

impulse

Issue 3/2012

Employee and business partner magazine
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Dear readers,



What does Christmas mean to you? Looking forward to a festive family meal and seeing children’s eyes lighting up? Or is it a time which has you thinking about the passing of another year and making conscious choices for the future? Every year my intention is to make it a little bit of all of the above. All too often, reality – or poor planning on my part – stops it from happening the way I had hoped. I had meant to change my energy supplier in time, the garden furniture is still waiting to be tended to in the basement, the little something I had meant to get for my Aunt in the USA has yet to be bought, let alone sent. How am I supposed to find room for other, loftier thoughts?

Well, by stopping to read the following story, for instance: One day a woman came into the Ensinger lobby in Washington, PA, without any prior appointment. Nonetheless, the reason for her visit turned out to be a highly interesting one: She was in search of a suitable high-temperature composite material for a tricky application in the energy industry. She was put in touch with the right people and the result was a project which is right in line with our strategic target direction. Chris Ranallo, our Head of Stock Shapes in the USA, asked the woman what had induced her to come directly to Ensinger. She replied that some days previously, she had been sitting with some co-workers in a restaurant talking about the application in question. Suddenly a man sitting at the next table approached and mentioned that he knew of a technical solution for the application they were discussing using a special material produced by Ensinger. He was clearly enthusiastic about his company, his colleagues and the products. This struck a

chord with the woman, who had herself once worked in a similarly positive work environment and knew what a difference this can make. She thought that trying out the suggested material might be worth a shot.

What makes this particular story impressive is when we find out where the main players actually came from. John, the employee who approached the woman in the restaurant, works in Extrusion. He in turn gathered the information relevant to the application from Lance, who had been hired many years previously by Ensinger as an assistant in the warehouse. Over the ensuing years he had risen up the ranks and now sells our products as part of the Technical Sales team. Some weeks previously, Lance had held a presentation to Extrusion about high-temperature applications which was designed to show the employees at the machine just how important their contribution really is.

I was deeply moved by this wonderful story, which actually helped me to put all the end-of-year stress to one side for a moment.

On this reflective note I wish you and your families all the time in the world for a contemplative Christmas and all the very best for the New Year.

Very truly yours

Roland Reber

Imprint

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Give us an "E"

At the end of the summer, finishing touches were made to the outside of the new Stock Shapes Division building with installation of the backlit company name and logo. This fully automatic high-bay warehouse will encompass 2,500 storage locations, while the extended production department will offer space for additional extrusion lines and cleanrooms complying with ISO class 8 / GMP. The internal fitting work is currently under way, including installation of the conveyor systems in the logistics area. The new production lines will go live in December, with the rest of the building launching operations after Easter. [JF]



Nufringen welcomes Local Government representatives

Stuttgart's Local Government President Johannes Schmalzl and Böblingen's District Administrator Roland Bernhard paid a visit to Ensinger in Nufringen at the end of October. Alongside an eight-strong delegation from the Baden-Württemberg State and District Authorities, Nufringen's Mayoress Ulrike Binninger was also among the guests. Klaus Ensinger, Wilfried Ensinger and Dr. Christoph Krohmer presided over a presentation and a tour around the premises to familiarize the visitors with the company and its operations. Talks focused on topical issues, in particular energy management and investment by Ensinger in new buildings at home and abroad. [JF]



Closing image after signing the Partnership Agreements in the Ergenzingen injection moulding factory: Miriam Fiedler, Personnel Development and Training, Heinz Lehmann, responsible for industrial training and Achim Lehmann, Head of the Legal Department and HR (left to right).

Education partnership with school

Joining seven other firms from the Rottenburg area, Ensinger has entered into an educational partnership with the Primary and Secondary School in Ergenzingen. The partnership agreement was officially signed at the Open Day in Ergenzingen (see page 9).

In future, classes from this school will have the chance to gain a first impression of the company on visits to the Ensinger Nufringen and Ergenzingen locations. Many of those interested will be given the opportunity to get to know the ins and outs of working in a plastics processing company by completing placements in our commercial or industrial departments.

The aim of entering into education partnerships is to help ease the transition from school to apprenticeships and careers for school leavers. Ensinger's Head of HR Achim Lehmann explained that at a time when numbers of young specialists are declining, the company also benefits from this type of cooperation. [JF]

Like the other contemporary construction projects undertaken by the Ensinger Group, the building in Leszno reflects the Group's new corporate architectural style.



