PÖRNER GRUPPE

ENGINEERING-TIMES

PÖRNER GRUPPE

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Success in Implementing new Technologies

High energy and raw material prices, climate protection and globalization of markets: Industry reacts to these issues with new solutions, new technologies. All companies of the Pörner Group make their contribution by implementing industrial plants with a greater degree of innovative ideas.

Biofuel of the 2nd Generation

COMMISSIONING. *German Chancellor Merkel visits SunDiesel® plant of CHOREN*

LEIPZIG (Holger Kosch). When in August 2004 EDL Anlagenbau Gesellschaft, Leipzig negotiated about cooperation in the preparation of an engineering package with CHOREN, the Freiberg-based company was rather unknown. Today, CHOREN is on everyone's lips. In spring 2008 highest-ranking German politicians found the way to the county town in the Ore Mountains, major newspapers from all over the world reported. What has been achieved for almost four years that attracted such attention?

©CHOREN Industries

In those days CHOREN was looking for an engineering company and found in EDL a process-oriented partner to engineer a plant for the production of synthetic fuel. Meanwhile, the Carbo V® process developed in Freiberg is a world-patented gasification technology. New about this process is that absolutely tar-free fuel or synthesis gas is made from solid biomass and carbonic feedstock resp. such as wood chips. In further different process stages the gas is processed to synthetic biofuel that is much more ecofriendly than the common fuel made from crude oil.

Fischer-Tropsch: Rebirth of a process

As of the second half-year 2004 CHOREN elaborated together with EDL solutions to produce ecofriendly diesel fuel from synthesis gas through conversion of synthesis gas, CO_2 separation, Fischer-Tropsch synthesis, hydrocracking and further process stages. Basic and detail engineering were followed by the wide-ranging procurement process for the Beta plant worth some EUR 100 million up to its erection in Freiberg.

In peaks more than 60 engineers were involved by EDL at the same time to engineer and supervise construction of the plant. And they had to meet certain requirements because space was limited. Therefore, plant components had to be arranged compactly over several floors and in a few buildings only.

Chancellor attended commissioning ceremony

The completion of construction in spring 2008 was also of interest to town, state and Federal Government officials. Aside from Georg Milbradt, Prime Minister of Saxony, the German Chancellor Angela Merkel attended the Beta plant commissioning ceremony on April 17, 2008.

The power plant incorporated into the plant as well as some off-sites had already successfully been tested and commis-

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The decisive Extra ...

Over the last decade the Pörner Group has quadrupled its sales. We were able to enhance our good reputation, have added important references to our project portfolio and participate in significant technological developments.

Against the turbulences recently experienced on the financial markets our central European group of companies' is able to counter with the trust of our clients paired with our extensive knowledge and experience.

As globally operating engineering company, we are committed to making our contribution to the betterment of both society and economy:

- *Increasing the cutting edge of production units: innovative products made of modern, resource saving materials need modern and efficient plants.*
- *It is an economic necessity to advance process technologies towards higher efficiency and environmental sustainability.*
- *New technologies must be made available also to emerging nations, if hunger, poverty, inequality and environmental pollution are to be eradicated. For that reason Pörner engages actively in regions with such backlogs.*

Last year's pure engineering turnover worth in excess of € 30 million and many large scale projects testify to the commitment and the esprit in which we live up to our business values.

Formulating Change

Part of Pörner Group´s philosophy is also to endow its work with innovative ideas and the decisive Extra in quality and productivity, thus providing added value to its clients.

Roland Ludwig (left), takes over at the helm of EDL from Gerhard Moser in July 2008. He will focus on strengthening the firm not only on the German market, but also internationally.

It is obvious that the world's challenges cannot be met without new technologies and the engineers who develop them. The present time of change offers more chances than ever to break new ground.

Even if the world economy faces difficulties ahead, the engineers of Pörner and EDL will participate in changes in the front rank and thus taking advantage of the changes that are inherent in times of crisis.

In this spirit we would wish both our clients and our employees the decisive Extra success in all their undertakings.

Andreas Pörner
Peter Schlossnikel

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Natural Gas Treatment and its challenges

REVAMP. *OMV increases capacity of Aderklaa I plant*

VIENNA (Peter Pospisil). In May 2006 Pörner Vienna was awarded a contract to provide selected engineering servicves to revamp the natural gas treatment plant 'Aderklaa I' operated by OMV Exploration & Production GmbH in Gänserndorf, Austria. After more than 2 years the objective was achieved to increase processing capacity from 1.3 to 1.9 million m3/d gas. In the project valued at EUR 28 million (total installed cost) Pörner acted as subcontractor to prime engineer, Black & Veatch Co. This company with its headquarters in Kansas City / USA had already built up the plants Aderklaa I and II and is a world leader in natural gas processing and sulphur recovery units.

