

impulse

Issue 2/2013 Employee and business partner magazine www.ensinger-online.com

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Top Secret

Dear Readers,



Although Daniel Ellsberg was charged with espionage in 1971 in America, it was his publication of the Pentagon Papers that actually brought the Vietnam War to an end. The consensus among the general public is that he should be hailed as a hero, rather than a traitor, the jury is still out about how history will judge Edward Snowden. In July 2013, Ellsberg issued a warning using the medium of Twitter: "Secrecy corrupts, just as power corrupts".

The fundamental question is not so much which country and which authority has overstepped "the red line", in my view, the abuse originates within the system, which is why the issue of state surveillance has to be the subject of public debate. The argument put forward by secret service organizations everywhere centres around the terrorist threat and the many lives that have already been saved through intelligence activities. The compromise this poses for civil liberties and human rights is something we have to take on the chin, or put another way, how much of its freedom is society prepared to sacrifice to protect itself by imposing more stringent controls? Lack of transparency makes it even more difficult to evaluate where an acceptable trade-off lies between these two opposing poles. Ultimately, if secrecy gives the surveillance machinery license to act beyond established democratic controls, the system threatens to fall apart at the seams.

The issue of how far control should replace trust is one that arises in the corporate world too. At Ensinger, we believe that trust forms the essential basis for people to work well together. Some degree of control is needed for the assessment of risks, but exerting excessive control is the death knell of trust. So where should we look for a solution?

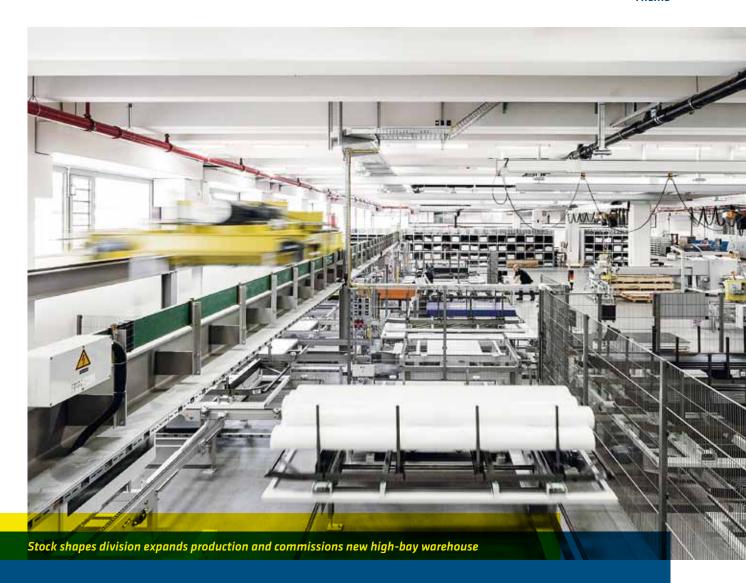
The conclusion I draw is that while "control is good, trust is better" we are all far more motivated, more efficient and more reasonable when we are entrusted to do something - a control mechanism standing in our way is first and foremost a barrier to independent thought, it can also be a provocation for some to attempt to get away with disregarding rules. At Ensinger, we are working to replace control by trust and transparency in an increasing number of areas. For over three years, we have been offering all our employees free access to the minutes of Management Board Meetings. A move designed to allow prompt and direct communication on all levels of important decisions taken and of their backgrounds to them. To date, our experience with this scheme has been exclusively positive.

Relating this to our digitally networked society is a far more complex consideration, largely because the ensuing debate has to be a democratic one. I am convinced that there will be many more scandals unearthed before any new consensus can be reached and until then, you may rest assured that it will not just be Angela Merkel's potato soup recipe that will be eagerly logged by the world's secret service organizations.

Wishing you a relaxing and enjoyable Christmas within the intimate circle of your family, the NSA, MI5, the BND and co.

Yours,

Roland Reber



Efficient logistics and production

Ensinger has commissioned a new stock shapes production plant and a high-bay warehouse in its parent factory in Nufringen. The new facilities are designed to optimize in-house logistical operations, speed up work processes, by providing additional production space and clean-room facilities, quadrupling its storage capacity and automating material flow, Ensinger group has created the ideal conditions for further growth of its biggest division. Customers benefit from shorter throughput times, a wider range of stocked products, competitive prices and an excellent delivery service.

The new long bar high-bay warehouse and the additional production areas are linked to the existing production halls by a link bridge, inflow and outflow of goods has been mainly automated, along with in-house transport and

handling processes being sped up significantly through the use of modern conveying systems.

