Dear Readers,

Nowadays we’ve become accustomed to the notion that everything is in a process of radical change far more radical than in the past. Terms such as ‘transformative’ or ‘disruptive’ are used so frequently in this context that ironically, the sense of upheaval and constant movement they are intended to convey is somehow lost.

The notion of accelerated change is widespread in our industry too. There’s a common perception that in the future, plastic components will no longer be manufactured in specialist companies but printed on site and on demand in the piece numbers required. While this may appear overstated, there are plenty of plastics processors and investors who believe we are on the cusp of transformational changes. Which creates pressure to act. Projects are being launched, printers purchased, whole new departments created. There are start-ups mushrooming everywhere and plenty of investors willing to buy them. Any wise entrepreneur should take at least a cursory glance into Silicon Valley to gain an idea of what the company of the future will look like. Yes, bring your dog to the office, no hierarchies here.

You’ll note my slightly tongue-in-cheek slant here. Actually there’s no reason why I should feel this way: after all, our company amongst those climbing on board the bandwagon of additive manufacturing, also known as 3D printing. But while the technical approach is a fascinating one, when working with high-performance plastics the devil is in the detail. Building up a component step by step means that it no longer consists of a homogenous mass but molten particles or strands which are linked together. Developers are puzzling over how to improve and guarantee the long-term quality of the link between the particles or layers. The last thing you’d want is for the layers of a component installed in an aircraft to start coming apart...

3D printing is predicted to grow at an exponential rate. But it’s difficult to estimate the absolute value of the industrially used components. Despite a market百花ed by huge volumes of risk capital and government research funding, there has not been an appreciable increase in the quality and quantity of practical applications. How should we interpret the commonly held belief that additive manufacturing is on the threshold of large-scale industrialization? Does it mean we’ve already passed this threshold, or that the threshold has turned into an insurmountable obstacle?

It presumably won’t do most representatives of industry any harm to wait a while and see how things develop. Ultimately, the disruptive process of transformation will boil down to the essence of what entrepreneurship has always been about: staying on the ball.

Yours,

Klaus Ensinger

The cross-border team attending a planning meeting at the future injection moulding hall in Shanghai (left to right): Carter Wu (Quality Manager Ensinger China), Eden Shu, Team Leader Injection Moulding Ensinger China, Chen Lin (Manufacturing Manager Ensinger China), Dong Ruxue (Managing Director Ensinger China), Juergen Fisch (Project Manager for Overseas Projects IM), Michael Werner (Process Development IM), Simon Glabik (Key Account Manager IM), Robert Dix (Head of Production IM) and Markus Sinnar (Quality Manager IM).

Denmark: Move to new premises in Ringsted

Seven years since its foundation, Ensinger Denmark has moved to new premises within Ringsted. The warehouse capacity has doubled compared to its previous location. Besides, the building complex affords the branch a bigger office suite and more space for logistics operations. The new address at a glance:
The plastics processor Ensinger has now expanded its portfolio to include a stock shape that can be labelled with a laser. The new product TECAFORM AH LM, a modified polyacetal copolymer (POM-C), permits particularly high-contrast laser markings on technical components and fulfils the stringent requirements of the food and pharmaceutical industry. The mechanical characteristics and processing properties of the extruded products TECAFORM AH LM white and TECAFORM AH LM grey are similar to those of the well-known stock shape TECAFORM AH natural.

The new, laser-markable material TECAFORM AH LM white is available from stock at short notice in the form of sheets (dimensions 620 x 3000 mm, thickness 20, 40 and 60 mm) and rods (length 3 m, diameter 40 and 60 mm). The variant TECAFORM AH LM grey is produced by Ensinger on request.

In the food-processing and pharmaceutical industries, the labelling of machine components with the aid of UV marking lasers is, in many places, standard practice. The plastics processor Ensinger has now expanded its portfolio to include a stock shape that can be labelled with a laser. The new product TECAFORM AH LM, a modified polyacetal copolymer (POM-C), permits particularly high-contrast laser markings on technical components and fulfils the stringent regulatory requirements of the food and pharmaceutical sector (FDA, EU 10/2011).

