10 Years ENSINGER s.r.o. in the Czech Republic

Festive ceremony with many guests

Exactly ten years ago, in May 1993, the managing director at that time, Wilfried Ensinger, established a company branch in the Czech Republic. A short time after the fall of the Iron Curtain, ENSINGER used the potential of eastern Europe to make technical plastics known in a country that had belonged to the communist states for decades. “Esro”, as it is lovingly called by German speaking colleagues, is the nickname for the abbreviation of “ENSINGER s.r.o.”

On Friday, May 23rd 2003, the tenth anniversary was celebrated together with all employees and their families. Senior managing director, Wilfried Ensinger and his wife Martha as well as managing director Klaus Ensinger did not let anything stop them from travelling to the Czech Republic to take part in the celebrations. Guests from Cham were also welcomed.

The festival programme varied: After the official welcoming and the introduction of employees there was a guided tour through the plant. Following the celebration, the party went on a sightseeing tour of the city with the mayor of Dobrany, Jaroslav SYKORA, and finally they attended a concert in the Saint Veit’s Church and a stand exhibition by the Czech artist Ota JANECEK.

With so many cultural impressions, the climax of this day, rich with experiences, was a reception in the “Blue Star” where Richard SUKOV, managing director of ENSINGER s.r.o., summed up the last ten successful years. He also mentioned the popular public vote concerning the Czech Republic joining into the European community as a very important political issue. “It is really interesting, that exactly one decade after the foundation of our company, we will return to the European confederation,” says the Esro manager.

On behalf of the staff, Sukov took the opportunity to thank married couple Vícelav HOBÍK and Zdenka HOBÍKOVÁ – since the early success of the company at the outset was certainly the result of their hard work. Sukov also mentioned other employees and their support since joining the company in 1994: Miroslav SNĚBEK, Jaromir HABART, Jiri KESTNER, Martin HRUŽA and Radko SOUKUP joined ENSINGER s.r.o. In 1995 the central core was completed, since Jaromir HABART, Jiri KESTNER, Martin HRUŽA and Radko SOUKUP joined ENSINGER s.r.o. In 1995 the central core was completed, since Jaromir HABART, Jiri KESTNER, Martin HRUŽA and Radko SOUKUP joined ENSINGER s.r.o. Today, ENSINGER Czech has a proud number of 38 employees. In his speech, global managing director, Klaus Ensinger, spoke about the historical connections between the two nations, Germany and the Czech Republic, and about the return to normality with a good neighbourly relationship.

Finally, the warm and cold buffet was opened for the eighty guests and the informal part of the evening began. Together with a variety of delicacies, a real Bohemian anniversary cake was the culinary highlight of the evening. With Bohemian and international accordion music, and with dance, the celebration came to an end too soon.

It was a very nice day and the Esro team is already looking forward to the twentieth anniversary.

Glassbuild in Atlanta

On March 12, the green light was given to the 1st “Glassbuild” 2003 in Atlanta, Georgia, USA. For the first time, this new trade fair offered the opportunity for ENSINGER to present and introduce their all-embracing product range for glass to the North American glass, window and door industry. Over three days, more than 400 companies displayed their goods on more than 1,500 stands to make this event the biggest in the history of the National Glass Association NGA.

ENSINGER Inc. appeared at this mass meeting with a typical American “showcase”, supported by the crew from Nufringen and Ravensburg. The team advised interested visitors about the ENSINGER products, insulbar® and Thermix®. The brand name “insulbar®” is very well known in the USA and discussions with customers were both positive and promising. So far, ENSINGER Inc. has been operating in the Northern American insulbar® market completely independently. At the trade fair it was also decided to bring together world wide ENSINGER profiles and the Building Products Division to enhance their techniques and efficiency in the market. This should enable ENSINGER to achieve greater efficiency and success, and improve the information flow.

At trade fairs in the USA and in Italy

SaiDue 2003 in Bologna “New living trends” – for five days, this topic fired the audience in Bologna. More than 117,000 visitors attended the international trade fair for building systems and building elements – and for the first time ENSINGER also joined the group of exhibitors.

Employees of the Building Products Division from Nufringen and Ravensburg together with colleagues from ENSINGER Italy presented the insulbar® and Thermix® product lines on the newly designed ENSINGER stand.

