New friction test bench using a rotatory principle

ENSINGER Service: Further tribological tests possible

Omron develops antimicrobial, inductive sensors for the foodstuffs industry and pharmaceuticals

Mouthpiece made of TECAFORM AH MT red

Cleaning in a dishwasher does not diminish the service life of the product made with this material. In the case of possible contamination with bacteria, disinfection of the mouthpiece is recommended by briefly boiling it in hot water. Due to the high degree of hardness and toughness of the material, TECAFORM AH MT shows no corrosion even on the external surface if unintentionally bitten. Minimum uptake of moisture in the coloured MT plastic ensures dimensional stability for easy exchange of the membrane and mouthpiece. As the mouthpiece can be easily removed, cleaned and used again, this solution provides comfort in use even by several users at the highest level of hygiene.
Dear Readers,

At last, everything is ready! Plans for our first management tool – employee dialogue – have been drawn up, the training has been done and the documents are ready. The care taken in preparation is already starting to bear fruit. A serious confrontation with the instrument and the often expressed wish of many members of staff to be able to use it (preferably before the official start). We know from the experience of individual subsidiaries, what positive effects can evolve when the instrument is used properly. It is important to concentrate on certain effects and not to be intimidated too easily by the complexity of the job (and the expectations of all participants). The centre of attention is focused on two requests. The first is to build a bridge between what the management of a division wishes to achieve and what happens in work groups and at the work places of the individuals concerned. We all have limited powers and possibilities, and this makes it necessary to undertake a little at a time, but to do this wholeheartedly. And this small part which can be achieved has to make a clearly defined contribution to the whole – to the objectives of the company and the division. Every employee has a right to know what contribution he/she is best able to achieve and every member of the company has the duty to try to use their abilities and strengths as best they can. The fundamental significance of the second request of the tool goes back into antiquity. Greek citizens who wanted to have the future predicted at a holy shrine in Delphi were confronted with the words at the entrance to the Oracle: Recognize yourself! That is the point! Satisfying and productive work also depends upon using manpower properly, strengthening existing strengths and leaving that which is just not one’s thing! In order to achieve this, it is necessary at times to make far-reaching changes. True changes are based, however, on self-awareness and willfulness and less on the efforts of others. That is why the instrument is called “dialogue”. Learning more about oneself in an open and constructive dialogue and – with the support of understanding colleagues – learning to risk more!

It would be nice, if as many of us as possible could learn to create this bridge between the company goals and that what we do and move towards new horizons with courage and self-confidence in the sense of the Oracle. Then the dialogue would have fulfilled its objectives.

Similarly, a further change at the company ought to have increasing repercussions. I am talking about the single most important project of our colleagues from the injection molding department, called “Delta Null (Zero)”. The aim of the project is to abolish shortfalls (delta) in order to completely satisfy automobile standards, in other words to develop, produce and sell in, in complete conformity with the standard requirements of the automobile industry. The quality changes are based, however, on self-confidence in the sense of the development and production of this branch of industry are highly developed and aim to match parts as precisely as possible to the complex system conditions of the components, to permit a smooth transition from small scale to large scale production and to eliminate errors systematically and quickly. Only in this way is it possible to introduce numerous innovations and improvements without introducing a serious loss of quality into millions of vehicles. The methods used and the procedures require intensive team work, a clear allocation of responsibilities and the use of new quality methods. We will report in more detail about these in one of the next issues. One thing is for certain: this project, which is being accompanied intensively by external specialists, demands a lot from our colleagues, but can and will drastically improve the way we all manage our processes and structures. I would like to wish you all lots of enjoyment reading this issue.

Yours sincerely
Klaus Ensinger

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**New insulbar® brochures**

(Wey) In the meantime, the latest version 1/2006 of the insulbar® standard program is available in ten languages and provides once again an extensive selection of profiles without tooling costs. General information about insulbar® insulating profiles for windows, doors and facade construction can be found in the current edition of the image brochure, which is available in German and English. We will be pleased to receive orders under insulbar@ensinger-online.com

**What keeps aluminium together deep inside:**

insulbar® insulating profiles

(Wey) Whether it is snowing or the sun is shining: Thermal separation into internal and external temperature zones using insulbar® insulating profiles can save quite a lot of energy when heating and cooling. insulbar® profiles made of high-performance plastics find use in metal windows, doors and facade construction.

