0

Issue 4/2005

"Joint growth - shared success"

ENSINGER's branch in Cham celebrates its 25th anniversary



In recognition of the occasion, Mayor Leo Hackenspiel presented Wilfried and Martha Ensinger with the new gold coin of the town of Cham.

At the end of September, ENSINGER's Cham branch celebrated the 25th anniversary of its founding. From humble beginnings with five employees in a small, rented building in 1980, it has developed into the ENSINGER group's biggest European production site, with 320 staff. "Joint growth – shared success" was the motto of the event, and Works Director Andreas Alsfasser also dealt with this slogan in his address. Growth had been a lot to do with customers, whose problems and needs provided a constant chal-

lenge and motivation to find the optimal solution to suit each individual case, since, according to Alsfasser, "the customer's success is our success." Enormous growth has also taken place in staff numbers – and there has also been shared men-



A long ladder was needed so that Works Director Andreas Alsfasser could point out the milestones of ENSINGER's success.

tal growth as a whole, and in the individual departments. Among the dignitaries present to offer their congratulations were District Administrator Theo Zellner, and the Mayor of Cham, Leo Hackenspiel, who both emphasised again and again the great amount of work the company management do for Cham business

Wilfried Ensinger was applauded for his address, in which he acknowledged the sites and employees in Cham and Nufringen.

Managing Director, Dr Roland Reber predicted that in future, more long-term management decisions would be made in Cham, and that the international Board, the Executive Management committee and the Advisory Board of Ensinger Holding would all hold meetings in Cham. According to Reber, "all product lines are growing briskly, and really promising products, such as the warm-edge spacer, specialised machined products for medical



Wilfried and Martha ENSINGER cut the

technology, and cast products for the cable car and crane industry are located in Cham."

The anniversary was fittingly celebrated with a large family party. In addition to the family of the company's founder, Wilfried Ensinger, the entire staff of the Cham branch was there with kith and kin. The fun afternoon programme of events offered something for the whole family. The children were entertained in a brightly-coloured tent with juggling, magic and clowns, whilst the adults could help themselves to the gigantic cake buffet, and later to the delicious evening

In this issue:

Page 2

■ Editorial

Semi-finished Products Division:

- New Dimensions
- TECATOR: Polyamideimide to meet the highest requirements
- Cut pieces "A la carte"

Cat piccoo 7 tia cai

Page 3

impulse-Interview:
Andreas Alsfasser

Building Products Division:

■ Thermix TX.N – the new generation of spacers

Page 4

- Wilfried-Ensinger-Prize awarded
- ENSINGER on Tour
- Donation for KUNO project
- Creative new trade fair stand
- Member of the Baden-Württemberg aerospace forum

The fair schedule is filled at ENSINGER MOTEK – BATIMAT – Transmission Expo – NORTEC

Review: ENSINGER at MOTEK in Sinsheim

[Kal/Wey] On 27 September 2005, MOTEK, the international trade fair for handling and assembly technology, opened its doors for four days once again. As in previous years, ENSIN-GER was represented in Sinsheim with some new products. Although visitor numbers have decreased slightly in recent years, the value of individual visits has increased sharply, and several promising contacts were

made, giving rise to high hopes for good business following the trade fair.

Review: Building products at BA-TIMAT in Paris

At ENSINGER building products' first appearance, the insulbar® (insulation profiles for metal windows, doors and facades) and Thermix® product lines were presented. The entire range of the new Thermix® TX.N warm-edge spacers were on public view for the first time. BATIMAT is

one of the largest, most important construction trade fairs in Europe. There was a very encouranging response to the ENSINGER presentation, which was confirmed through numerous new contacts.

Preview: First appearance at the Transmission Expo in Berlin, and at NORTEC once again

We hope to make just as many interesting contacts at the Transmission Expo in Berlin, which we are taking part in for the first time this year. You will find us at the international trade fair for vehicle transmission technology from 6 to 7 December 2005 in the Maritim Hotel on stand no 42.

ENSINGER will then start the new year with an appearance at the NORTEC trade fair in Hamburg, which takes place every two years. Visit us in the far north from 25 to 28 January 2006 at the trade fair for production technology in Hall 10, ground floor, on stand no. 120

Highly demanding components for high precision positioning systems made from Vespel®

In close co-operation with ENSIN-GER, Huber Diffraktionstechnik GmbH & Co. KG produces high precision positioning systems with Vespel® components, that cope with highest demands and most extreme circumstances.