Marking lasers are among the most reliable labelling systems. Laser labelling is permanent, fraud-proof and clearly legible. Unlike engraved surfaces, laser-marked parts are easy to clean, and in contrast to ink markings which can wear out over the product’s life cycle, there is also no contamination risk to foodstuffs or pharmaceutical products.

Available in white and grey
The material POM-C natural, which is widely used in industry, cannot be labelled using UV marking lasers, and therefore Ensinger has developed a compound with a special additive. Customised data such as text, numbers, graphics and codes facilitating traceability can be applied to the light-coloured material, available in the colours “white” and “grey”, using serial production processes. Thanks to the high contrast, product markings using small fonts less than 1 mm high are also possible. The mechanical characteristics and processing properties of the extruded products TECAFORM AH LM white and TECAFORM AH LM grey are similar to those of the well-known stock shape TECAFORM AH natural.

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Laser markable engineering plastics
Components made from TECAFORM AH LM can be reliably marked

Materials

IT integration in Italy

by Dr. Erwin Schuster, Head of Information Management

Previous issues of impulse focused on the TECAspeed project, i.e. the introduction of SAP into Ensinger GmbH on April 1, 2017. This go-live is only a sub-step in the overall IT strategy for the company group. Another programme – as a number of coordinated individual projects are called – is the internationalisation of the SAP platform.

The need for inter-country exchange of information at Ensinger has also rapidly increased over recent years. Transfer of files, shared calendars, collaboration on projects, and, above all, video conferences – including with external parties – are also becoming increasingly important.

Compare this to the current situation at the sites, where self-contained IT systems were developed in the past. Sites such as Austria and Malaysia are exceptions. IT will be integrated here right away, as part of the new builds. These sites work directly in the company network around the world. With all the advantages based on Ensinger standards.

All these factors came together at the Italian site: the planned energy-efficient building conversion, a new computing centre, the growing need for IT-supported collaboration and the fact that SAP is set to be introduced at Ensinger Italy in the near future.

A sort of total revolution
Where did the challenges lie? This is best described using the analogy of home construction or carrying out a renovation. You modernise the existing features, without really starting anew from the ground up – a sort of total renovation. It would be considerably easier to completely start from scratch but operations cannot be interrupted – in Italy, local IT systems had to continue to run smoothly. Daily business comes first. So this was a huge hurdle for the migration team, which consisted of representatives from the headquarters and Italy. The first step was to carry out detailed project planning and procure the necessary components. First of all, the computer room was relocated and the infrastructure was put in place according to modern Ensinger standards. This was a long weekend of intensive work. Then work really began. The existing ERP system and the archiving solutions had to be migrated to the new platform, while taking the regulatory requirements into account. Here it became apparent that modern versions from the headquarters and existing “old” IT systems do not always work with one another. This was an immense task which, looking back, was handled exceptionally well, but definitely needs to be taken into account more fully in regard to the other sites.

Where are we now? The technology works, now it is time to reap the harvest. Employees in Italy are now able to enjoy the office environment and fast internet connections. On these modern workstation systems, users can work as if they were sitting in one of the offices in Nufringen, Cham or Ergenzingen, with WLAN and mobile access when they are on the move.

I would like to thank to German-Italian migration team once again. An excellent team result!
We must implement the management principles consistently

Sven Heidinger has been leading Human Resources for the Ensinger Group for around a year now. Here he explains the goals which he and his team are working towards and what is especially important to him about this work.

How did you come to work in Human Resources?
My father was a career officer in the Army, and my brother was a regular soldier. I grew up in Swabia, grew up in Baden; Sven Heidinger is a true native of Baden-Württemberg. After completing school and officer training, he studied Business Education. In 1997, he moved into business. At Osram, he assumed various HR management functions in Munich and Wipperfürth. After nineteen years, he left the company. He spent a short while as Head of the Personnel Division at Krauss-Maffei Wegmann, before arriving at Ensinger in June 2017. As Head of the Human Resources Service Center here, he has responsibility for human resources for the corporate group.

He commutes at weekends from Nufringen to his family home in Munich. His wife works as a teacher, his daughter (20) is training as a hotel manager, and his son (17) is working towards his school leaving examinations.