Automating its intralogistic processes has created additional benefits for Ensinger: "It cuts out the costly operation of industrial trucks, reduces the risk of accidents and prevents material damage", explains Ruhullah Wasseh, the Project Manager in charge of the new facility.

To interlink all processes involved from production through to shipping, conveying technology experts developed bespoke components: The fully automatic transportation and storage concept used for the semi-finished sheets and rods measuring up to 3 metres in length uses a system of skids. These carriers are capable of bearing loads of up to 2.5 tons.

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Capacity quadrupled

The two-aisle high-bay warehouse is 50 metres in length, 24 metres in width and 24 metres high. Having four times the capacity of the previous warehouse, this new storage facility opens up scope for Ensinger to extend its existing portfolio of permanently available stock shapes and incorporate some new product.

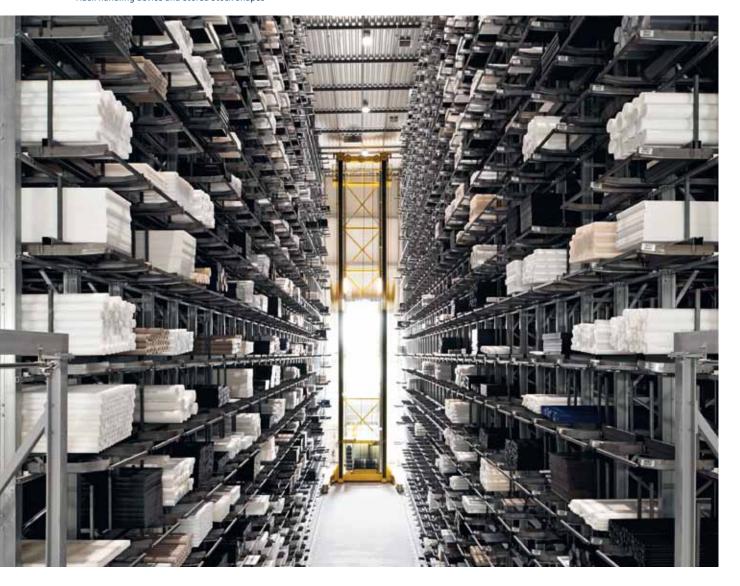
"The high-bay warehouse is supplied by two fully automatic rack handling devices. All the plastic items are stored separately according to batches", explains the Head of Site Logistics, Dieter Scharf. "Capacity forecasting and plan-

ning and also control of the conveying technology are all performed from the computer-aided logistics control centre. We are able to perform up to 135 storage and retrieval processes every hour".

Ergonomic order picking workstations

The picking of individual items for customer orders also takes considerably less time in the new facility than previously. Ensinger has switched over to a dynamic order picking system using the goods-to-man principle, by introducing a paperless system, the average order pick now takes less than half the time.

Glimpse into the high-bay warehouse: Rack handling device and stored stock shapes







Handling devices help with lifting heavy load. Left: loannis Assaridis

Working ergonomics have also been improved with ceilingmounted crane systems able to reach all areas of the hall on both levels, flexible handling devices are used for lifting the heavy sheets and rods, saws are provided at all the order picking stations for cutting semi-finished sheets and rods, eliminating the need for buffer storage.

There are saws in place at all the order picking workstations for cutting the semi-finished sheets and rods to the required length, dispensing with the need for intermediate storage. Eliminating the more strenuous physical tasks and also restoring 2-shift instead of 3-shift operations have meant a welcome relief for the logistics team members.

Ensinger's Nufringen location showing the new Stock Shapes Division building in the foreground

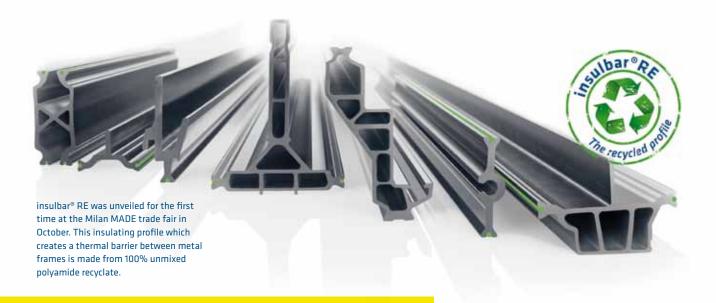


The energy concept

"By installing modern plant and building technology, we have been able to not only meet but exceed the requirements set out in the Energy Saving Ordinance for the new facility in our Nufringen location", says Robert Müller, Head of Operations for the Stock Shapes Division. Heat recovery has played a key role in this achievement. Surplus energy can be used during cooler seasons to heat the logistics areas and the truck loading hall or for heating water. This surplus energy can be utilized in the cooler seasons to heat the logistics areas and the truck loading hall or for heating water. Even the energy generated by braking the rack handling devices is returned to the grid.