For over three decades, Huber has been developing high precision positioning systems. The required accuracy of the positioning of the movement and rotation systems range in the lower µm and arch second region. The systems are increasingly used under extreme conditions as for example in vacuums or under cryogenic temperatures and in surroundings where there is high exposure to rays.

The required components must demonstrate long term resistance. Simultaneously, the materials used must not negatively influence the application or the measurement result.

The assembly groups that were used until now contained components which did not fulfil the requirements of the extreme operating conditions and due to increasing demands it became necessary to replace them. Due to its extraordinary properties, Vespel® is the material of choice.

If the part's symmetry allowed, the components were directly replaced by Vespel* parts. It this was technically not possible, the components were exchanged to parts with varied

constructions or new developments.

For example very complex UHV limit switches (operative range up to 10E-10mbar) were developed for the sur-veillance and restriction of the positioning area. The housings are made from Vespel® SP1.

The remarkable material properties can be seen in the production

process and enable the realization of a filigreed construction (with low tolerances) as in diverse applications under extreme conditions.



For further information, please contact our Vespel® expert Bernhard Binder-Reisinger, b.breisinger@de. ensinger-online.com.



Editorial

"Strength lies in change"



Dear Readers.

Steve Jobs, founder and co-owner of the computer firm Apple, was invited to speak to the students of Stanford University this summer. Whilst talks like this are usually forgotten quickly, this one left a lasting impression and contin-

ues to be discussed. I would like to present one of the talk's key points to

Steve Jobs founded the Apple business with a partner when he was 20, and in 10 years grew the company to a staff of 4000 employees and a turnover of 2 billion dollars. Then, because of his headstrong ideas, he was urged by his partner and the supervisory board to leave the company. Jobs describes this time as a mixture of personal defeat, shame

and disorientation. The whole focus of his previous life had been destroyed in one fell swoop. But he perceives what happened next as the start of one of his most creative periods. In the following five years, he founded two new businesses -NeXT and Pixar. Pixar has become the most successful animation studio in the world, and NeXT was bought by Apple, and forms the core of current Apple technology. Finally, Steve Jobs also returned to Apple. Today he once again guides the fortunes of the company that he founded, that kicked him out, and that he, according to himself, has never stopped loving.

Steve Jobs' personality is clearly fascinating. However, I think that many people have this type of experience, generally not in the public eye and not always with such far-reaching consequences. There are many little losses, which, when paired with the

right attitude, can lead to new opportunities, to smaller and larger gains. Unfortunately the general mood, particularly in Germany, does not appear to support this mindset. Risk should be minimised and difficult changes should be counteracted by passing off responsibility and pointing out mistakes. Strength seems often to be used only in order to hold on to as large a piece as possible of an ever-shrinking pie. High-level whining is the common denominator.

Defending privileges, created for us by previous generations, seems to me to be counterproductive. Strength lies in change. Changing circumstances offer new opportunities, even if change is not always pleasant. I am thankful that the seizing of new opportunities is the rule rather than the exception at ENSINGER. Perhaps this is thanks to our founder, who left a secure position with good prospects and

took on high risks in order to realise his vision. Perhaps it is also due to the fact that we often replace "old" materials with new technical plastics and, with our customers, take the risk of leaving behind something tried and tested in order to create something better. In any case, I look forward to continuing to look for the strength of change with our partners and colleagues. Creativity, trust and optimism lead to joint projects, and these form the basis of growth at

May I wish you all a winter full of change

Yours.

R.ful

Roland Rebei

Semi-finished Products Division

"À la carte" cut pieces now available

Six months ago, in addition to our regular cut pieces service, ENSINGER set up our special customer service "ENSINGER à la carte", which has been eagerly taken up. We would like to remind you of the three delivery options:

Express delivery: cut pieces for breakfast

Due to a high level of demand.

ENSINGER has expanded the

range of its warehouse stock of

TECAFORM AH (POM-C) tubes.

The following sizes are now in

(Ø outer / Ø inner in mm; new sizes

56/40

60/30

60 / 40

60/50

70 / 36

70/50

75/50

80 / 40

80 / 50

80/60

90/50

90/70

100/50

100/70

100/80

110/50

125/50

125/80

125/100

135/110

150 / 100

150 / 125

165 / 100

180 / 125

180 / 150

200/100

200/150

200/175

230/200

250/200

280/200

300/200

stock:

shaded grey)

20/10

25/10

25/15

25/18

30 / 15

30/20

36/20

36/25

40/25

40/30

45/25

45/36

50/20

50/30

50/40

56/30

56/35

For a supplement, extremely urgent cut pieces can be delivered to the customer by 8am on the working day following the order. This service is available if cut pieces, tube sections and rod sections without further work are desired,

and these are ordered from ENSIN-GER by 12.30pm.