Heidinger is convinced that collaboration succeeds when managers and staff members interact regularly. Managers who are performing strongly and demonstrating development potential should not be lost to us due to a lack of foresight. So we will purposely develop these talented individuals especially intensively to become managers. This also includes taking on special duties or projects. At this early stage, however, it is also easy to iron out misunderstandings – since some staff members prefer a specialist career without management responsibility.

What is your thing? When the German Army was significantly reduced in size a few years after the fall of the Iron Curtain, I decided to leave. I went to Osram via an unsolicited application. After a while, I had the chance to lead a team and later a series of projects in the area of staff development. I saw these as a learning opportunity. By the end, I was responsible for human resources for two divisions.

What were your first impressions of Ensinger, with your many years of Business experience? Company culture in a family business is different to that at other employers: independence and sustainability play a key role. Instead of the hectic atmosphere typical of most businesses, and which I don’t miss, my experience at Ensinger is of prudence, which is important for decision-making processes. The working day is also characterised by openness and appreciation. This doesn’t reach into every nook and cranny, of course, but by and large this culture of trust makes Ensinger stand out from the crowd.

How is this trusting collaboration promoted? Within the management circle, we are convinced that employees demonstrate above-average performance and satisfaction when they are intrinsically motivated and are able to freely develop themselves along with the company objectives. The flat hierarchies offer many staff members a larger space for creativity and allow them to take on more responsibility than in other companies. It is important that the managers and staff members interact regularly and that there is mutual trust. Then collaboration is successful.

Is there going to be more flexibility in the framework conditions as well? The possibility of combining work and family life is a key factor when choosing an employer these days. That’s why we are trying to address requests for part-time working and why we are supporting staff members when they need to either increase or reduce their working hours. At Ensinger, we also see the option of working from a home office positively – many managers are setting an example in alternating presence and mobile working. In order to increase the proportion of women in management positions, we as an employer need to be even more flexible. The keywords here are job-sharing and part-time managing. We are also going to test new types of working time models in the area of production. The issue here is encouraging more staff into shift working.

What are your expectations of managers? At Ensinger, we have good management principles, they match the company’s mission statement and the company culture. However, in some areas we need to implement them more consistently, that is, we will start with management quality. Training will become an obligatory foundation for management careers. We will pay closer attention to management behaviour, but will also promote management competence, for example organisational capabilities and efficient process thinking. I encourage managers and staff members to move to a different area sometimes, since silo thinking doesn’t move the company on.

Good managers recruit good staff, and retain them. So a model manager also isn’t afraid to develop staff. One element of a company’s recipe for success is finding the best possible managers via careful selection. Managers are often too quick to plump for a preferred candidate. It is important to involve HR Business Partners at an early stage in personnel or organisational decision-making, because we can often help with finding the ideal solution.

What lies behind the concept for succession planning that you recently presented? In order to systematically prepare our specialists to take on management responsibility, we have started to merge succession planning with staff development. Staff members who are performing strongly and demonstrating development potential should not be lost to us due to a lack of foresight. So we will purposely develop these talented individuals especially intensively to become managers. This also includes taking on special duties or projects. At this early stage, however, it is also easy to iron out misunderstandings – since some staff members prefer a specialist career without management responsibility.

What would your advice be to the next generation of staff, that is, to our apprentices and new professionals? I would encourage all new professionals to actively request feedback and to seek out challenging tasks. When you enjoy your work, success comes by itself.

What especially motivates you about your daily work? I am driven by making things better and being able to create something. I particularly enjoy developing ideas or solutions in a team, coming out of a meeting and then all pulling together.

How did you manage to make the move into business? I studied Business Education in Munich and opted early on for the area of personnel management. After a placement in Staff Development at BMW I knew: this is just my thing. When the German Army was significantly reduced in size, I was looking for a way to become managers. This also includes setting an example in alternating presence and mobile working. In order to increase the proportion of women in management positions, we as an employer need to be even more flexible. The keywords here are job-sharing and part-time managing. We are also going to test new types of working time models in the area of production. The issue here is encouraging more staff into shift working.

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How did you come to work in Human Resources? My father was a career officer in the Army, and my brother was a regular soldier. I knew from them that nowhere else other than an armed forces’ university could one focus so much on a course of study leading to a career as an officer. 4 years, full employer support, small group teaching, on-campus living. I was also attracted by the duties of an officer; I knew that I would also develop and apply management skills through these. However, I knew from early on that after twelve years at the latest I wanted to go into business.