**Perfect solutions – for standard and individual systems**

insulbar® standard profiles are available in narrow graduations (construction sizes from 12 to 36 mm), in straight or offset variants and with multiple function zones. Furthermore, a multitude of complex geometries for specific applications, e.g. full profiles or hollow chamber profiles, have been developed according to individual ideas of the customer. The highest fire protection requirements are satisfied by special and unique fire protection profiles. Composites of metal profiles with these profiles can withstand enormously high temperatures for up to 60 minutes. The versatile range of material solutions made of TECATHERM® plastics rounds off the options available for profile design. A further advantage of the insulbar® profiles is that they are a single material system and thus directly recyclable, in contrast to constructions in which thermostetting foams, in particular, are used.

**Prototyping – safety right from the start**

insulbar® profiles are made available very quickly for pre-trials via rapid prototyping, machined from semi-finished products in the original plastic or extruded using prototype tools which are identical to those in serial production (insulbar®-prototyping). The thermal characteristic data of constructions are optimised with the help of modern software. The insulbar® design is agreed with the customer, amongst other things, using finite element calculations to determine heat transfer coefficients. A consistent flow of data accelerates the processes and creates flexibility from planning to production.

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**Thermix® TX.N edge spacers take off**

(Wey) Although they have only been on the market since September 2005, the new edge spacer generation from ENSINGER has experienced an extraordinarily positive response. In order to manage the high demand, the production capacities for the innovative “warm edge” edge spacers are currently being greatly expanded and the product range has also been extended to cover intermediate space sizes of 8-20 mm between panes. After May 2006 things will move forward in “full swing” and the complete programme will be available.

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**Business Unit Building Products**

The usable moment of inertia of the composite can be enormously increased by optimized knurling of the aluminium shell combined with high-strength insulbar® profiles. The following schematic example is intended to clarify this: two aluminium hollow shells (30 x 30 mm) and individual systems which are identical to those in serial production (insulbar® prototyping).

If the aluminium profiles are not knurled and thereby have no transverse strength (gliding, low shear joint), then only the sum of both individual moments of inertia of 5.88 cm⁴ can be used independently of the span width. With weak knurling and assumed low shear strengths of 20–25 N/mm, only between 13 percent (with 80 cm) and 68 percent (with 200 cm) of the maximum possible composite moment of inertia of 42.6 cm⁴ is utilisable in the important span width range of 80 to about 200 cm due to the lacking or poor composite effect.

Further information in the Internet under www.insulbar.com
finished products, our sales contact Ühlken, export manager for semi-
products, to 2002.
How do you profit from ENSINGER?
In 1991, we had decided on
the shape of semi-finished products. Therefore, another training session is already planned for the end of May and will take place at the ERIKS Core
Compliance Centre in Hoboken (Antwerp).
How do you care for your customers?
Our customers profit from a maximum external focus, which means that we visit them in order to see and understand their application requirements. This helps us to steer the right di-
rection at all times in order to meet the successful needs of solutions in plastics. Our approach therefore
fits perfectly with ENSINGER’s Ask-think-succeed mentality and forms the link between the local market requirements and ENSINGER’s Business
Development.
How is your ability to support?
We have a large portfolio at our central distribution stock in Hoboken but we also have an optimum logistical concept. At least once a week we have a fixed consignment from Nürtingen.
One of our six core competences is the “Knowledge of Logistics” which means the continuous streamlining of logistic processes internally but also externally, i.e. for the client and partner supplier.
How do you see the potential for further development?
2006 is the year in which we will focus on creating the integrated Solutions in plastics concept. Since that’s exactly how we differentiate ourselves from others in the Belgian market. Our next action in this respect is the launch of our new webpage www.solutions-in-plastics.info. It will work as an influence during our ambitious trajectory of growth.
In June, ERIKS will yet again organise the “Technivent”. What exactly is this event?
Technivent is a large house trade fair where our leading partners can represent themselves. The event will be the highlight of our 50th anniversary in the summer. ENSINGER, who is one of our 20 leading partners will have the opportunity to exhibit the full spectrum of products at this happening. Using this event, we would like to emphasize ERIKS’ role as a partner in knowledge and technology. Therefore, we have chosen ERIKS: The Art of Technology as the theme for this happening. During the trade fair a photo exhibition will be held. We expect the event to attract 1,500 visitors.
We want to show the Belgian industry the latest product developments and the distinctive business relationship between ERIKS and ENSINGER.
Mr. van Dyck, thank you very much for the interview.