Fast delivery: cut pieces over coffee

If it can wait until the afternoon, for a small supplement, the cut pieces can be delivered on the following working day before 5pm. ENSINGER will also guarantee this service for cut pieces and sections without further work, 7ordered before 12.30pm.

Priority delivery: cut pieces in larger portions

Up to 100 cut pieces can be ready within 24 hours at no extra cost. For this service, an order for cut pieces and sections without further work only needs to be made by 4pm.

TECATOR: Polyamideimide to meet the highest requirements

In the case of materials in the uppermost performance category, it is often just nuances of their properties which decide whether they are used. For this reason, ENSINGER has complemented its product range with the high performance polyamideimide thermoplastic TECATOR to satisfy highest requirements. The material has particularly high thermal resilience and can be used both for cryogenic applications and in the high-temperature field up to 270 °C. Furthermore, the very rigid material TECATOR exhibits high mechanical strength and toughness.

Due to its low thermal coefficient of expansion and the extremely high creep resistance, the material is particularly suitable for highly demanding components. Further characteristics are high long-term stability and high fatigue strength; TECATOR is also self-extinguishing in accordance with UL 94 V-O.

Good chemical resistance is a further characteristic – TECATOR is resistant to conventional solvents, lubricants and fuels and can be used in contact with many different acids. The plastic material is also highly resistant to high-energy radiation.

ENSINGER supplies the yellowbrown natural type TECATOR 5013 and the black slip-agent modified type TECATOR 5031 in the form of sheets and rods. Both versions can be cut easily with conventional tools and machines.

In addition to the above-mentioned general profile of properties, modified TECATOR 5031 has excellent abrasion strength and good antifriction and rubbing properties.



Due to its outstanding material properties, TECATOR is suitable for use in automobile construction, electronics, cryotechnology and in the aeronautical and space engineering fields. It is also the material of choice for demanding components in the fields of precision engineering, mechanical engineering, medical engineering, and vacuum technology, as well as semi-conductor technology.

In comparison to metallic assemblies, components made of TECA-TOR are lighter but with comparable properties and are used when weight savings are required.

TECATOR is suitable for example in switching and connecting parts, plain bearing bushings and discs, plain bearing bushings and discs, piston rings, valve seatings, sliding tracks, ball bearings and ball valves, casters, insulating parts and mechanically and thermally stressed construction parts.

ENSINGER also offers the manufacture of pre-fabricated parts and components made of TECATOR through its internal machining division.

New sizes:

TECAFORM AH (POM-C) tubes

Previously, the new sizes were only available as special orders, with a minimum order quantity. The customer can now take advantage of the expanded warehouse stock range.

TECAFORM AH tubes in black can now also be ordered at short notice.

TECAFINE PE and PP rods

Quick delivery is becoming more and more important for the smooth running of production processes. The company has therefore considerably expanded the range of sizes of TECAFINE rods in stock in the Nufringen warehouse.

TECAFINE PE in natural and black is available in several sizes between 8mm and 80mm diameter. TECAFINE PP in natural and grey is available from 8mm to 12mm and 60mm to 120mm diameter.

Many other sizes are available at short notice, and many other colours can be produced, depending on the customer's specifications.

A list of all currently available sizes can be downloaded from the inter-

The ENSINGER TECAFINE range has very low moisture absorbency, low density and excellent insulating properties. Compared with other plastics, these materials are costefficient, high-performance thermoplastics for versatile engineering.

For further information, please contact info@ensinger-online.com



The impulse Interview

Questions to Andreas Alsfasser



Since 1998, Andreas Alsfasser has held dual positions at ENSINGER in Cham: He is Manager of the Service Center Plant and Buildings Cham and Technical Manager of the Building Products

Division.

After studying plastics technology he worked for various companies: He started as a car body design engineer with Opel in Rüsselsheim, after which he held a number of managerial posts in several companies, including a year as plant manager in Brazil.

Congratulations on the success of the anniversary event! It must have been quite a challenge to organize such an informative and entertaining event and to bring so many employees and their families together?