Technological challenges

Due to the fact that the acid gas gathered cannot immediately be sold because of its composition the gas treatment plant is used to remove unusable portions such as CO2 that reduces the calorific value as well as sulphur constituents from the gas. The resulting H2S is an utmost poisonous gas being very corrosive to common carbon steels.
The acid gas is treated in several stages:

- separation of free water, gas condensate and solid particles
- removal of acid gas by amine treating (MDEA)
- drying of salable gas by means of triethylene glycol (TEG)
- adjusting the hydrocarbon dew point of the salable gas
- utilization of hydrogen sulphide (sulphur recovery)

FEED und EPCM

The Front End Engineering Design (FEED) being the basis of the subsequent EPCM implementation was prepared by Pörner in close cooperation with Black & Veatch. Pörner's scope of work basically included the following: preparation of application documents, support in cost estimating, civil engineering (foundations, piperacks, pump house with gantry crane and HVAC), underground piping, electrical, instrumentation and control systems, expediting and inspection of mechanical equipment as well as preparation of the operating manual for OMV.

The equipment was procured and installed under consideration of all relevant regulations and standards such as Pressure Equipment Directive (Druckgeräteverordnung DGVO), Regulation on Explosive Atmospheres (VETAX), ATEX Product and Operating Guidelines as well as OMV works standards and pipe classes.

The finals

In August 2007 construction work started at the site, having its peak in May 2008 when the plant was shut down. Approx. 3,500 running meters of pipe with up to 16" / 900 lbs were installed and 189 tie-ins had to be executed. The fact that the four weeks' shutdown time was strictly adhered to, the remaining work was performed during normal operation and the plant commissioned in July 2008 acc. to schedule delivers proof of the good American-Austrian cooperation. ■

BITUMEN EFFICIENTLY STORED

Modernization saves 80 % of energy

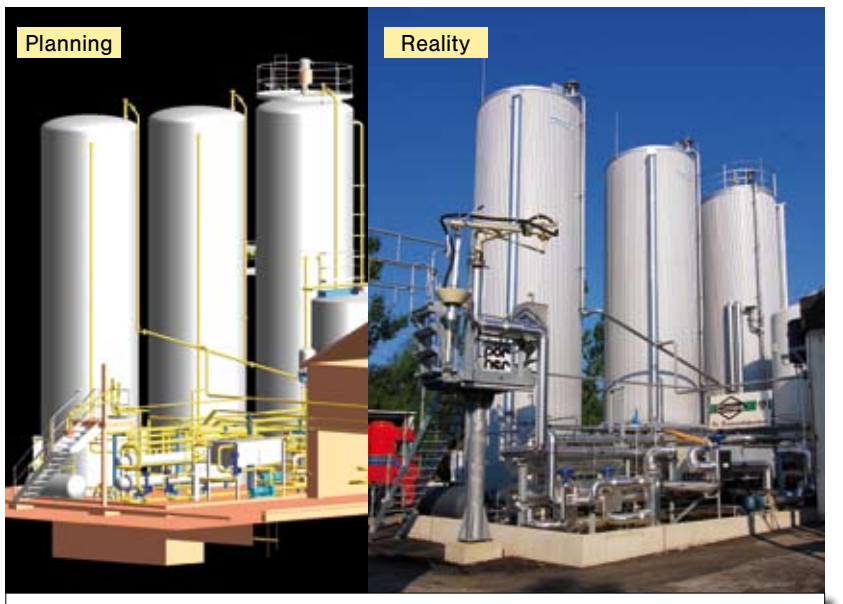
LINZ (Eugen Gotter). Colas S.A. Boulogne-Billancourt, a globally acting construction corporation, is leading in producing road and building construction materials. At the Gratkorn location/Styria, Austria it operates a plant to make bitumen emulsions from polymer and oxidation bitumen.

In March 2007 Pörner Linz was awarded by Colas a contract to perform general engineering services including authority engineering for modernizing the raw material and finished product storage. In an efficiency analysis the project team could spot potential savings both for energy consumption and the production process itself. For this reason the scope of services was considerably extended.