Werner Buscheck, Head of Technical Services at the location, is delighted with the results: "We can dispense with energy guzzlers such as refrigeration machines and air conditioning systems. To air condition our production and office areas in summer we use a principle which is ideal from the energy saving viewpoint: abdiatic cooling. This entails drawing in and humidifying the hall air, which is cooler than the outside air. A heat exchanger is used for what is known as evaporation cooling."

The economic use of these energy sources requires the systematic analysis of electricity, heat, gas, oil and compressed air consumption. Measuring devices installed at every production line and facility permit optimum energy controlling. [*JF*]



insulbar® RE: Thermal insulating profiles now also in recycled material

Doubly active against climate change

by Marnie Röder, Head of Building Products Marketing

Anyone aiming to save energy and drive down carbon emissions in the construction sector needs to pay attention to a whole range of issues, including the use of highly insulated windows, doors and facades. Plastic insulating profiles can make a decisive difference by providing a thermal barrier between the inner and outer shell of a metal frame reducing room heating and cooling costs. With its latest development, the insulbar® RE insulating profile, Ensinger has taken its commitment to the planet another step further: by saving even more energy and precious resources right from the manufacturing stage.

insulbar® RE is made of 100 % unmixed recycled polyamide, this base material is upgraded using a special process to lend its properties on a par with new material extending the useful life of this high-grade material by another complete product life cycle, actively protecting the environment and helping to slow climate change – and has consequently been dubbed "up-cycling."

The process used by Ensinger to "up-cycle" the polyamide recyclate is fully in compliance with the stringent insulbar® quality standards as set out by DIN ISO 9001: 2008. The composition and properties of the material are exhaustively tested and documented at every processing stage ensuring that insulbar® RE comes with the same

quality credentials users have come to expect from the classical insulbar® profiles. As well as being energy efficient, insulating profiles made of recyclate provide impressive mechanical properties, durability and functional reliability for years to come.

System manufacturers and processing companies using insulbar® RE insulating profiles made of recyclate in the window and facade construction business will be ideally equipped to meet present-day and future building requirements and regulations. Public buildings and large property investment projects constructed to high ecological standards are being conferred with quality seals in compliance with the DGNB, LEED or similar qualification systems. These are designed to classify the whole of the construction process and the building materials used in ecological, economic and functional terms.

The use of insulbar® RE can provide a key competitive edge when bidding for green construction projects, adopting a sustainable and environmentally responsible approach can bring economic rewards too.

For more information on the Internet, go to www.insulbar-re.de

"Jogging is my yoga"

Interview with Jan Danger

What changes have you initiated since you joined the insulbar® division?

Both in terms of sales and in application technology, we are beginning to open up our operations to embrace more innovative and advice-intensive market segments, also in the international arena. It goes without saying that we aspire to a "made by Ensinger" quality standard which is consistently high the world over. Today's markets expect a wide and variant-rich standard portfolio. At the same time, expected product lead times are growing ever shorter. To increase efficiency, we are working to improve our production and logistics processes, and at the same time we aim to engender closer cooperation between the two German locations and the subsidiaries abroad in keeping with our "no more borders" ethos. With improving sales and results on the rise, our new strategy is clearly beginning to bite.

Which experiences gathered from your career to date do you think can be used to particular advantage at Ensinger? My foreign travel and career to date have taught me that the challenges we all face become greater with increasing geographical distance from home. Generally – partly as a result of my periods spent abroad – I am receptive to all kinds of cultures. I am used to accepting and tolerating different ways of doing things in other countries. Internationally established corporations have to fit in with local circumstances and markets.

What aspects of your present job do you particularly like?

My role as I envisage it is, to mould a disparate collection of people into a cohesive team and to fill that team with enthusiasm to achieve a common vision. It also includes bringing together widely differing characters and cultures – not only on the international level but also between culturally diverse regions within Germany. We are getting better at pulling together as an international team against a rapidly changing backdrop to get things done, and this task becomes twice as enjoyable when it involves a technologically sophisticated and innovative product such as insulbar.