The team decoratively displayed stock from the Product Unit around the topic “Thermal insulation in frames and glass” in gleaming showcases. After all, they had to highlight themselves positively among more than 1,500 exhibitors. ENSINGER received praise for the light and open stand from customers and visitors alike. A very positive reception was given to the vivid representation of insulbar® development with exhibits, diagrams and experiments. Many people stayed to watch for some time. Other highlights were the computer stations with an insulbar® version of the demo programme WinUw by Sommer Informatik. This programme illustrates the Uw-Value Calculation for aluminium systems with different versions of insulbar® profiles and in comparison to versions with and without Thermix®. Within the context of intensive discussions with customers, the Building Products Division was able to establish very promising contacts. Visitors as well as stand staff will have pleasant memories of a successful presentation and outstanding Italian hospitality.
Intra-oral camera: Modern techniques for easy use

Medical application of anti-microbial plastic

Novadays, dentists cannot do without an intraoral camera in their practice since it provides essential information for patients. Beside being user-friendly and having various functions, dentists particularly emphasise the clarity of the pictures. These convince patients at a glance, making treatment more transparent and in turn improving the dialogue between doctor and patient.

The dental camera (see picture) provides overview pictures, intraoral and macro pictures. The camera head of this medical instrument is equipped with high-quality, objective and light-emitting diodes that have a long lifetime. An integrated LED-light brings about an even brighter light. For the 25 mm long and 15 mm wide LED head, the antibacterial and medically approved ENSINGER-plastic TECAPEEK MT AM blue (see infobox) is used.

TECAPEEK is basically hydrolysis resistant. This specially modified plastic also corresponds to biocompatibility demands and due to its anti-microbial properties it is generally suitable for medical technology. According to the manufacturer, the small size of the camera head facilitates access even to areas in the mouth that are normally difficult to reach.

The plastic part was produced by the ENSINGER Machining Unit in Cham. The smooth surface is free of edges and hollows. Thus, the instrument can easily be disinfected.

In cars and commercial vehicles, the connection between pedal and clutch, the clutch release system, relies almost exclusively on hydraulics. In Europe, since 1996, these “hydraulic release systems” have been attracting a steadily increasing share of the market. At present, further development is concentrated on cost reduction, for example by the use of plastic materials instead of metal.

Furthermore, the transition to plastic allows technical and economic integration of additional functions, as for example vibration damping. For the clutch manufacturer “LuK” in Bülach, at the foothills of the Black Forest, the ENSINGER Injection Moulding division produces plastic components for hydraulic release systems. Among other things, the clutch master cylinder and its housing are made from ENSINGER engineering plastics to replacement metals.

The housing of the first and subsequent hydraulic clutch master cylinders that transform the pedal force into hydraulic pressure were made from metal. Further development was sometimes costly and expensive.

With consistent further advancement, and in close co-operation with ENSINGER, LuK managed to introduce master cylinders made from plastic and thus to exploit the potentials of this material. The number of individual parts were reduced to about half the original number. The decreasing number of parts also reduces the error potential.

Reliable plastic liner sheets are better produced from suitable material combinations and glass-fibre reinforced thermoplastics replaced the metal piston rod.

The ENSINGER engineering plastic, TECAMID GF 35, was used in this application. Its chemical resistance to brake fluid and other substances used in the engine is outstanding. Furthermore, the material has a high density and a reliable heat and wear resistance.

In this way, the producer was able to do without costly metals and furthermore, with the use of plastic, the lightweight construction has improved efficiency.

ENSINGER produces other components for hydraulic clutch release systems, for example piston rods and vent bolts from TECAMID 66 GF 35 or piston cramp from TECATRON GF 40.

ENSINGER also participates in other new developments of the LuK company. System parts are produced in Brazil where they can provide the best delivery to LuK locations in South America.
Anniversaries in Cham: Five times ten years experience in plastics

In April, five people celebrated their 10th anniversary at ENSINGER in Cham. The employees had decided on a professional future in the field of technical plastics in April 1993. The Company is especially pleased with this kind of loyalty, which is something of a rarity these days.