Contemporary new building opened in Leszno

Riding high in Poland

by Cezary Michalczyk

Precisely one year after the foundation stone was laid, the new home of Ensinger Polska has been ceremoniously opened. The main benefits offered by the new building in Leszno are its spacious accommodation and improved internal logistics.

On September 29, Ensinger Polska hosted an array of visitors representing local administration, politics, industry and commerce. Alongside Wilfried and Klaus Ensinger who travelled with their families to join in the celebrations in Leszno, other senior management members from the parent company and various branches around Europe made the journey to Poland. The evening saw members of the Polish staff take to the stage in an unprecedented display of creativity, singing a fitting verse for every one of the different branches represented. The guests were infected by the high spirits which had already bubbled to the surface during the move into the new building and the preparations for the opening event.

The significance of the new building comes sharply into focus looking back at the company's early years. When it was founded back in November 1998, Ensinger Polska sp. z o.o.

employed a workforce of just three. Working closely with the Chief Executive, the team sent out its first quotations and processed its first orders. The tiny office was rented, as was the store room from which the first semi-finished products were despatched to the fledgling company's first customers.

The town of Leszno, located between Poznań and Wrocław, is home to a population of 62,000. The main motivating force for choosing this particular location was its convenient position between two of the most important economic centres in the west of Poland. Besides, the rapid system of customs clearance in place locally for imported goods was of particular importance at that time.

Market presence

Right from the start, Ensinger commanded a powerful presence in what was still a fledgling Polish engineering plastics market. A policy of proactive communication with potential customers and a sound technical advisory service were key factors which helped Ensinger Polska to establish a competitive advantage in the marketplace from the very beginning.

A continuously growing customer base and rising sales meant engaging additional personnel and extending the available space. Even at that early stage, it was clear that more space for the company's logistics operations and improved links between office and storage area would only be possible in a specifically designed building. Although the budget was in place, the problem was finding a suitable site in the locality.

The green light was given for the new building after the town of Lezno designated a new industrial zone complete with infrastructure in the autumn of 2010. Ensinger Polska was the first investor to purchase one of the newly released plots.

Within just eleven months, a two-storey building encompassing a 2,800 sq.m. warehouse and 800 sq.m. of office space was constructed. A local building contractor was awarded the contract to implement the plans drawn up by a young team of architects known as "Grid architekci". Support was also on hand from the logistics experts in Nufingen, Germany, whose experience made a valuable contribution to the warehousing concept.

The dynamism of a gazelle

In total, Ensinger Polska employs a workforce of 40 in Leszno and at a second location in Sosnowiec. In recognition of its dynamic business development, the company has been awarded the "Gazela Biznesu" (business gazelle)

Finished parts from Scotland

Jet Engineering acquired

Ensinger Ltd. has announced the purchase of Jet Engineering (Scotland) Ltd. Based in Glasgow, the company has been trading since 1994 and has gained a highly regarded reputation for its quality finished plastic components using some of the most state of the art CNC machinery and equipment. Jet serves a variety of industries including offshore, subsea, material handling, electronics and medical from their factory in Glasgow, employing 23 highly skilled personnel. The acquired company will continue to trade as Jet Engineering (Scotland) Ltd, joining Ensinger Precision Engineering Ltd in Tonyrefail, South Wales and Trig Engineering Ltd in Bridgwater, Somerset. [JF]



The inauguration ceremony began with a Mass in the Collegiate Church in Lezno. Wilfried Ensinger handed over a donation to the local children's home. Right: Cezary Michalczyk

prize on several occasions. Ensinger is now one of Poland's leading suppliers of semi-finished engineering plastic products. The foundation of its success is the commitment of its workforce, which takes part in regular training programmes and is motivated by a true team spirit. Charitable involvement and social responsibility are seen as a natural part of corporate life in Poland. As well as supporting its local primary school, Ensinger Polska also helps to fund a number of charitable foundations.

The functionality and landmark architectural value of the new building set standards well beyond Poland's borders. Its generous proportions and particularly the new warehouse organization offer outstanding scope for future growth.

Cezary Michalczyk
is CEO of
Ensinger Polska Sp. z o.o.

The new address
Ensinger Polska Sp. z o.o.
ul. Geodetów 2
64 -100 Leszno,
Poland

A warm welcome ...