The impulse interview
Questions to Erwin van Dyck, ERIKS

The ERIKS group is active with 2000 employees through almost 50 group companies in Western Europe, USA and South-east Asia. The group offers a broad and high-
quality range of industrial components. Their portfolio includes work in the fields of hydraulics and pneumatics, measure-
ment and drives, sealing and fluid technology, thin wall vessels, systems. Since 1991, ERIKS has been the Belgian trading partner for ENSINGER.
Manager of the ERIKS Plastics Business Unit, 31-year old Erwin van Dyck, spoke to impulse. He has a Master in Electro-
Mechanics, with specialisation in Automation. Before he worked for ERIKS, he was Sales and Project Manager for pumps and valves for a Swedish engineering company. In August 2000 he moved from the world of stainless steel to plastics as the chairman of a new challenge, joining ERIKS as Manager of the Plastics Business Unit.
What is ERIKS’ success story?
ERIKS has evolved further in the role of a leading trade company by focusing on market development activities and supplying new, innovative solutions for a wide range of industrial applications. Our philosophy is to be the preferred leverage in creating added-value, not only for the local industry as a market but also for a selection of strategic producers, giving them close partnership in product and market development.
What are your competences?
We have six „core competences“ and each of them is driven by one element of knowledge, namely knowledge of markets, knowledge of products, knowledge of applications, knowledge of customising, knowledge of logistics and knowledge of infrastructure (hard- and software).

Measuring our success by growth in turnover, a 48% increase compared to the year 2000, means that our approach is successful.

What are the milestones of your cooperation with ENSINGER?
We have been co-operating for 15 years now. In 1991, we had decided on placing the ERIKS range from ENSINGER, at the moment mainly in September 2002 was a milestone in our cooperation with ENSINGER?
Mr. van Dyck, thank you very much for the interview.

How do you profit from ENSINGER?
We appreciate the support of Björn Uhlin, export manager for semi-finished products, our sales contact Ute Schäffer and by the Technical Marketing department and we are always pleased about the prompt and expert reactions to all our enquiries and questions. At the beginning of March we attended a training session, also as an introduction to ENSINGER. Applications expert Peter Bargarth refreshed and intensified our knowledge in the basic end of E-moduli, testing methods, artistic issues and product properties in general.
We believe that related application issues and problems are crucial, especially when developing OEM markets with engineering and high performance plastics. Therefore, another training session is already planned for the end of May and will take place at the ERIKS Core Compliance Centre in Hoboken (Antwerp).
How do you care for your customers?
Our customers profit from a maximum external focus, which means that we visit them in order to see and understand their application requirements. This helps us to steer the right direction at all times in order to meet the successful needs of solutions in plastics. Our approach therefore fits perfectly with ENSINGER’s ask-think-succeed mentality and forms the link between the local market requirements and ENSINGER’s Business Development.
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Mr. van Dyck, thank you very much for the interview.

The high performance thermo-plastic TECAMAX SRP has over-
come an important hurdle by passing the ABD 0031. In a test carried out according to this norm in the Fire Test Laboratory in Bremen, TECAMAX SRP passed all fire tests at first go. AIRBUS Deutschland GmbH became aware of the plastic after a lecture held at the Aerospace Forum Baden-Württem-
berg in Friedrichshafen. The group is caused by the high strength of the without the use of fibre reinforcement and is consider-
ably stronger than other non-rein-
forced thermoplastics. TECAMAX SRP excels through excellent mechanical properties, also at extremely low temperatures, remarkably high compression strength, high scratch and abrasion resistance and the outstanding resistance to chemicals.