Ready for working life: Once again, the ENSINGER trainees have completed their apprenticeships with above average results. In their examinations, Dirk Strauss (2. f. l.), who was trained to be a process mechanic and Marcel Rau (2. f. l.), a tool mechanic, both received grade A. Emanuel Christian (r.), a tool mechanic, also completed his training with a good result. We are glad that we can employ the two tool mechanics in the tooling unit in Nufringen. And we are also pleased that Dirk Strauss has found his area of responsibility as a process mechanic in the semi-finished products division in the field of tool maintenance and repair.

Successful training completion in Nufringen

All our best wishes go to the three young employees and to a successful future at ENSINGER!

Career days in Cham region

Pupils inform themselves at ENSINGER

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More than 130 pupils visit the company

On 8th April, ENSINGER held its fifth annual company fair for schools. The company introduced itself to interested school classes from the surrounding area. It gave over 130 pupils an opportunity to gather information about the many faceted training programmes at ENSINGER.

Factory visit

Students of plastic technology from Rosenheim visit ENSINGER

"ENSINGER is always interested in close co-operation with teaching and research, since students of today will be the employees, customers and users of tomorrow," personnel clerk Arnt Stumpf sums up. "Thanks to the flexibility of individual product units we can honestly say that the event was a real success."
Meetings of the workforces in Cham and Nufringen

Canteen committee established

From the annual report, employees could gather that the new works committee is working well together and that initial difficulties were eliminated. They were now heading in one direction.

Managing directors Klaus Ensinger and Dr. Roland Reber reported that ENSINGER did not remain untouched by the economic situation of the last year. Their prospects for the future were nevertheless confident.

Security manager Rolf DeLanerdix advised in Nufringen on the growing number of first aid persons – more than 70 people have such a function. According to Franz Schönberger, ENSINGER Cham can rely on 64 first aid persons.

In Nufringen, the new representatives for the trainees, Nicole Eltner and Christian Hennemann introduced themselves to the ENSINGER-staff and gave their annual reports. In Cham, trainee representative, Anja Tinkler, took on this task.

In Nufringen, Wilfried Ensinger and his wife Martha were present. The company founder addressed the employees with some final and motivating words.

In Cham, the location manager Andreas Alsfasser spoke a few welcome words to his employees.

Pepper vs tomato or fish vs lamb

An ENSINGER employee does the cooking

Birte von Loyewski is enthusiastic about Bäuerlein’s cooking skills.

He had given up hope but suddenly it appeared in the post box after all: The invitation for “cooking duel” on the private TV station “Vox”. For three years, Siegheid Bäuerlein, ENSINGER employee and enthusiastic amateur chef, had waited for this letter. On April 1st, the show started chosen from 40 competitors, he was ready to prove his culinary skills on TV.

As an amateur actor in different theatre groups, he is already used to appearances in front of large audiences, but nevertheless he was a bit nervous. The lively Swabian had many opportunities to watch the ladies of the house cooking. Also in the “Cooking Duel” he did not have to cook alone. Here, two teams met, Team Pepper and Team Tomato. In each team there is an amateur cook and a professional cook. The amateur cook has to buy the ingredients before the recording and gives them during the show to his partner who has to invent a creation out of the food. Both teams have 15 minutes to conjure up a menu, that convinces a jury of three of their skills – since finally there is something to win.

Presenter Birte von Loyewski gives the start signal and both teams begin. Team Tomato serves lamb with puree from white beans, Team Pepper serves Fish! Will the jury decide in favour of Pepper or Tomato, to, fish or lamb? Who will get the top prize? After five minutes, the jury has tasted both dishes and has a unanimous opinion: The lamb by Team Tomato wins over the fish by Team Pepper. For our cooking artist Bäuerlein, this means, that he can pack his bags for two persons and leave for the island, Juist.

Will he have his apron in his luggage?

ENSINGER co-operates with small and medium-sized businesses

New programme for employees’ qualifications

As in previous years, trainees from Cham have made a donation in favour of two social projects. The young people sold plastic cutting boards they had made on their own in the ENSINGER workshop. We have already reported a similar project by the Nufringen trainees. The proceeds of 2,500 Euro were used to support victims of crime and to cancer and victims of crime. The donation was given by the staff.

In Cham and in Nufringen, at the end of May and beginning of June, this year’s meetings of the workforce took place to inform employees about the past and the following financial year. As in previous years, the rooms were filled to capacity.