Jan Danger has headed up the insulbar® Division since mid 2012. Prior to joining Ensinger he was CEO of a refrigeration and air conditioning component manufacturer, with his previous areas of focus in the fields of production, change management, lean management, quality management, aftersales service and materials management.

Jan Danger grew up in Bad Segeberg in Schleswig Holstein and almost became a sound engineer. As a fan of classical rock bands such as Led Zeppelin, the Rolling Stones and Genesis, he was fascinated by the combination of technology and music, instead he opted to take a more broad-based route and took a degree in mechanical engineering.

Two extended periods spent abroad have played a part in shaping the career of the 50-year-old engineer. In the beginning he worked for three months in South Africa, and it was during his stay that Nelson Mandela was released from jail. Jan Danger maintains that experiencing this momentous event on the spot at first hand made a deep impression on him. "It is incredible what Mandela had to endure and how he has always remained true to himself." Another career move took Jan Danger to Mexico for six months, where a new plant was planned and commissioned under his direction.

Today, an outdoor enthusiast and family man, Jan Danger lives in Munich and commutes alternately to Cham and Nufringen. He and his wife have a 19 year-old daughter and a 17 year-old son. [JF]

Panorama



What is your own personal outlook?

I see every problem as an opportunity. This also applies to mistakes, as it is from mistakes that we learn.

Are you able to separate your career and your leisure time? I can switch off by concentrating fully either on one or the other, this way I can concentrate on work, and enjoy my leisure time to the full.

What is the best way for you to relax?

By practising sport – Jogging is my yoga. In the evening, I will often get on my mountain bike and drink in the scenic beauty of the Schönbuch or Bayerischer Wald, these areas are also great for ski touring. The weekend is spent with family and friends, when time allows, I also enjoy DIY around the house and garden.

Your idea of happiness ...?

I don't need much. The perfect wave, deep snow up to my waist. I love the gliding sensation of windsurfing. I also feel perfectly at one with nature when I am deep snow skiing.

And what are the things you could do without?

I get annoyed by people playing games or using political manoeuvring to get what they want, I am all for frankness and transparency, and I expect the same from my colleagues. I am very demanding and also impatient when things are not perfect or don't move forward as fast as I would like, however, looking at the situations in other countries quickly makes me rationalize those things I thought were major problems here at home. Putting things into perspective restores my equilibrium and allows me to approach things with a positive attitude; I would definitely encourage young people to spend some time abroad. When you've experienced other places you will see your own country – and yourself too – through different eyes.

Looking forward to the future, where do you envisage your division will be in a few years?

Our increasing environmental awareness will mean ever more stringent energy-efficiency requirements in the construction industry. We aim to be at the forefront of this development as a quality supplier, our green, energy-saving product range provides an ideal basis for our sustainable development in an attractive market. [IF]



Wilfried Ensinger Prize 2013 Dissertation and master's thesis

At the K Trade Fair in Dusseldorf, the Scientific Alliance of Polymer Technology (WAK) awarded prizes for outstanding dissertations. The two Wilfried Ensinger Foundation prizes were awarded to Dr. Stefan Dietrich and Christin Kühr. Dietrich received the top monetary award of €5,000 for his dissertation on the mechanics of sandwich structures, completed at the Karlsruhe Institute of Technology. Kühr was awarded a €4,000 prize for her Master's thesis on the development of a thermoplastic foam particle completed at the University of Bayreuth.

Celebrating company jubilees

A number of long-serving staff members celebrated important milestones in Nufringen. To mark his 40-year jubilee with Ensinger, Ibrahim Babaic was presented with certificates by the Minister President of Baden-Württemberg and the Böblingen Chamber of Commerce. Ibrahim joined the company in 1973 as a turning technician in the Machining division at the former branch plant in Bondorf. In 1980 he changed to become a machine fitter in the extrusion department and since 1995, he has worked in the Industrial Profiles & Tubes division with responsibilities including development and testing. Ibrahim Babaic is only the second employee in the history of the Ensinger to celebrate a 40-year jubilee within the company.



A warm welcome ...