Many people think military personnel management means obeying orders ... In fact, in an army you experience the full spectrum of management styles – from authoritarian through to co-operative. But an army officer learns from the start that “Command and Obey” is never successful. You need thinking people, and not only because of the complex weapons systems. My credo is: Manage by modelling, lead by good example. Be demanding, but don’t make too many demands of people. I have observed other managers and over the years I have learned to continually readapt to new people with their own individual ways of thinking and acting. Little by little, the level of responsibility and the management tasks become more complex.

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A warm welcome ...

Employees who have joined Ensinger:

### Nufringen
- Accounting
  - Romeo Bleko
  - Thomas Christian Bucher-Fischer
  - Paola Goncalves de Souza
  - Marco Guadagnino
  - Steven Guadagnino
  - Marko Jelic
  - Johannes Koch
  - Oliver Kraus
  - Matthias Krüger
  - Yujin Lee
  - Daniel Oltovanji
  - Doris Reinsein
  - Anastasios Sachinidis
  - Sandro Thomas

- Compounds
  - Tim Ebner
  - Lena Heiberger
  - Ines Grammer
  - Patrick Splawski
  - Julian Vetter

- Purchasing
  - Alexander Kovats-Buchholz
  - Melanie Gruidl

- Facility Management
  - Andreas Bahr

### Ergenzingen
- Injection Moulding
  - Tim David Baur
  - Nils Bückle
  - Daniela Holaschke
  - Selcuk Kaplan
  - Izabela Kozińska-Kwiecz
  - Timo Nestle
  - David Renz
  - Kai-Uwe Schmidt
  - Norman Schmidtke
  - Sinem Yüceer
  - Muharrern Yüksel

### Cham
- Industrial Electrics
  - Johann Schindler

- insulbar
  - Ingeborg Bach
  - Markus Bauer
  - Eugen Borodihin
  - Jakeline Brandl
  - Albert Demil
  - Alexander Eberl
  - Daniel Gruber
  - Josef Höcherl
  - Michael Klein
  - Jan Kuschtscha
  - Thomas Müller
  - Martin Mutz
  - Stefan Pfeiffer
  - Christian Spätz-Legrand
  - Ahmet Uzun
  - Matthias Weinfurter
  - Stefan Zollner

- IT
  - Nicole Fiedler

### Shapes/Cast Nylon
- Shahnaz Weitner
- Franco Zwicknagl

### Thermix
- Arnjom Alles

### Tool Making
- Tobias Aichinger

### Administration/Main office
- Natalie Roßmann

### Machining
- Stefan Bauer
- Denis Bobkov
- Fabian Brandl
- Tanja Brandl
- Dominik Eisenrieth
- Florian Friedl
- Svetlana Ivanov
- Marcel Kettler
- Elke Koch
- Milena Löffelmann
- Jessica Wissner
- Josef Wühr

### Ravensburg
- Lilia Markin

With best thanks ...

This year the following employees celebrate their company anniversaries at Ensinger:

### Nufringen
- Roland Ellwanger
- Werner Musterle
- Joachim Neumann
- Wolfgang Wünsch

### Cham
- Josef Krotenhaufer
- Alfred Lohnt
- Erich Nuss
- Peter Sponsfeldner
- Angelika Stumpf

### Shapes/Cast Nylon
- Stephan Wagner
- Rosemarie Zangl

### Thermix
- Artjom Alles

### Tool Making
- Tobias Aichinger

### Administration/Main office
- Natalie Roßmann

### Machining
- Stefan Bauer
- Denis Bobkov
- Fabian Brandl
- Tanja Brandl
- Dominik Eisenrieth
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- Marcel Kettler
- Elke Koch
- Milena Löffelmann
- Jessica Wissner
- Josef Wühr

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Works councils elected

The constitutive meetings marked the start of the work by the newly elected works councils of Ensinger GmbH.

Ensinger in mourning

It is with a heavy heart that we have said farewell to two colleagues taken from us far too young.