Employees who have joined Ensinger:

Nufingen

Industrial electrician

Johannes Essen

Controlling

Nelli Kirschmann

Sandra Lanny

Semi-finished products

Thomas Blahut

Thomas Geke

Marcus Hennig

Dr. Carmen Kunze

Sebastian Roller

Katharina Stuka

Industrial Profiles & Tubes

Sabina Groß

Elena Mann

insulbar®

Daniel Böe

IT

Elisabeth Götting

Marketing

Kristin Ahlgrimm

Human Resources

Sven Birk

Quality

Sylvia Gruber

Apprenticeships / Studies

Industrial management
assistants:

Marc Supper

Jacqueline Pfeil

Process mechanics:

Alexander Baur

Pascal Bellach

Nils Rinderknecht

Sergej Sachs

Niyazi Ügür

Tooling mechanics:

Fabian Bürgler

Magnus Faßnacht

Patrick Jung

Bachelor programme,
Mechanical engineering /
Plastics technology:

Matthias Schäfer

Sebastian Gärtner

Bachelor programme,
Industrial engineering
and management:

Ramona Heckel

Ergenzingen

Injection moulding

Bernd Freitag

Simon Glabik

Bernd Helle

Guelhan Karabacak

Marco Schoch

Cham

insulbar®

Rolf Wollenberg

Thermix®

Andreas Haase

Human Resources

Michael Jokisch

Apprenticeships

Process mechanics:

Brigitte Daschner

Manuel Mühlbauer

Machining mechanics:

Maximilian Auer

Andreas Haiek

Thomas Hausladen

Markus Kolbeck

Maximilian Weingärtner



Induction seminar in Dachau

by Jacqueline Pfeil

On the 3rd and 4th of September an induction seminar was held in the International Youth Centre in Dachau. Over the two days, candidates had the opportunity to find out everything they needed to know to ensure a good start to their vocational training. To encourage the new apprentices to interact, there were plenty of opportunities for gathering and exchanging information in small groups.

The apprentices came away with lasting impressions first and foremost of the rapport which quickly built up between Nufringen and Cham-based trainees: "The most memorable thing for me was the group project. Our task was to build an egg flying machine. It was enormous fun not only working together to design and construct our machine but watching each of the groups present their flying machines."

The mix of informative content and team building helps to engender a sense of camaraderie between the trainees and lays the foundation for a confident start to their training at Ensinger.

Jacqueline Pfeil has started her apprenticeship as an industrial management assistant at Ensinger in September

Ensinger continues to cultivate the next generation

49 trainees, 6 Cooperative State University students, their tutors and other management team members of our family firm came together to pose for this group photo in October. The occasion: the annual trainee get-together involving plenty of events which was hosted in Nufringen.

At its company headquarters, Ensinger trains industrial clerks, process mechanics and tool mechanics, and from September next year also for warehouse logistics trainees. Over the past three years, the company has doubled the number of industrial traineeship places offered in Nufringen.

School leavers with university entrance qualifications can apply for the Bachelor of Engineering course. Ensinger offers places to students specializing in industrial engineering as well as mechanical engineering and plastics technology.

At the Cham location, traineeship placements are also offered in the professions of office administration, tool mechanics, process mechanics and machining mechanics. [JF]



Lovingly hand crafted

Michael Losert transforms his model aircraft into “corporate jet”

Sometimes the best ideas come from the most unexpected source. When Michael Losert walked into the offices of the Marketing Department, he little thought that a model aircraft he had built would become the star attraction at Ensinger's ILA trade fair stand just a few weeks later. Originally, the plastics joiner had planned to simply give his BAE 146-300 a new coat of paint – in the corporate colours of his employer. Graphic designer Julia Kaupp was taken with the idea of an “Ensinger Corporate Jet”. Putting their heads together, they sketched out a design conforming to the Ensinger corporate design which met with an enthusiastic response from Marketing Director Martin Baras.

As the Berlin Air Show was just around the corner, the next step seemed an obvious one: The two metre-long model was integrated into the trade fair stand concept. Michael Losert painstakingly stuck the custom-produced yellow and blue transfers onto the newly painted aircraft by hand and packaged the finished article carefully for safe transportation. The 29-year-old model building enthusiast and his girlfriend were presented with two exhibitors' passes as a token of the company's thanks.

After completing his apprenticeship in joinery, Michael Losert worked as a ramp agent at Stuttgart Airport for over five years. Much of his free time is still taken up with the study of aerodynamics and improving his model aircraft. But it was only this September that the opportunity to attend the ILA arose. “It was a great feeling to be ushered



Michael Losert with his model aircraft in the Ensinger corporate colours

through the entrance checks while the journalists from the biggest aviation magazine were refused entry. Visiting the show was a once-in-a-lifetime experience, especially the chance to chat with jet pilots”, recalls Michael Losert.