Employees who have joined Ensinger:

Nufringen

Semi-finished products

Rene Fetgenheuer Fatih Halil Martin Länge Günter Meza

Ruben Pfeil

Bernd Röhm

Marcel Schmid

Kay Schulz Elvis Siljevic

Livis bijevi

Jens Wamp

Marcel Wegener

insulbar®

Johann Vranic

IT

Katharina Dimoula Fabian Pilz

Technical Services

Michael Neumann Silvio Schatz

Apprenticeships / Studies

Specialists for Warehouse Logistics: Luca Saur Nikolaj Weimer Specialist for System Integration: Adrian Emanuel Schmidt

Industrial management assistant:

Rebecca Ehrmann

Process mechanics: Patrick Breitmaier Marvin Kopp Sevket Simsek Sinan Tunar

Oscar Zündel

Tooling mechanics: Jacob Deutschle Marius Graf Fabian Husung Julian Simic

Bachelor programme, Mechanical engineering / Plastics technology: Hans Lörcher

Bachelor programme, Industrial engineering and management: Christian Rehfeldt

Ergenzingen

Injection moulding

Janine Betz Patrick Weippert Johannes Vögele

Cham

insulbar®

Thomas Ellmann Andrea Groitl Sascha Langner Daniel Pongratz Michael Pongratz Eduard Vejcel

Cast Nylon

Samir Briki Michael Drexler Martin Hahn Stephan Holzfurtner Horst Polakowski Daniel Schmuderer

Apprenticeships

Office administration: Maria Schwendemann

Process mechanics: Johannes Dietl Markus Schmidbauer

Machining mechanics: Jonas Bauer Fabian Ried Thomas Schneider Carlos Valverde Albarrán

Tooling mechanic: Sandro Beck

Ensinger mourns for a long-standing colleague

On August 20th, **Peter Eckstein** passed away unexpectedly at the age of 64. Peter Eckstein joined the company in April 1986, and last worked in the Technical Service Centre in the Nufringen location as a tool mechanic, specializing in erosion technology. Ensinger will miss Peter Eckstein as a dedicated, loyal and much valued member of staff.

Occupational health and safety



Occupational Safety Specialist Günter Deyerl (left), Deputy Works Council Chairman Werner Bachl and Safety Officer Hans Rank (right) are pleased to take delivery of new defibrillators in Cham.

Life-saving treatment before the emergency services arrive

by Günter Deverl

Since November 2011, defibrillator training has been an essential area of the first aid courses held at Cham. Over 60 first-aiders and occupational safety officers have now completed this special supplementary training. Reassuringly, four defibrillators have been purchased for the Cham plant and it is encouraging to know: There is growing interest amongst staff to receive first-aider training.

Modern defibrillators are designed for ease of application. In fact any employee is capable of operating this medical device, although many still harbour inhibitions about administering electric shocks in an emergency situation.

In 85% of sudden cardiac arrest cases, the incident starts with what is called ventricular fibrillation or ventricular flutter. On average, it takes approximately 11 minutes for emergency response to arrive, which is far too long. With the aid of a defibrillator, cardiac arrhythmia can be normalized by administering directed power surges.

Time is the decisive factor in determining the survival of cardiac arrest victims. As each minute passes, the likelihood of survival diminishes by 10% after only 3-5 minutes, the first brain cells begin to die off. Through early defibrillation and further treatment by the emergency services, the chances of survival increase to over 70%.

Anyone dealing with an emergency situation should follow the golden rule: 1 person remains with the unconscious patient, the other fetches the defibrillator. These shock administration devices are among the few investments which we hope it will never be necessary to use.

Günter Deyerl is responsible for occupational safety at Cham

Editor's note: Next year, Ensinger will be installing a large number of defibrillators in the other two producing locations, and offering first-aiders the relevant training.

BVWInnovation and safety

by Karolin Blaich and Adrian Schenk

Company suggestion scheme helps improve occupational safety

What can we do to prevent occupational accidents? A growing number of employees have been racking their brains and come up with some interesting ideas for the company suggestion scheme (BVW), Suggestions ranged from simple organizational changes to complex technical solutions. There are rewards for accepted and implemented improvement suggestions from staff members, and this year has seen a particularly high number of staff suggestions put into action at Ensinger. A few examples include:

- → To minimize the risk of burns, protective guard plates have been mounted on the temperature control units. These spacers prevent any contact with the hot media.
- → A suggestion for the prevention of cuts and stab wounds was to place a safety cover on the tool trolley. A hinging semi-cylindrical lid now covers the sharpedged and pointed tools preventing unintentional contact.
- → As well as clearly evident dangers, risks also exist which only become evident at second glance. At the initiative of one employee, the cross-hall transportation heavy equipment has been improved. Modified trolleys now in place, not only simplify transport in terms of logistics but also minimize the risk of crushing and fractures due to the reduced risk of tilting.