At both locations, the chairs of the works committee, Ilona Brodt and Franz Schönberger, reported on the work of the first united ENSINGER works committee during the last year. Basic training for the ten new members was mentioned as well as the establishment of a canteen committee whose first project was the introduction of a salad buffet – which is well received by the staff.

In Cham and in Nufringen, the donation was given to Anna Schneider who looks after 1,500 Euro. The donation was given to Mrs. Winter gets the donation for the organization “Weißer Ring”.

In Cham, trainee representative, Anja Tinkler, took on this task.

In Nufringen, Wilfried Ensinger and his wife Martha were present. The company founder addressed the employees with some final and motivating words.

In Cham, the location manager Andreas Alsfasser spoke a few welcome words to his employees.

Moreover, Mr. Winter has already reported a similar project by the Nufringen trainees. The proceeds of 2,500 Euro were used to support victims of crime and cancer and victims of crime. The donation was given to Mrs. Winter and the canteen committee had initiated it already very successful.
Field specific know-how for ENSINGER customers

Individual seminars on plastics

ENSINGER has added a training course to the company’s range of customer services. The seminars about elastomers take place at individually determined dates at ENSINGER in Nufringen. Gerhard Lichtenberger from the Technical Marketing Department is the manager of the project, lecturers are the Technical Advisors and ENSINGER application engineers Peter Bongardt and Frank Kirchner. According to time and the main focus of their interest, customers can choose between one- and two-day courses. The seminars provide extensive knowledge in theory and practice about the structure and application of plastics.

Modules are easily varied and adapted to the demands and background knowledge of the participants, for example:

- Basic knowledge about plastics
- Properties of plastics
- Production and working of plastics
- Material specific applications
- Adhesive bonding of elastomers.

Furthermore, ENSINGER offers so called “field specific management modules”, e.g. about “Applications in Medical Technology” or “Plastics in Packaging Techniques” – because field specific knowledge is necessary to effectively support customers in these areas.

“Our goal is to make qualified and content users and loyal customers out of our buyers. Since the mere purchase of plastics is not enough. The whole product is only accessible to the applicant when he is sufficiently familiar with it,” says Lichtenberger. ENSINGER seminars have the ability to impart knowledge and skills for the best possible use of products made from plastics – to those on whose capability in the handling of the products, the use depends.

Interesting things for the “Year of Chemistry”

(Part 2)

Great names and milestones from the polymer industry

In 1839, Charles Goodyear accidentally found out that rubber can be transformed into a stable and weather resistant material without losing its flexibility. In that way, he produced a new converted natural material. The hard rubber that had been developed, was sold and elastic over a wide temperature range. Unfortunately, he missed having the procedure he called vulcanization patented in time and so others made it first – he died in 1869 and was deeply in debt.

Celluloid was the first plastic in the world, its development was the beginning of the polymer industry. The legendary impetus was a competition in the year 1869, where a new material was searched for. Expensive ivory from billiard balls was to be replaced with it.

The Hyatt Brothers took part in this competition. They treated cellulose nitrate, or gun cotton with alcohol and camphor. What they got was a hard, shiny material that could be molded when hot. Cheap and uniform in consistency, this new material did indeed replace ivory in billiard balls. Unfortunately, the Hyatts did not win the announced sum of 10,000 US dollars, but their experiments with cellulose nitrate led to the birth of celluloid.

Celluloid also replaced horn in combs, found wide use in housewares, and was made into the first flexible photographic film.

A disadvantage was the flammability of the material. The film industry suffered from this dangerous material property. From time to time, cinema films were overheated in projectors and even caused cinema fires.

In 1887, Count Hilaire de Chardonnet created a related product when he learned to spin cellulose nitrate into Chardonnet silk, the first synthetic fibre to enter production and a forerunner of rayon, nylon, and dacron.

Chardonnet started to develop artificial silk when a silk moth disease brought the silk production to a standstill. Chardonnet’s wife allegedly was the first person who wore a ball dress made with the new fibre.

Celluloid and Chardonnet silk were polymers that were created by modification of natural polymers.

The first truly synthetic polymer did not come along until 1909, when American inventor Leo Baekeland treated phenol or carbolic acid, with the preservative formaldehyde under heat and pressure. His product, Bakelite, was hard, immune to harsh chemicals, electrically insulating, and heat resistant characteristics that made it useful for a myriad of household goods and electrical parts. Soon Bakelite was being used to make tools, machines, and cookware.