By optimizing loading and unloading times, heating cycles and by using a heat recovery unit that was implemented in this sector for the first time, operating costs could significantly be reduced, power demand per production hour even by 80 %. The heart of the heat recovery unit is a bitumen/thermal oil/water cooling cycle that treats all hot process water self-sufficiently from the energetic point of view.

Thanks to a high degree of commitment and experience the Pörner engineers from Linz could cope with the challenges such as thermal design of the heat exchanger including special measures to be taken as well as transition of the batch operation into a continuous production process.

The project was implemented during running operation without any incidents. In late June trial operation started, thus completing the first stage of the modernization concept at the Gratkorn location. ■



Breaking new ground in engineering: The PDMS planning tool was used for arrangement planning, piping and electrical engineering in Linz for the first time. Based on very vivid and realistic plans the design review meetings proved to be very efficient. Customer wishes could be considered already at the planning stage so that the plant was set up without any considerable additional costs and time for modification.

GENERAL PLANNING FOR DONAUCHEM GMBH

Safe chemicals filling

VIENNA (Werner Gindl). On June 6th, 2008 both the ORGANIKA 2 plant of DONAU KANOL and the ANORGANIKA 3 plant of DONAUCHEM GmbH were commissioned in an official ceremony.

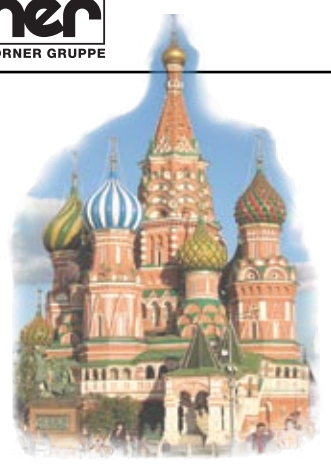
Almost every Pörner colleague knows how to get to Pischelsdorf since the ORGANIKA 2 plant was built up for DONAU KANOL by Pörner on this area in 2007 and just in the vicinity Austria's first bioethanol plant was put up for Agrana AG by Pörner as well. In October 2007 DONAUCHEM GmbH awarded Pörner with the follow-up order for general planning of the ANORGANIKA 3 plant. Beside the preparation of the plant concept, the scope of work covered preparation of the permit application and guide planning for mechanical equipment, civil, structural, HVAC, automation andinstrumentation, electrical and piping.

The modern plant, covering an area of 9,000 m², serves to mix anorganic liquids, such as acids and caustic solutions to mixed products, e.g. liquid fertilizer, or to fill them up for shipping.

Of course, to engineer a plant for handling and processing of dangerous goods required to strictly adhere to Austrian regulations and guidelines for protecting systems and instruments in order to ensure safe plant operation.

Because of the high commitment of the project team the project could be implemented within 10 months only – from the concept up to contract award of all mechanical and electrical work as well as the subsequent seven months' installation period with commissioning.

The result of the work proved the efforts of all parties involved: production could start on time in April 2008. ■



PÖRNER GRIMMA: TECHNOLOGY CENTER FOR FORMALINE AND DERIVATES

Within Pörner Group, the Grimma location has been acting as a technology center for formaline and its derivates for quite some years. Together with renowned European licensors and know-how providers Pörner Grimma offers - as an EPC contractor - plants to produce formaline, UFC, hexamine, UF, MUF, MF, PF resins, novolacs and bakelites, polyester and alkyd resins.
In the last quarter 2007 this technology-oriented plant engineering strategy was successfully continued by signing a contract for another two plants to be implemented in Russia.

SUCCESSFUL ON THE RUSSIAN MARKET

Pörner Grimma builds new novolac and bakelite plant for Karbolit

GRIMMA (Gerhard Bacher). In late October 2007 an EPCM contract for a new novolac and powder bakelite plant was concluded with OJSC „Karbolit“ in Orkhovo-Zuyevo near Moscow. Novolacs are meltable phenol resins that remain stable during storage. These resins are produced by condensation of formaldehyde and phenol in the presence of an acid catalyst. In order to hold their shape the solid novolacs are mixed with hexamine and other additives. Thus, the main product, the so called powder bakelite is generated. In 1907, the Belgian Backeland already applied for a patent on bakelite, a material which still has a wide and flexible range of application. Bakelite is used to produce stable, heat-resistant synthetic resin parts, as bonding material in grinding wheels, brake covering, wood varnish or to insulate electrical devices.

Kick-Off Meeting with Karbolit in Grimma in late January 2008

Project duration only 16 months

Pörner Grimma's scope of work covers basic engineering (assisted by its technology partner), authority engineering, detail engineering, procurement and supply of all equipment and materials, transport to the site, construction supervision and commissioning support. The plant will be set up in an existing, fully reconditioned industrial hall under limited space conditions.