On March 17, 2018, Christian Nass died following a severe illness at the age of 23 years. Christian, the son of Division Manager Fred Nass, joined Ensinger in September 2011 as an apprentice. After successfully completing his training as a machining mechanic, he was employed at the Cham location in the Machining Division, most recently as a specialist advisor to the Internal Sales department.

On March 19, 2018 Dr. Dirk Weydandt died following a severe illness. He joined the Injection Moulding Division of the company in May 2008 as Head of Production. In June 2014, he moved from Rottenburg-Ergenzingen to Nufringen, where he headed up the Industrial Profiles and Tubes Division for one and a half years before taking over responsibility for production in the Shapes Division in Europe and Asia. Dr. Dirk Weydandt was 54 years old and leaves a wife and two children.

Ensinger mourns its two dedicated, conscientious and amiable employees, who will be sorely missed and will always remain in our thoughts. The deepest sympathies of their colleagues go out in particular to their bereaved families and loved ones.

The General Works Council (GWC) of Ensinger GmbH consists of the following people:
- Chairperson: Werner Bach
- Deputy chairperson: Graciela Enns
- Members: Nicole Möß and Armin Lankes

The Management Board, Works Council and Staff of Ensinger

Nufiringen / Ergenzingen / Anröchte (from left to right): Markus Wanner (Deputy Works Council Chairperson), Huayia Xu, Christian Beck-Schmidt, Nicole Möß, Stephan Werke, Rommy Wagner (Substitute member), Graciela Enns (Works Council Chairperson), Ioannis Argiriadis, Jasmin Arndt, Michael Wetard, Frank Grill and Ottmar Wildmann (Substitute). Not shown in the photo: Jürgen Fischer, Ramona Jamnitzky, Steffen Mai and Miklo Breitschneider (Substitute).
Broadening one’s outlook

A dual study program combines practical work experience with academic knowledge. Thanks to theoretical and practical phases at sites abroad, bachelor students can also gain international and intercultural experience at Ensinger. Fabienne Pfizenmayer and Johannes Wörner report on their practical semesters in Malaysia and the USA.

Fabienne Pfizenmayer (pictured centre) studies Industrial Engineering with the goal of graduating with a Bachelor of Engineering (B.Eng.); this photo shows her at Ensinger in Malaysia surrounded by colleagues from Management, Production and Logistics.

Malaysia: Respectful interaction

by Fabienne Pfizenmayer

My biggest wish was to complete part of my dual study program abroad. I was given an opportunity to spend my 5th practical semester at the Malaysian site as part of a project. I took on the task of improving production control by building a transparent key figure system. Over the two months, I was able to gain an insight into the working methods and daily work routine of the production and office employees. Thanks to my mentor Štefan Dijaneziev, I had optimal on-site support and was also able to learn about the technical aspects from a different perspective. It is remarkable how well the site has developed within just a few years. The employees support one another and are always ready to help. I was soon well integrated into the team and was pleasantly surprised how quickly the employees adopted and implemented the production control and the new evaluation options.

Malaysia is increasingly developing into an industrialised country. What impressed me is how peacefully and respectfully the various cultures live alongside one another in this predominantly Muslim country and how well one is also supported by strangers. Life in Asia is different to life in Europe, but if you are open-minded and curious in regard to the cultures, the people and the food. A trip to Malaysia is an experience not to be missed. This practical semester gave me my first deeper insight into another working environment and has had a positive effect on my awareness of and views of other cultures. For me, this project was more than just a chance to consolidate my studies and get to know one of Ensinger’s overseas branches; it was also an opportunity for personal development and to expand my horizons.

USA: The highlight of the dual study program

by Johannes Wörner

My project abroad was a six-week placement at the USA subsidiary Ensinger Inc. in the small town of Washington, Pennsylvania. As part of my studies at the Coopera-
tive State University in the field of mechatronic engineering, my task was to introduce and test a technology recently developed at the main plant in Nufenring designed to optimise extrusion processes, in the overseas subsidiary. The transfer involved both the planning and the process-related implementation. Alongside the actual task, I was able to gain some interesting insights into the company. Many similarities with the main plant in Nürnberg became apparent but also a few differences emerged. These are not just down to different mentalities and ways of working, they are also due to the relevant industrial standards. For example, in the USA the stan-
dards in regard to dimensional accuracy of the stock shapes are significantly different. This means that additional time-consum ing and costly process steps are needed, that do not apply in Germany. Overall, my stay abroad was a very valuable experience for me. I got to know many friendly colleagues and was able to see the company group from a completely different perspective. This experience has definitely been the highlight of my dual studies at Ensinger to date.