Do you also know an interesting story or anecdote about plastics? Send an email to impulse@de.ensinger-online.com

The ENSLINGER seminars take place in small groups.

For further information, please contact Gerhard Lichtenberger, email g.lichtenberger@de.ensinger-online.com or by phone on 00 49 70 32 819 141.

The ENSLINGER seminars take place in small groups.
In 1997, ENSINGER found a branch in Brazil. After half a decade, Sergio Bica Jr., General Manager from ENSINGER Brazil, sums up the first years: „More than five years ago the first container containing high performance plastics arrived in Brazil and a small team started working in a country which is known more for carnival, nice beaches and Caipirinha than for a strong and well-developed economy. Many stories from these early days still make us laugh when it’s Friday evening and we drink some beer to celebrate the end of the week. For example the story from the machine operator who had a problem with POM rods and became outraged about the material behaving like a human being: In the morning working well and in the afternoon starting to lag – and this just because he did not know POM well enough and did not heat-treat it properly during machining. ENSINGER started extorting basic profiles from very basic engineering plastics. Soon after, the company added a cast plant – unique in South America. And recently we bought state-of-the-art injection moulding machines. Now, we are capable of providing our customers with our full line of engineering plastics solutions locally. This new capability enhances our presence in the high tech market niche and paves the way for our growth within South America. Last year, with ISO 9000-2000 certification, our quality system received its recognition award, allowing us to trade in markets which were previously unavailable. Today we have 28 people within the organisation. With the main offices and production plant in Sao Leopoldo, on the southernmost state of Brazil and a customer support office in Sao Paulo state, where more than 50% of Brazilian GDP is generated, ENSINGER is geographically in the best position to support all customers within the South American region. In fact, today, ENSINGER plastics can be seen at 41,000 ft inside airplanes, as well as in the 3000 ft depth of the Ocean as in oil drilling equipment. They can also be seen in 300ºC glass plants and in minus 120ºC cold test chambers, in radiation cleaning operations and in HCL vapour pumps. A huge step forward for a company that five years ago was just a small team of hardworking people, trying to teach the market the benefits of POM against PP and PA. With solutions tailored to suit specific customers needs, ENSINGER in Brazil is starting to co-ordinate operations within key countries in South America, where the same situation found years ago in Brazil is the norm: we are now implementing the way we are there also. Ask, Thiva, Succeo: a real motto that plays its role in our operation. It all started small, we were keen to provide the market with decent quality products. Right now, some years on and ENSINGER has become a successful and expanding branch, being the number one in POM, PTFE, PEEK, PVDF and other high performance plastics – and still growing.“

**Winter boots for street children**

**Donation supports Caritas Spes Ukraine**

As we already mentioned in one of the last issues of impulse, last year, ENSINGER decided to support social projects instead of giving gifts to employees and customers. One of the projects is the campaign “Winter boots for street children”, initiated by Stanislaw Szyrokoradiuk, Bishop of Kiev. In February, the Suffragan Bishop and President of Caritas Spes Ukraine bought 750 pairs of winter boots from resources donated by ENSINGER. The boots were given to orphans and streeturchins who especially suffered from the cold in the Ukrainian winter. They were distributed in several cities in the Ukraine: Kiev, Kiamianets-Podilsky, Khmelinsk and Zhytomyr.

With great personal commitment, Bishop Stanislaw cares for the children in orphanages and holiday villages that he founded. In recovery and rehabilitation courses, children in particular from contaminated regions around Czernobyl who suffer from mental and physical wounds are “pepped up” annually for 5 weeks.

In 2000 and 2001 more than 5,000 children were cared for in the centres – this means more than 2,500 children each year. Martha Ensinger is in personal contact with Bishop Szyrokoradiuk and did not hesitate to support his campaign with the donation for Caritas Spes. “Spes means hope. And this is what we want to convey. Warm boots just seem to be like a drop in the ocean – but how can a street urchin survive winter in the Ukraine without boots?” answered Martha Ensinger when she was asked for her motive for this contribution.

**Bishop Szyrokoradiuk and „his“ children in the orphanages in Zhytomyr**