The fact that Ensinger is a supplier to Airbus is a source of some pride to him – particularly as he and his colleagues in the cutting department personally work on some of the semi-finished plastic components for this renowned aircraft manufacturer. [JF]



Wilfried Ensinger Prize for training achievement

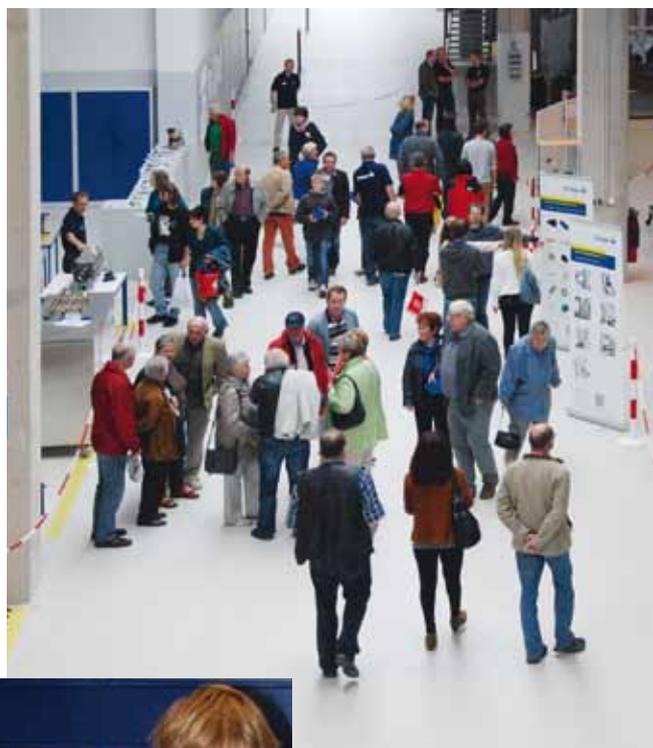
Wilfried Ensinger (left) congratulates Onur Okut on the successful completion of his apprenticeship as a process mechanic. In recognition of his examination results, Onur Okut from nearby Gärtringen was awarded the Wilfried Ensinger Prize which comes endowed with a cash bonus. Onur Okut is now employed by Ensinger as a machine setter in the Rottenburg-Ergenzingen injection moulding plant. [JF]

Injection moulding plant opens its doors

Take-up for business park open day

Premiere in Rottenburg-Ergenzingen: At the end of September, thousands of members of the public flocked to the Ergenzingen business park, taking advantage of an Open Day to visit the premises of major firms. Employees of our injection moulding plant were on hand to show off the precision components and explain the manufacturing techniques. Young visitors interested in the possibility of training and a career at Ensinger were given a tour of the apprenticeship workshop.

The advertising giveaways in Ensinger colours met with particular enthusiasm from visitors: Plastic shovels and sorting boxes emerging from the injection moulding tools at the rate of two a minute were given to visitors to take home. [JF]



Decorated scientists

Every autumn, the WAK, a scientific alliance of polymer technology, presents awards for outstanding research achievements. The Wilfried Ensinger Award is one of these, and is conferred in recognition of excellence in the development and description of engineering plastics for innovative applications. The subject of the winning dissertation by Dr. Christoph Heinle (right) is "Simulation-aided development of components made of thermally conductive polymers". Prize-winner Bianca Fischer (centre) was distinguished for her Masters thesis on the characteristics of integral PBT foams. Klaus Ensinger (left) held the laudation. [JF]



Energy Management System certified

Successful audit at the sites

The energy management system of Ensinger GmbH has now been certified. The basis is a successful audit, which took place at the German production sites in Nufringen, Ergenzingen and Cham. With this certificate, the external auditor has confirmed that Ensinger satisfies the requirements of the DIN EN ISO 50001 standard.



Karolin Bradtke, Energy Management Commissioner

Improvements in energy related services and cost savings are the most important reasons for the introduction of an Energy Management System. In order to systematically reduce the electricity consumption, Ensinger is analysing the use of energy and is investing in measures to improve overall energy efficiency.

The energy consciousness, which is embedded in the company's structure and modern infrastructure, was positively remarked on during the audit. Also, the work of the local energy team, who recorded the energy usage in detail this year, was highlighted.