Kadir Simsek donated his bonus payment to the Wilfried and Martha Ensinger Foundation.

Employee recruited, bonus payment donated

Forklift operator required, Rottenburg-Ergenzingen site. When Kadir Simsek saw this job vacancy on the bulletin board in the canteen in Nürnberg, he immediately thought of a good friend of his who had for some time been looking for another job. Following his application came an invitation to attend a personal interview with the HR Department and the Logistics Department. “The interview was successful, my friend had all the right technical skills, and a few days later the acceptance letter ar-

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After work, the US colleagues often invited Johannes Wörner to join them in leisure activities. This photo shows a panorama of Pittsburgh, taken during a trip on the “Duquesne Incline” railroad.

Bonus reward programme “Employees recruit employees”

It is not just founders of start-ups who frequently hire their own classmates and friends when they are looking for proficient and reliable staff. Medium-sized companies are now also adopting a multipronged approach in their search for employees. Ensinger GmbH devised a recruitment programme many years ago in which any current members of staff are welcome to take part.

Those who keep an eye open for suitable applicants, and then successfully support the process of filling the vacancy, receive a bonus (gross) of 1,000 Euros. Payment is made once the new employee has successfully completed the probationary period. Further information about the “Employees recruit employees” programme is available from your HR Business Partner.
Top achievements in vocational training

Plastics research at the University of Stuttgart

This year’s Wilfried Ensinger Prizes at the University of Stuttgart were awarded to two science postgraduates working in the field of plastics and process engineering. Dr. Jing Wiedmaier was recognized for her outstanding dissertation dealing with the mechanical properties of nano particle-modified polyamide 6 composites. The second prize winner, Julia Resch, was recognized for her masters thesis analysing the processing properties of recycled plastics fibres in the injection moulding process.

ensinger-stiftung.de

First award for the work of the Cham Technology Campus

A Wilfried Ensinger Prize has been awarded for the first time to the Cham Technology Campus. The prize-winning bachelor thesis of Mechatronics student Simon Zollner deals with the question of how electric vehicles can be integrated as energy stores into electricity grids. Selected student research theses are set to become recipients of the Wilfried Ensinger Prize over the coming years at the Technology Campus. Encouraging the technical specialists of the future is one of the core missions of the Wilfried and Martha Ensinger Foundation.

th-deg.de/de/tc-cham

Axel Philippin receives GKV sponsorship award

A prestigious prize awarded only to the ten best qualifying trainees in the profession of process mechanic for plastics and rubber technology by the German Association of Plastics Converters GKV has gone to Ensinger’s Axel Philippin. In addition, the GKV has presented Ensinger with an honorary certificate in recognition of its services to vocational training. Axel Philippin had already been selected last autumn as the Best in State by the Baden-Württemberg Chamber of Industry and Commerce.

EVI, BOOM and T.I.C.K.

The continuous improvement process at Ensinger – by Klaus Mauderer, Head of CIP

Since we launched EVI nine years ago, the employees at our German and Austrian locations have implemented a whole range of continuous improvement processes. At our US subsidiary Ensinger Inc., a similar CIP tool was introduced in 2012 entitled BOOM, while at the headquarters of our UK subsidiary Ensinger Ltd. the T.I.C.K. scheme was recently launched, which is also similar to our own EVI.

The continuous improvement process is firmly rooted in the Ensinger mission statement. The CIP tool operates at Ensinger (EVI) is a programme used to develop and execute the different actions. This is about more than just improving efficiency: The main objective is to ensure the active involvement of staff in the design and improvement of different processes. The aim is to make these safer, more ergonomic and simpler to address the demands of a highly challenging market.