Moulded polyamide tubes from very small to very large
ENSINGER GmbH has extended the standard portfolio of TECAST tubes and centrifugally cast pipes with a number of new dimensions: the moulded polyamide semi-
finished products from very small to very large are available with wall thicknesses of 0.25 to 70.10 mm and internal diameters 30 to 500 mm. In addition to stocks of TECAST tubes and centrifugally cast pipes, the portfolio also comprises numerous dimensions and modifications which can be produced at the customer’s request. As customers cannot always order large amounts, especially in those special sizes, the company has changed a number of processes and can now accommodate special requests with lower minimum quantities in the area of small tube dimensions.
Even the factor time has been optimised: ENSINGER now offers faster access to the very broad spectrum, shorter reaction times can be achieved by the customer.
In contrast to rods, tubes have multiple advantages: in applications which require hollow materials, the customer has less reworking. The machining process is also more economic due to less waste. The customer can also order dimensions which are closer to those of applications are calendering cylinders, bus-
es, rope pulleys, castors, gear
racks, gearboxes parts, etc.

New brochures
Semi-finished products
catalogue completely revised
ENSINGER has revised the product delivery program for “Semi-
finished products made of technical plastics” and reissued it. The almost 90-page catalogue contains, in addition to the dimensions available, even more pages on me-
chanical, thermal and electrical material reference values and details about chemical resistance, as well as information on the processing of these plastics. In the area of Advice – Industry and industry specific, all contact partners are listed with contact data and photos. The catalogue is available in German and English. It is available under www.ensinger-
online.com as a download file, however, it can also be ordered free of charge under shapes@ensinger-
online.com.

Business Unit Semi-finished Products

Special brochure for distributors
In order to further develop markets in those countries in which the company operates through distributors and to make the TECA product even better known, ENSINGER has de-
signed a special brochure. The fol-
lowing plastics are explained in de-
tail therein: TECAFINE, TECAMID, TECAFORM, TECANAT, TECADUR and TECAMIT. TECALPON as well as TECAPEX. The main properties and the technical reference values are described. A special main em-
phasis has been put in explaining areas of use and providing applica-
tion examples – as it is often not known in how many areas and in indus-
tries plastics are used and what they can really do. The brochure is available in German, English and French, as well as in seven other languages. Enquiries under shapes@ensinger-online.com.
Wilfried Ensinger receives the Order of Merit of the Federal Republic of Germany

In December, company founder Wilfried Ensinger has officially opened the new UK headquarters at Tonycelli, South Wales. ENSINGER has had a presence in the UK for the past 18 years and during that time has expanded from a small single factory with three people to seven strategic locations currently employing more than 230. Alone in Tonycelli, there is a staff of workforce of 100 and in the course of the coming three years, 48 additional employees will strengthen the team.

From the new facilities, ENSINGER is selling stock shapes, building products, injection mouldings, custom cast components and precision machined plastic parts.

Managing Director, John Spears, said: “The new purpose-built factory reinforces our position as a leading UK sub-contractor in precision-machined plastic parts.

The official opening was carried out by company founder Wilfried Ensinger and his wife Martha and the Honorary German Consul in Wales, Heike Rother-Simmonds, was also in attendance.

She congratulated Wilfried Ensinger on the Federal German Government’s Order of Merit which was presented to him by President Horst Köhler.

“We have an extraordinary and broad range of products, very committed and motivated employees and an excellent service. This approach has resulted in a growing business in Wales and we are proud to be in Walsh Top 300”, says Wilfried Ensinger. "Now we look forward to further growth at our excellent new site at Tonycelli."

From Stuttgart to India – 2006 will be the “Year of trade fairs”

Several politicians took the opportunity to visit companies in the region before the state assembly elections and to inquire locally about their needs. ENSINGER was also the object of such a visit.