Another relatively simple solution for the prevention of accidents is to install round mirrors at poor visibility junctions. This is an effective way of preventing collisions between industrial trucks

Although the statutory framework for occupational health and safety in industry is a successful tool, additional and differing requirements are bound to arise in every company, making the upward increase in suggestions submitted to the BVW highly gratifying. Ideas submitted for practical occupational safety are currently enjoying an upsurge at Ensinger, particularly in the production departments.

Karolin Blaich is responsible for energy, environmental and occupational safety management at Ensinger GmbH, Adrian Schenk is a specialist in occupational safety in the Nufringen and Ergenzingen locations.

Winners in Ergenzingen

A third of the complete injection moulding workforce took part in the "Occupational Health and Safety Quiz". There were some worthwhile prizes to be won such as torches, rucksacks and stainless steel thermos flasks. Pictured are the winners receiving their prizes in Rottenburg-Ergenzingen.



Mobile working at Ensinger

Cloud with a silver lining

by Dr. Erwin Schuster

One of the most commonly used buzz words in the IT world today is "the cloud". But what does the term actually mean? What sort of possibilities does it open up and, most importantly, how should Ensinger go about putting the concept to work for the benefit of the company?

What cloud computing means in practice is that IT applications and infrastructures are no longer installed and operated locally. Instead, all these resources are made available as a service by a provider.

At Ensinger, as in most other companies, the need for cloud computing came about predominantly as a result of changing communication needs. Today, it is almost taken for granted that employees will be able to access the information they need everywhere and at any time. Whether on a visit to a customer, while waiting to board an aircraft, or just briefly before delivering a presentation in a foreign subsidiary -

the ability to access the latest data at short notice is extremely useful in many different situations.

From the cloud to the tablet

The first Ensinger cloud sub-project launched was mobile working, aiming to equip employees with mobile terminals such as smartphones, notebooks and in the future also tablets. For sales teams, frequent travellers and employees dividing their time between different workplaces (including their home office) this provides an ideal solution.

Due to the stringent security requirements in place, services for mobile working at Ensinger are made available in the form of private cloud computing, in

other words the company's own IT department operates and monitors the infrastructure itself (see insert).

The meeting areas of all the German producing locations are now equipped with wireless LAN. Tests have also been successfully completed in our foreign subsidiaries, and also in the home office sphere.

All the important information in the right form in the right place – the Ensinger Cloud is way more than just pie in the sky.

Ensinger of

Customers will also benefit from the

IT structures set up for mobile working: Our guests will soon be able to use the WLAN networks in operation in our various locations, although they will be required to register and use suitable security technology.



At the beginning of November, the responsible IT representatives from five foreign Ensinger branches met with the core team in Nufringen to discuss case examples and strategies for further harmonization of the various platforms and applications.

In-house or out-of-house?

The information and telecommunication technology (ITC) provider can be an external partner or alternatively our own IT department. Hybrid solutions comprising both provider models are so widely used.

- → Public Cloud Computing. This model uses ITC resources provided by an external provider made available over the Internet.
- → Private Cloud Computing. In this case, IT applications and infrastructures are centrally available and only used internally. Actual operation of the in-house cloud can be outsourced to an external provider.
- → Hybrid Cloud. With this combined form, it is possible to operate systems which are critical to the running of the business (such as ERP) locally while sourcing other applications (such as e-mail) from a public cloud.

Expansion of the infrastructure

Information and communication technology forms the background of the Ensinger Cloud. Instead of procuring, implementing and operating the ICT infrastructure completely itself, Ensinger will procure the necessary resources from a service provider. The "infrastructure as a service" concept enhances the flexibility of the system and enables new accounting models to be implemented as the need arises.

The new infrastructure not only links the German and foreign locations, but can also be placed at the disposal of customers and project partners where required. As in the case of mobile working, a particular area of focus for Information Management is the creation and maintenance of high security standards for internal and external data exchange.

What happens next

Over the coming weeks, the specialists in Nufringen and Cham will be drawing up the final concepts for our ICT infrastructure, creating the basis for an internationally expandable information and communication platform. The Ensinger cloud is planned to launch in Germany at the beginning of the 2015 financial year.

As CIO, Dr. Erwin Schuster is responsible for the IT Service Centre at Ensinger. He joined the company in January of this year, having previously headed up Information Management at Wittenstein AG, a medium-sized mechanical engineering firm.



The Ensinger booth team before the start of the second K show day in Dusseldorf.