All the CIP concepts in operation across the Ensinger Group have one thing in common: They all emphasize the importance of employee initiative and team spirit.
Certified energy efficiency

Insulbar RE awarded Cradle to Cradle Material Health Certificate in Gold

Saving energy, reducing CO₂ emissions, conserving resources – Ensinger was early to recognize the signs of the times. By 2013, the plastics specialist was the first manufacturer to launch a recycled insulating profile for the thermal separation of aluminum windows, doors and façades. Since then, insulbar RE has been providing additional points for the certification of buildings worldwide with its Environmental Product Declaration (EPD). Its outstanding sustainability is now additionally confirmed by a Cradle to Cradle Material Health Certificate in gold.

“With this certification, we are sending out a further signal that the ecological footprint of our products and the conservation of resources are of great importance to us. We only have this one planet”, says Jan Danger, division head for insulbar at Ensinger. “We were the first to go into series production with an insulating profile for metal frames in 1977. With insulbar RE made of pure recycling material, we combine energy efficiency and sustainability and once again support the building industry as a pioneer in climate protection.”

Doubly climate-friendly

During product evaluation by testing institutes such as EPEA, the entire value-added chain is considered in accordance with the principles of the Circular Economy - from cradle to recycling. The verified sustainability and the eco-balance of the product, which is certified with the Cradle to Cradle Material Health Certificate and the EPD, pays off with building certification, be it according to DGNB, LEED, BREEAM or country-specific regulations such as HQE in France or GBCe in Spain. “With insulbar RE, we offer our partners in window, door and façade construction a strong differentiating feature, an added value that we want to further expand together”, says Jan Danger. “The manufacturing process is clean, the solution has been tried and tested millions of times and the transition is easy. Existing tools can be reused unchanged and without additional costs. We offer our customers a wide variety of standard designs and individual profiles.”

Sustainable quality

Ensinger has more than 50 years of experience in compounding and precision processing of specialty plastics. The use of recycled material in the production of insulbar RE reduces the consumption of fossil fuels by 89 % compared to the conventional polyamide profile, CO₂ emissions are 84 % lower and 32 % less water is consumed. The material properties are checked in every phase of the process and documented according to DIN ISO 9001:2008. That is why insulbar RE has the same high quality, durability and functional reliability as known from classic insulating profiles.

For more information: insulbar-re.de

Spacers as ambassadors

Residence of the German Embassy in Chile gets new lattice windows with Thermix

How heritage preservation can be reconciled with energy efficiency in the renovation of historic buildings is demonstrated by a German-Chilean construction project in Santiago, Chile. Single-glazed lattice windows have been replaced with highly insulating safety windows and doors with Thermix Warm Edge spacers and Thermix muntin bars.

The German Embassy in Santiago de Chile, built in 1944 in the Neoclassicist style, is located in a seismographically highly active area at acute risk of earthquakes. A decision was taken in 2008 to evacuate the building on safety grounds. A wise move, as a serious earthquake in 2010 caused heavy damage to a number of buildings in the city, which has a population of six million.

During a one-year project in 2014/2015 a general renovation and earth proofing process was carried out on the building and its façade, which are protected as an ensemble by a preservation order. The climate in Santiago de Chile is comparable to the Mediterranean area and is generally dry, although subject to abrupt changes of temperature. High temperatures prevail in the summer months, while winters can be cool. A main aspect of considerations during the renovation, alongside earthquake proofing, was bringing about a sustainable improvement to the energy balance. The planners hoped to achieve this primarily by installing new wooden windows with low Uₜ values.

The window construction firm commissioned for the job chose insulated glazing units with Thermix warm / cold edges and muntin bars. By utilizing the cooler tempera-
TECAPEEK is regarded as an almost universally usable starting material for all components exposed to high levels of stress. Ensinger uses the material to produce not only sheets and rods but also an extensive portfolio of hollow rods, tubes and rings. So that design engineers can go straight to the right product to meet their technical requirements, Ensinger is providing a “Tube Selector” on the website. This online tool is the first of its kind. With one click on the appropriate button on the homepage ensingerplastics.com, you can directly access the new service available. The first step is to specify the material. The two slide controls make it possible to define the internal and external diameters. The software indicates the best match in each case, i.e. which stock shape from Ensinger’s product portfolio most closely corresponds to the desired size. Anyone looking to reduce the amount of material waste right from the ordering stage should take a closer look at the Tube Selector.

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