Ernst Pfister, Minister of Economic Affairs, following the speech of the State Assembly of Baden-Württemberg, had visited the ENSINGER subsidiary in Sao Leopoldo during a trip to South America last November to promote the industrial location South America. ENSINGER was represented in February for the first time through a joint company booth at the exhibit for the Federal Republic of Germany. The enormous economic growth in India is also reflected in the many interesting contacts it was possible to make there.

Upon returning from the Orient, we went straight to Stuttgart in March for the annual MEDTEC. Our new products were successfully showcased here for the field of medical device technology. A very positive result was evident at this trade fair especially with the qualitatively high level of discussions and detailed enquiries. ENSINGER thus intends to increase the size of its booth at MEDTEC next year, in order to highlight more strongly the important relationship to this branch of industry.

A further destination in March was the SPE European Thermforming Conference in Salzburg. In the first instance, this provides a forum for members of the SPE (Society of Plastics Engineers) to professionally exchange ideas in the dynamic thermforming industry, as well as the provision and promotion of expertise concerning plastics and polymers.

Furthermore, it was also possible to make valuable contacts to interested parties throughout Europe. In particular, our technical plastics for deep-drawing applications were greatly in demand – ENSINGER was the only representative of the field. The picture shows Business Development Manager Dr. Jürg Wieder at the ENSINGER booth.

For questions and suggestions please send an email to impulse@de.ensinger-online.com

Visit before the state assembly elections

Politicians visit ENSINGER

Emast Pfister, Minister of Economic Affairs in Baden-Württemberg, visited us in January.

environmental protection, research, training and wage costs with the general managers.

In March, the company was then visited by a CDU delegation: Stefan Mappus, chairman of the CDU parliamentary group in the Baden-Württemberg state assembly, and the parliamentary candidate Sabine Kurz discussed current topics with the general management and were also shown the production halls.

Karl Weyer One could say that for ENSINGER 2006 will also be a year of trade fairs. Six trade fairs have already been attended with great success in the first four months. In January, we were able to report successful participation at MORTEC in Hamburg. At PLASTINDIA in New Delhi, one of the largest plastic trade fairs in Asia, ENSINGER was represented in February for the first time through a joint company booth at the exhibit for the Federal Republic of Germany. The enormous economic growth in India is also reflected in the many interesting contacts it was possible to make there.

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Looking forward to further trade fair events, which are still to take place this year, the ACEMA in Frankfurt needs to be mentioned in particular, at which we will participate again in May after having had a break. We shall be pleased to welcome you to this trade fair for chemical technology, the environment, and biotechnology, which will be held from 15th-19th May 2006 ENSINGER booth G26 in Hall 3.0.

Furthermore, an in-house trade fair Techvent 2006: The Art of Thermforming takes place at Eniks N.V. during their 50th anniversary celebrations on 1st and 2nd June, (see also interview, page 5). Over 20 partner companies of Eniks will be exhibiting their product ranges, and about 150 visitors from different branches of industry are expected at this event. The meeting is a mixture of know-how transfer, networking and celebrations surrounding Eniks N.V. Bjorn Ulliken, Export Manager Semi-finished Products and Rainer Gottschalk from Business Development will be introducing interested customers and visitors to the ENSINGER portfolio at the ENSINGER booth.

In September, the most important fair for window and facade construction in North America will take place in Las Vegas: Glassbuild America opens its doors from 19th to 21st September.

Finally, the biggest trade fair for glass, GlassBuild, takes place from 24th to 26th October in Dusseldorf. ENSINGER building profiles presents the full range of the product line Thermix® spacers and bars for insulating glass.

For questions and suggestions please send an email to impulse@de.ensinger-online.com

IMPRESSUM

Newsletter of ENSINGER GmbH Rudolf Diesel Str. 9 71154 Nürtingen, Tel. 07032 19-0, Fax 07032 19-100, info@ensinger-online.com, Internet: www.ensinger-online.com

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