Occupying a two-storey main stand in Hall 5, Ensinger presented its wide variety of different process techniques and competence which has earned the family firm outstanding international acclaim. Finished and semi-finished products, profiles and technical applications were presented for visitors. The stand featured six different branches of industry, including the food sector, a field in which Ensinger has recently launched several new products. The Compounds Division exhibited its own stand again as it did three years ago in Hall 8, alongside a large number of other companies showcasing raw materials and supplies.





Lasting eight days, the lead fair for the plastics industry is something of a marathon for the Ensinger sales teams, as well as the application technicians, marketing experts and buyers. At the same time the "K" also provides the perfect rendezvous for managers and team members from the different subsidiaries and branches. After the fair closes its doors for the day and at the traditional "Ensinger Evening", Düsseldorf's old quarter provides plenty of opportunity for forging new business contacts and for in-depth discussions which tend to be cut short during the bustle of the show.

Once again this year, Ensinger's biggest division chartered a Rhine boat and invited its top international clients and key technical trade representatives to enjoy what has become the traditional Stock Shapes evening, also on board was magician Ully Loop, who amazed the guests with his "magic bar".

The General Management were delighted with the positive outcome of the show, "It will be difficult to beat this trade fair stand in three years' time. The consensus is that the team spirit and cooperation at this year's K were outstanding," recalls Klaus Ensinger. The world of plastics technology will be gathering on the shores of the Rhine again from 19 – 26 October 2016. [JF]

Martin Baras, Head of Marketing and Stock Shapes Sales, is responsible together with his Marketing Department for trade fair presentations across the company group. In the background is the portfolio of innovations.



Albert Artmann (left) is a member of the field sales team for the Machined Finished Parts Division.



Trade fair

Impressions from the evening events

Stock Shapes evening: With an international team on board the MS Loreley



Julia Schanz (left, Marketing Assistant and Stock Shape Sales), with Giancarlo Piatti (centre, Managing Director at Ensinger Italia) and Paolo Senatore (right, General Manager at the Stock Shapes division in Italy)

Jan van Schaik (left), Managing Director at Ensinger International in Singapore, talking to John Speirs (right), former Managing Director of the British subsidiary Ensinger Ltd.





Close-up magician Ully Loup astounded colleagues from the European branches: Paolo Senatore (Ensinger Italia, left), Olivier Gauby (Ensinger France, centre) and Paul David (Ensinger Ltd., right)

Ensinger evening in Düsseldorf's historic centre











New dimensions

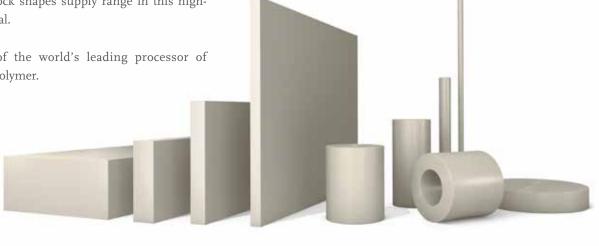
PEEK plates in 150 mm thickness

Ensinger is scaling up its stock shapes portfolio with new bigger dimensions: From now on, TECAPEEK plates will be offered in the thicknesses 120 and 150 mm. Plates in widths of 1,000 mm will be supplied in thicknesses 20 to 60 mm.

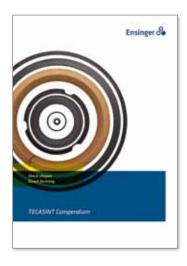
With rods of 210 mm in diameter Ensinger will also be rounding up its stock shapes supply range in this hightemperature material.

Ensinger is one of the world's leading processor of VICTREX® PEEK Polymer.

Fore more information, please contact: Christine Jandl, Ensinger GmbH, Germany, Product management HP stock shapes, Tel. +49 7032 819 261 c.jandl@de.ensinger-online.com



Concentrated expertise about polyimide materials



The new "TECASINT Compendium" contains everything you will ever need to know about Ensinger's polyimide materials. The brochure has been radically updated and significantly extended right on time for the K 2013 trade fair. Alongside additional graphics and illustrations, the revised edition also contains a list with answers to the most frequently asked questions, with information about factors

such as environmental influences, fire behaviour, weather and chemical resistance. The focal section of this 24-page publication is an extended detailed chapter on the mechanical, thermal and tribological characteristics of non-melting high-performance plastics.

The TECASINT Compendium is available in printed as well as digital form in German and English.