Yes, you are right. As this was the first meeting of its kind, we did not know what to expect. But we had a good organization team, which was able to keep calm even when we received a whole lot of late registrations shortly before the day and we had to add on extra capacities.

You are one of the few people at ENSINGER who has an operational double function. What are your exact duties and responsibilities?

On the one hand, I am Technical Manager of the Division Building Products and as such responsible for production, raw material supply, quality assurance, production planning as well

assurance, production planning as well as for shipping and logistics. On the other hand, I am Manager of the Service Center for Plant and Buildings in Cham: Technical Services, i.e. maintenance, procurement of machines and equipment and building services enjenering as well as administration, tool making, occupational safety and the training apprentices and trainees belong to my area of responsibility. As works manager in Cham, I also per-

As works manager in Cham, I also perform duties spanning across more than one site, e.g. contacts to municipal establishments and authorities as well as process planning.

as process planning.
I am also a member of the board of the Chamber of Commerce and the Action Group in Cham. In the case of the latter, which is an initiative of our company founder Wilfried Ensinger, we actively participate in presentations, continuing education events and activities to promote training, such as e.g. open days for school graduates wishing to choose a career.

Internally, I try to ensure that the resident divisions not only think just of themselves despite profit targets, but that the common success of the factory is kept in focus. For this reason, I see myself as a mediator between the divisions who has to bundle the various requests and interests together, so that acceptable solutions can then be found in agreement with all concerned.

What modifications have you proposed and been in charge of recently?

One of the most recent activities was the extension and redesign of the training workshop, which took place during rebuilding work in the Machining Division.

ENSINGER recently received two new raw material silos for the Building Products Division for storing plastic granulate just prior to the anniversary. The 18 meter high and three meter wide silos serve to ensure continuation of supply and prepare for possible additions to our capacity.

Furthermore, we have erected a new tool storage tower, which was necessary due to the continuously growing number of tools. An automatic high rack warehouse with a computer-controlled lift-warehouse system now simplifies the access to building product tools. We developed an idea together with suppliers for the optimal utilization of space and took logistics requirements into consideration at the same time.

A new 5-axial milling machine was purchased for the tool division, which allows us to manufacture new production-optimized tools and also to cover capacity peaks in machining. We have also bought a new vertical eroding machine for more cost-effective production.

Is further expansion planned for the future?

Yes, as was mentioned at the anniversary, at least some expansion in the mid-term is planned. Our premises are becoming more confined all the time. This means in the short-term that existing halls will be extended, but that in the long run we have to start with the planning of a new hall.

Where do you see the advantages of the location in Cham?

The site in Cham was chosen 25 years ago because one of the employees working at that time in Nufringen came from the area. That proved to be a good decision over the years. A big advantage of the location is the attitude and motivation of the staff, their point of view about work and loyalty to the company, which are quite exemplary in this respect. As ENSINGER has a very good reputation in the area, it is also never a problem to find new recruits for our training program.

our training program.

On average, we have 20 trainees per year- five to seven new youngsters are hired every year; as a rule our trainees are always amongst the best graduates in their class, often with distinctions from the chamber of commerce.

Which milestones have you reached in the past few years at ENSINGER and passed?

An important milestone was the launch of the so-called operational data collection system for process-optimized order processing in the Building Products Division about two years ago. Since then, orders can be entered directly at the control station and processed. Planning has become more transparent thanks to the minimization of paperwork and the centralized registration of orders, processes and work times.

With regard to flexible working hours, I introduced time accounts about two years ago into our shift operations. We have always used the Knauth model for our 5-shift system, so that we were able to tie this in quite easily. As one is particularly dependent in the building industry on seasonal effects and the business cycle, this is very useful and we are able to react flexibly as the situ-

ation requires.

In the course of a larger project, we were able to distinctly lower our reject quota through process optimization and technical solutions.

An important and quite current milestone is the new Thermix® TX.N profile, which I think will be a winner because it offers what customers want: Simplicity in handling and excellent thermal insulating properties (for more details see the special report on this page).

Mr. Alsfasser, Thank you for the interview

Building Products Division

Thermix®TX.N

The new generation of spacers

[Wey] Thermix® TX.N is a further top quality product from ENSINGER in a rapidly growing market for "warm edges".

The insulation glass edge bonding with Thermix® TX.N is a reasonable and economical investment in energy conservation and comfort benefits for the users of the glazing in windows and facades

More than 10 years of experience in the development, production and application of warm-edge spacers has been put into the new Thermix® TX.N product range. With Thermix® TX.N you achieve a considerable energy saving and a distinct improvement of interior room climate in an economical an intelligent way.



