearing on the market together in the future – although each area will continue to support its customers individually and intensively. The fact that this strategic solidarity works very well was proven by the three branches at the Hannover Trade Fair in April – where they presented the combined Kurtz competence as "Contract Manufacturing".

Joint communication started in Hanover

The joint stand of the Metal Components business field was an important signal to the outside. Following the official motto of this year's Hannover Trade Fair "Integrated Industry – Discover Solutions", Kurtz showed its interlinked industry across the branches and presented itself as a competent partner for the entire added value chain in the areas of thin sheet, iron casting and contract manufacturing. The customers were given extensive advice, with the result that the best possible cooperation with Kurtz Ersä is implemented, depending on the requirements. The visitors' interest in the Metal Components stand was above all for the Ersä SMARTFLOW 2020 selective soldering system produced within the framework of the "contract manufacturing". The extremely compact soldering machine is completely assembled, tried and tested by the MBW fine sheet specialists.

If components and housings of other machines are too large for the Wertheim location, the Kurtz GmbH contract manufacturing team takes over – at the machine factory in the Wiebelbach location, a clear height of up to 18 metres is available, amongst other things.

All in all, Kurtz contract manufacturing is the competent partner for customers if it is a question of the best and quickest possible support and processing of components. ■



Committed Kurtz Ersä employees of the Metal Components business field at the Hannover Trade Fair 2016.



KURTZ CONTRACT MANUFACTURING

Partner for the entire value-added chain

With a new structure, Kurtz contract manufacturing gives additional impulses to the main business of Kurtz GmbH – for example by extending the machine fleet and improved customer communication. Attendance of the Hanover Trade Fair in the spring of 2016 is a sign of the positive development.

Last August, the moving column milling machine from FPT was put into operation and has more than proven its worth since then. Maximum efficiency and quality have been an even bigger thing in the machining process at Kurtz since then: during inspection, we established that the geometrical requirements are more than fulfilled – the machine works distinctly more precisely than the required 0.02 mm/3 m. Even 0.017 mm/10 m are achieved!

Communication to the outside increased

With Kurtz contract manufacturing, Kurtz GmbH is staking even more strongly on active communication in the direction of the customer – the new brochure and matching content on www.kurtzera.de support the move to direct discussion with the customers. Both means of communication show the extensive range of services in the field

of machine processing: from the lathing, drilling and milling CNC applications via measurement down to complex welding constructions including assembly and surface finish. New customers are approached purposefully and their attention is drawn to the possibilities of the Kurtz machine fleet. As early as the first mailings, Kurtz contract manufacturing was able to obtain some new customers. Orders from existing customers are continuing and prove the outstanding cooperation and excellent results in component production. The cooperation also functions within the Kurtz Ersä group – orders are received by Kurtz GmbH both from the MBW fine sheet specialists and also from the Ersä system supplier, for example for a new sprinter development prototype production. As a result of the concept of the joint contract manufacturing with Kurtz Eisen-guss GmbH & Co. KG and MBW Metallbearbeitung Wertheim GmbH, Kurtz GmbH clearly distinguishes itself from the regional and nationwide competition. Lots of success and lots of orders for Kurtz contract manufacturing! ■



KURTZ ERSA STAFF

The rhythm of my life



Staff member

Markus "Smeily" Müller, Electronics Technician for equipment and systems and drummer at the Diamond Dogs.

It is practically a law of nature – show a twelve-year-old boy a gleaming drum kit and you will see shining eyes and hear the question: Can I have a go? For Markus Müller, Electronics Technician for Equipment and Systems in the Kurtz engineering works, it was a little different. But even so, the 43-year-old still has the odd story to tell – among them, the one about how he got involved with music.

When I was 16 I had a couple of mates who played in a band – but they were still looking for a bass guitar. Without thinking too long about it, I got myself a guitar and learned the first bass lines jamming together with the lads. To my parents' delight, I set up a rehearsal room for myself in their basement. I very soon realised that rhythm really is my thing and I was quick to pick it up.

Even so, I switched over to drums before too long – the drum kit I bought myself back then cost an awful lot of money. But it was worth it: 25 years on, I am still playing it, even if I have repeatedly played around with the constellation of snare, cymbals, etc. This time I really wanted to go for it – a band without a good rhythm group of bass and drums is doomed from the start. That's why I travelled once a week to a music school in Aschaffenburg for lessons. At the same time, though, I also wanted to be live on stage and played in a variety of bands.

Five years ago, I quit the job I had at the time and spent eight months travelling in India, Malaysia and Thailand – an absolutely priceless experience. For the last five years I have been here at Kurtz in the engineering

works and work as an electronics technician wherever I happen to be needed. Be it the particle foam machines or the low pressure casting machines. When you see what has been happening here in the last four years – I take my hat off to the Kurtz Team! The individual elements all have to mesh with one another perfectly, like gears, so that in the end a top rate machine can be sent on its way to the customer.

The analogy can also be used for music making: In our band too, the individual instruments have to complement one another ideally if we want the gig to be really good.

For three years now I have been the drummer in the band "Diamond Dogs" – whether at open air events or, in the warmer seasons, once a week in the Wertheimer Burg. It's the classic line-up with vocalist, two guitars, bass and drums. It's a really cool thing; the band is great fun – and so is the audience!

PS: In his private life too, Markus Müller, who everyone knows as "Smeily", has found his groove – he is soon to get married and take his wife's name. Looks like he never misses a beat! ■

KURTZ ERSA
inside



Worldwide Presence

Germany

Kurtz GmbH
Wiebelbach/Hasloch
info@kurtz.de

Ersa GmbH
Wertheim
info@ersa.de

Kurtz Eisenguss GmbH & Co. KG
Eisenhammer
97907 Hasloch am Main
info@kurtz.de

MBW Metallbearbeitung
Wertheim GmbH
Wertheim
info-mbw@kurtzsa.de

China

Kurtz Far East Ltd.
info-kfe@kurtzsa.com

Kurtz Shanghai Ltd.
info-ksl@kurtzsa.com

Kurtz Zhuhai Manufacturing Ltd.
info-kzm@kurtzsa.com

Ersa Asia Pacific
info-eap@kurtzsa.com

Ersa Shanghai, China
info-esh@kurtzsa.com

France

Kurtz France S.A.R.L.
info-kfr@kurtzsa.com

Ersa France, Frankreich
info-efr@kurtzsa.com

Russia

000 Kurtz Ost
info-kru@kurtzsa.com

USA

Kurtz North America Inc.
info-kna@kurtzsa.com

Ersa North America
info-ena@kurtzsa.com

Mexico

Kurtz Ersa S.A. de C.V.
info-kmx@kurtzsa.com

Korea

Ersa Korea, Korea
kmc@kmckr.co.kr



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!

Kurtz Ersa HAMMERMUSEUM

Eisenhammer 1, 97907 Hasloch
www.hammer-museum.de

Imprint

Publisher

Kurtz Holding GmbH & Co. Beteiligungs KG
Frankenstraße 2
97892 Kreuzwertheim

Phone +49 9342 807-0
Fax +49 9342 807-404
info@kurtzsa.de
www.kurtzsa.de

Responsible

according to the press law
Walter Kurtz, Thomas Mühleck
© Kurtz Holding GmbH & Co.
Beteiligungs KG, 07/2016