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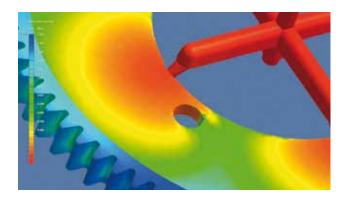
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Volume parts conforming to the highest standards

ISO/TS 16949: Injection moulding development certified

The development processes in place for technical injection mouldings in Rottenburg-Ergenzingen were successfully audited in July, confirming that our product development is fully in compliance with the requirements of the automotive standard ISO/TS 16949. The new certification also encompasses direct formed TECASINT components manufactured using the die pressing technique.

The new development process is the result of a joint effort by a team made up from the Quality Management, Development and Project Management Departments at the beginning of the year. The individual phases of the injection moulding development process are controlled using what is known as quality gates. These are crucial points at which a decision is taken to release to the next project step on the basis of previously determined quality criteria. Q gates are used in addition to the Failure Modes and Effects Analysis. The FMEA has long been established as a key element of



Example of a flow simulation

certified quality management in the injection moulding plant. "The consistent application of this type of method permits the detection of possible process errors and their effects on the product right from an early project stage", explains Markus Schroth, Head of Quality Management for the Injection Moulding Division.





Markus Schroth, Head of Quality
Management for the Injection Moulding
Division: "The overarching improvement
of processes across the different
departments has been acknowledged
by ISO/TS 16949 certification."

The most important automotive engineering suppliers (Tier 1) and the car manufacturers (OEMs) require their subcontractors to be certified to the ISO/TS 16949 standard. The aim of quality management systems in the automotive industry is to improve production processes to the degree that defects and risks are practically excluded. The process-oriented approach not only requires exhaustive auditing and inspection of producing locations but also their interfaces to the outside – in other words their cooperation with suppliers and customers, based on the principle that the totality of all interacting processes decisively influences the quality performance of a company. [JF]

As many car manufacturers and their subcontractors work to the ISO/TS 16949 standard, this new certification is likely to exert a positive impact when it comes to the award of contracts for volume parts. Markus Schroth was delighted with the outcome stating; "The first projects executed this year using the new development process have clearly testified to the efficiency of the system and its benefits for customers." [JF]

Hats off to the Compounds team

A simple solution for improved communication

Hardly any other division of the Ensinger Group can claim such growth over recent years as the Compounds Division. The increasing size of the team, the aquisition of new facilities and increasing product diversity over the years have meant even greater complexity with regard to coordinating the preparation of raw materials. What is the best way to manage communication so that every employee receives the information they need and can actively contribute to improvement processes despite changing shifts? The Nufringen-based compounders have come up with two ingenious answers: An Info Corner and the appointment of designated "hat wearers".

The Info Corner is centrally located within easy reach for production planners and production staff. Noticeboards surrounding the conference table provide information about new events, problem situations and key indicators, as well as staff-related issues. The shift managers use this zone, which is partitioned off from the production areas, to hand over and log important facts and data in a shift book. Large-format plans of action give all staff members the opportunity to launch new tasks or proposals in line with the EVI (Ensinger Improvement Instrument) principle.

The idea of creating an Info Corner came from process technology engineer Anika Harbord and her colleague Devrim Yüksel, who is responsible for work preparation, both have gained further qualifications as operations learning promoters. Whilst working in agreement with Thomas Widmann, the Division's Production Manager, alongside their core activities both are responsible for identifying where training is needed, communicating knowledge and initiating change processes.

In the day-to-day practical running of the scheme, it soon became evident that the production division needed a number of "hat wearers" to systematically take responsibility for defined issues and initiate improvements:



Shift handover in the Info Corner. RMA shift manager Emil Pucko (left) and Maik Schaarschmidt (2nd from the left) with Devrim Yüksel (2nd from the right) and Anika Harbord (right).

- \rightarrow 5S hat wearers keep an eye on cleanliness and tidiness
- → AS hat wearers ensure that occupational safety regulations are adhered to
- → QS hat wearers are responsible for quality

Implementation within one week

The urgent measures hat wearer plays a key role: they are responsible for monitoring optimization steps on a daily basis and for appointing responsible people where required. Urgent actions should be tackled as quickly as possible, with the aim of completion within one week.

The hat wearers go straight to the core of the problems occurring within their specialist area – needless to say with their focus on the factual not the personal level. All those concerned regularly meet at the bistro-style conference table to exchange views and information about unresolved actions, key indicators and achievements. "Now that the scheme has been in place for a few months, the Info Corner can be pronounced a resounding success", reports Anika Harbord. "The flow of information has certainly improved, with all levels now involved, sharing knowledge and singing from the same hymn sheet." [[F]