As the energy team introduces suggestions for improvement and discusses them, the team of experts will also play a central role in the future. "Further contributions are provided by the Ensinger improvement instrument (EVI) workshops and by the internal suggestion scheme (BVW)", said Karolin Bradtke, the Energy Management Commissioner of the Ensinger GmbH. "Energy management will become a natural part of our everyday work." [JF]

Fakuma 2012

Pioneering additional compound products

From October 16 - 20th, Ensinger unveiled new compounds at Fakuma in Friedrichshafen. The innovations include materials for producing fuel cells and compounds for the direct laser structuring of conductor tracks.

Working in partnership with the ZBT fuel cell research center in Duisburg, Germany, Ensinger has developed thermal and electrically highly conductive compounds for bipolar plates used as media supply plates in fuel cells. Producing these components on injection moulding machines offers cost benefits as a result of shorter cycle times. The Highly-filled graphite material can also be processed by hot pressing.

Other potential applications include use as separator plates in redox flow batteries. Their excellent thermal conductivity makes these materials equally suited for manufacturing corrosion resistant heat exchangers for industrial applications and heat sinks for use in power electronics.



Solutions for injection moulded interconnect devices (MIDs)

For the efficient manufacture of moulded interconnect devices (MIDs, see picture) Ensinger has introduced the compounds product line TECACOMP LDS. The conductor tracks are applied using laser direct structuring (LDS) and subsequent metallization. This merger of electrical and mechanical functions in a single component has opened up interesting new scope for the manufacture of mechatronic modules. [JF]

For more information: www.ensinger-online.com/en/compounds

Thermal dimensional stability up to 470 °C (HDT/A)

New High-performance series TECASINT 4000

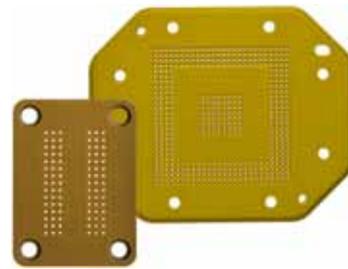
Ensinger has recently launched a range of new semi-finished products as part of its TECASINT series. These polyimide materials are particularly suited to applications entailing unusual demands on the oxidative stability. Highlights include type TECASINT 4111: With thermal dimensional stability of 470 °C in accordance with HDT/A, this polyimide is unmatched by any other organic material and offers up scope not only for whole new uses but also for improving the efficiency and service life of existing applications.

The TECASINT 4000 series offers the benefit of extremely low water absorption, an essential requirement for dimensional stability. The chemical resistance of this low-outgassing material is also exemplary, while its low friction values make it ideal for tribological applications.

With their easy machining properties, these materials are generally suited for the manufacture of components with good load bearing properties and extreme temperature

resistance. Their applications include high-performance gaskets, lubricated and unlubricated friction and sliding applications, test sockets for the semiconductor industry, thermal and electrical insulation, low-outgassing components for ultra-high vacuum and aerospace applications, and also in cryogenic temperature ranges. [JF]

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The easy-machinable materials of the TECASINT 4000 series are ideally suited for the manufacture of dimensionally stable components with high resistance to mechanical and thermal loads.

Current brochures

The Manual – 100 pages of expertise

The “Engineering Plastics” Manual contains the accumulated expertise of many years in the field of plastics development and processing. The 100-page reference work replaces the “Ensinger essentials” brochure published a number of years ago. It is far more extensive in terms of detailed content and also features the most up-to-date developments.

The introductory section provides an overview which allows readers to draw direct comparisons between materials on the basis of their most important variants and fields of application. Illustrated by clearly arranged diagrams and examples, the chapters Materials, Properties, Material Selection and Further Processing provide users with the factual knowledge needed for designing components and machining semi-finished products. [JF]