Thermix® TX.N - this is "warm edge"

Only the best of everything

The combination of stainless steel and highly insulating plastic ensures that the respective material properties are optimally used. This results in the best insulating values. Thermix® TX.N spacers are suitable for all standard insulating glass products.

It 's all a matter of the Ψ-value

The valid European standards do not only consider the loss of warmth through the glass and frame of the window, but also the loss of warmth through the edge bond of the insulated glass. These have been calculated according to EN ISO10077-2:2003/10.

Comparison of Thermix® TX.N with aluminium spacers

Fenstertyp type of window	Holzfenster wooden window		Kunststofffenster plastic window		Metalifenster therm, getrennt metal window thermally broken	
Glas/glass U _g Rahmen/frame U _r	1,2 W/m²K 1,4 W/m²K		1,2 W/m²K 1,9 W/m²K		1,2 W/m²K 2,0 W/m²K	
Abstandhalter/spacer	Aluminium ⁽¹⁾	Thermix® TX.N ⁽²⁾	Aluminium ⁽¹⁾	Thermix [®] TX.N ⁽²⁾	Aluminium ⁽¹⁾	Thermix® TX.N(2)
ψ-Wert/ψ-value	0,08 W/mK	0,040 W/mK	0,08 W/mK	0,036 W/mK	0,11 W/mK	0,053 W/mK
Verbesserung/improvement ψ durch/by Thermix®TX.N	50%		55%		52%	
U _w Fenster/U _w window	1,46 W/m2K	1,36 W/m²K	1,67 W/m2K	1,56 W/m²K	1,72 W/m2K	1,57 W/m²K

(1) Values for aluminium spacers: pr EN ISO 10077-1: 2004/8

Thermix® TX.N – For real life practice

Thermix® TX.N warm-edge spacers can be processed using conventional methods for insulating glass manufacture – regardless of whether you produce plugged or bended frames.



Corner keys and straight connectors to fit Thermix® TX.N



Cut a good figure in all bending machines:

Thermix® TX.N - grey, black and coloured

Thermix® TX.N – Thermix®T X.N is available in the standard colours light grey and black.It is also possible to satisfy individual colour wishes with our special production

The range of Thermix® TX.N warm-edge spacers offered comprises of the currently available profile widths 12, 14, 16, 18 and 20 mm. Further widths are in preparation

You get further information from www.thermix-txn.com or from ENSINGER Ravensburg, Tel. 0049 751 / 3545 2-0.

⁽¹⁾ Values for Thermix® T.X.N warm-edge spacers: iff Test Report No. 427 29076/1 (31.01.2005 EN ISO 10077-2: 2003/10)



Tombola proceeds go the KUNO Project

ENSINGER donates 2000 Euro



The picture shows Tanja Altmann, Works Director Andreas Alsfasser, and KUNO representatives Johann Hecht, Janine Zangl and Alexandra Volkammer.

[Hä] As part of the 25th anniversary celebrations in Cham, there was also a prize draw in aid of KUNO, the project to build a university children's hospital for Eastern Bavaria. Excited by the valuable tombola pri-

zes provided by the company, the guests eagerly bought tickets, raising a grand total of over 1750 Euro, which was topped up to 2000 Euro by company manage-ment. The cheque was presented short while ago in the ENSINGER offices. Johann Hecht, who works at the hospital and is on the Kuno Project committee, accepted the dona-

tion. Andreas Alsfasser summed things up: "We are pleased that our contribution will go a little way towards achieving the goal 'We are building our university children's hospital ourselves'"

ENSINGER on tour

[Kal] ENSINGER has been working with the logistics company Diehl for some years, ensuring reliable delivery of products to customers. Every day, the logistics company transports several tonnes of plastic goods from ENSINGER in Nufringen to their depot in Esslingen, from where they despatch the goods all over

Germany and Europe. As a way of demonstrating their excellent business relationship, Diehl offered ENSINGER the tarpaulins of two lorry trailers. Since September, Diehl's large lorries can be seen daily around the Stuttgart region, with ENSINGER advertising on the sides



Creative new trade fair stand concept

ENSINGER's Czech firm at the largest engineering trade fair, in Brno



The largest trade fair for engineering in Central and Eastern Europe took place in Brno in the first week of October. Everyone who is anyone in the engineering world was there, and so, naturally, ENSINGER Czech Republic (Esro) could not This year, Esro's stated miss it. goal was to pamper their existing customers. A new stand was to be the means of achieving this, one that would be more than simply a 'visual" highlight. The "inner life" as well as the concept should confirm to visitors ENSINGER's position in the Czech Republic. The basic concept was the "plastic pyramid". Clarity and "stylistic" cleanliness from the outside, and the cosy "home atmosphere" inside were waiting for the visitors from Monday morning. The "inner life", however, contained a lot more know-how as well. A stainless steel pyramid, on which the individual material groups were lit up in colour in the semi-darkness, and on top of the pyramid, a piece of polycarbo-

nate, bathed in blue light. All that was accompanied by "Dark Side of the Moon," a classic Pink Floyd work, which also makes use of pyramids.

For Thursday, another treat was in store: for two hours, a local folk group was hired, who performed wonderful well-known Moravian folk songs for the visitors. The lovely songs, the cosiness and happy atmosphere attracted others, who would usually have just walked past, deep in the usual "trade fair stress".

That customers were not only satisfied, but also enthusiastic, was shown not only by their reactions, but also by the "AURA" committee. Aura is a competition for "successful participation in trade fairs". Two candidates from each of five trade fairs held during the year go forward to the final round, and ENSINGER has done it, as they did last year. Many thanks to the great team, who led us to success once again.

Richard Sulko

Wilfried-Ensinger-Prize awarded

[Hä] In November, the "Wilfried-Ensinger-Prize" was awarded once again, for two outstanding pieces of scientific research in the field of plastics technology. Dr Sonja Pongraz was recognised for her higher doctorate, and Dr Juan Pablo Hernández-Ortiz received the prize for his exceptional dissertation. The annual award aims to recognise important scientific and technological advances in the field of plastics technology. The prize was awarded by the scientific working group on plastics technology (WAK), with this year's ceremony taking place in Chemnitz

The Wilfried-Ensinger-Prize focuses on the core topics of plastics

tech-nology research and education, and recognises important achievements of the next generation of scientists in the field "development and specification of technical plastics for innovative applications".



ENSINGER is a member of the Baden-Württemberg aerospace forum

ENSINGER GmbH is a member of the LRBW – the Baden-Württemberg aerospace forum, which works closely with many different companies to develop innovative applications and oversees development projects. Many well-known companies are represented in this forum, which offers an excellent platform for ENSINGER as a manufacturer and vendor of high-performance plastics.

At the first general meeting in October, which was also the formal inauguration, the Minister for Economic Affairs, Pfister, was among those who praised the creation of the forum and the close interaction between science, industry and politics it offers as an increase in the industrial-political strength of Baden-Württemberg.

In the second part of the meeting, some of the members presented their companies and products.

Rainer Gottschalk, the ENSINGER Industrial Manager, presented the new material "TECAMAX". "The presentation was very popular. We made valuable contacts following on from the talk, and we laid down solid foundations for interesting future projects," he summed

ENSINGER plastics are first choice for specialised aerospace technology, when weight reduction, high performance and safety are all important considerations. An ideal alternative to lightweight metallic construction materials, aluminium and glass, they have impressive qualities: low densities, optical transparency, are self-extinguishing and can be easily shaped and coloured.

Further information on the forum at: www.lrbw.de

Impressum

Newsletter of ENSINGER GmbH Rudolf-Diesel-Str. 8, 71154 Nufringen, Tel. 07032/8 19-0, Fax-100, info@ensinger-online.com, Internet: www.ensinger-online.com

Prize

competition

In the last "impulse" we asked

"What does the so called

The correct solution was "The

linear coefficient of heat trans-

The prizes (ENSINGER USB

ENSINGER Sweden AB

The question for the current

What is the slogan of the new

e-mail to impulse@de.ensinger-

Win one of three ENSINGER hip

 Ψ -factor stand for?"

mission'

sticks) went to

Lothar Kleinschmidt.

Petra Drothen-Rauer, Flowserve Gestra AG

Congratulations!

prize competition is:

"cut pieces service"?

a) "ENSINGER al gusto"

b) "ENSINGER à la carte"

c) "ENSINGER - it's your

Send the answer by

The closing date is

flasks - Good luck!

February, 10th.

choice

online.com.

Dräger Medical AG

Dr. Roland Reber

Editors for this issue were
Doris Hämmerling
Mirjam Betz
Petra Kalf
Annt Stumpf

Jochen Weyershäuser

Production Druckerei Maier, Rottenburg