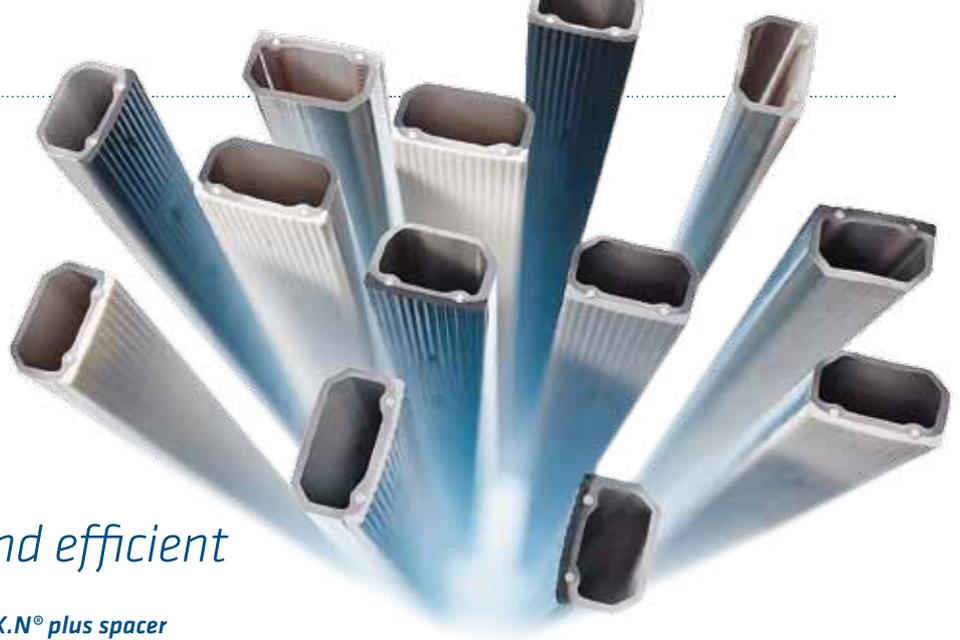
“Engineering Plastics – The Manual” is available with immediate effect either in hard copy or digital form. The English version is available as a download in PDF format on the website www.ensinger-online.com/en/downloads/brochures

Machining recommendations

The most important benefits of machining technologies are extreme precision and narrow tolerances. Optimum results can only be achieved with precise knowledge of the properties of the materials concerned. The new brochure entitled “Machining Recommendations for Semi-Finished Engineering Plastics” provides a wealth of useful tips. Detailed explanations are provided, not only on the individual machining techniques (sawing, turning, milling, drilling, cutting threads, planing / plane milling and grinding) but also on material behaviour and the ideal machining parameters – all clearly arranged according to material groups. Anyone who follows these recommendations is certain to improve the process reliability and efficiency of their machining operations. [JF]



The brochure “Machining Recommendations” is available as a download on the website www.ensinger-online.com/en/downloads/brochures



Perfectly formed and efficient

Ensinger unveils the new Thermix® TX.N® plus spacer

Thermix® “warm edge” spacers have been successfully established in the market for many years. The products are designed to prevent thermal bridges at windows, helping to bring about tangible energy savings and improving the indoor climate. At the glasstec show in Düsseldorf, Ensinger unveiled a new product generation to the trade public: Thermix® TX.N® plus.

Alongside excellent thermal characteristics and high quality, the new generation of spacers offers a whole array of other benefits which will impress not only home owners, builders, renovators and planners but will have a special appeal for manufacturers of insulating glass. Why? Because the Thermix® TX.N® plus has been designed to simplify processing, providing a solid basis for reliable and economical insulating glass production.

Using an optimized construction method and new material combinations, the engineering team at Ensinger have

succeeded in coming up with an even more dimensionally stable product. The new spacer offers outstanding rigidity without compromising bending capability

Greater processing productivity

Because its high level of dimensional stability reduces the over-bending angle, a safe, precise and rapid bending process is assured. The finish bent frame additionally offers outstanding stability and makes for simplified handling during downstream processing stages. These benefits help to speed up the production process, making for improved productivity and economy. [WS/JF]

www.thermix.de

For more details or enquiries, contact: Dr. Albert Lingens, Ensinger GmbH, Sales Director Thermix®

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Trade fair premiere at glasstec 2012

by Silke Weinmann, Marketing Thermix®

The glasstec exhibition is the world's biggest international trade fair catering to the glass industry and its suppliers. Customer response far exceeded our expectations. Our stand was host to visitors from around the world. Curiosity drew punters from the USA, the United Arab Emirates, Pakistan, South Korea and even from as far afield as Australia and New Zealand to the Ensinger trade fair stand. The sustainable impact of glasstec is evidenced by the daily enquiries which continue to arrive and the overwhelmingly highly positive customer response to our new product Thermix® TX.N® plus.

The Ensinger Team at glasstec 2012 in Düsseldorf (left to right:) Heinz Raunest, Marc Rehling, Thomas Baumann, Christian Helfert, Klaus Esser, Bärbel Müllner and Susanne Wolf (not pictured are Dr. Albert Lingens, Jürgen Dollak, Martina Wiest and Elisabeth Trapp).