Since the equipment will be installed during running operation, safety measures to be taken are demanding. In the end, the plant will be delivered together with a GOST-R certificate confirming conformity with the latest European, but also Russian regulations and standards.

The project having an investment value of more than EUR 12 million has been under construction since June. Equipment and material deliveries have already started and will be finished by the end of October so that the plant can be commissioned in 2nd quarter 2009 as scheduled. Therefore, the ambitious project duration of only 16 months can be adhered to. ■

Pörner Group builds new hexamine plant in Gubakha, Russia

VIENNA (Gerhard Bacher). In late November 2007 an EPCM contract for a new hexamine plant to be built in Gubakha, Perm region was awarded to Pörner Vienna by its regular customer OAO „Metafrax“. This contract is again being implemented by Pörner's technology center in Grimma, Germany. Cooperation with OAO „Metafrax“ is already well adjusted because in 2005 - 2006 a formaline plant was set up for this longstanding customer in Gubakha.

Basic design conference in Gubakha in June 2008

The investment value of the entire project amounts to some EUR 15 million. Pörner is realizing this order as general contractor within the company group and is responsible for basic engineering (together with technology providers), authority engineering to obtain a license for commissioning of the plant, detail engineering, procurement and supply of all equipment, transport of equipment to the site as well as construction supervision and start-up assistance.

High-tech

Viktor Maier, CEO of OAO „Metafrax“ has made ambitious plans. „We selected the objectively best technology and intend to launch the new product in Europe”, said Maier. The plant will become one of the most advanced ones in the world due to its high degree of automation and a production capacity of 20,000 tpa. It is being engineered and built acc. to the latest European and Russian standards and complies with the requirements of GOST-R certificate.

For Metafrax it is important to meet the current European and German environmental standards such as TA Luft. For this reason, the plant comprises - beside the production plant itself and an advanced packing unit - a waste-water treatment unit (revamp of an existing rectifying column) as well as a new thermal off-gas treatment unit.

-47°C up to +37°C

In the course of project implementation customer's wishes have always priority as regards efficiency and economy. Therefore, equipment will be installed during running operation in strict compliance with safety measures. Due to limited space as well as extreme climatic conditions - design conditions ranging from -47°C up to +37°C - the job is quite demanding. But not completely new for Pörner's engineers that have already gained extensive experience in Russia.

Hexamine is a versatile chemical intermediate product since it is used in chemical reactions as ammonia and/or formaldehyde source; e. g. to produce amino- and phenoplastics. In pressed form it is used as solid fuel and is the main component of ESBIT fuel.

A joint project

Within Pörner Group the engineers closely work together via VPN server. Beside Pörner Grimma, there are other parties performing engineering services - the customer (infrastructure as well as civil/structural engineering), the know-how provider (basic engineering and partly detail engineering services), the Ukrainian Gazintek being a member of Pörner Group (detail piping engineering services) and Pörner Vienna (DCS, export and transportation services).

To coordinate all parties requires a lot of time and work, but is gladly carried out. The Pörner slogan ‚out of one hand' fully applies in this respect. It goes without saying that Metafrax is provided with comprehensive services from one single point of contact only.

Basic engineering has just been completed and agreed with the customer. Further engineering work to be performed with the help of 3D planning software by Intergraph, runs at full speed. The project is exactly on schedule. Therefore, there is no doubt that the plant will be commissioned in autumn 2009. ■

New pressing station for Agrana Zucker GmbH

VIENNA (Thomas Olbrich). At the sugar factory in Tulln/Austria the existing double-screw presses that were initially installed at different places are brought together in a central bed plate in the courtyard. By means of these eight presses, leached sugar beet chips coming out of the extraction towers are dewatered, the content of solid matter is increased from about 12% to 30%. The sugar beet chips dewatered this way are then directly loaded on trucks and taken away or led to the chips drying unit and following to the pellet pressing station.

Project manager P. Hartberger

The bed plate was designed by Pörner + Partner as reinforced concrete structure. In addition to this, the project required a quite complex structural engineering for access ways and different conveying routes. Pörner + Partner did not only perform engineering services starting from basic through authority to detail engineering and local construction supervision, but also made significant contributions to the layout.

Bed plate with presses being installed

The new bed plate for presses is expected to be commissioned in September this year, i.e. in good time before sugar beet harvest starts. ■

HDS1 REVAMP AT OMV

EDL successfully accomplishes revamp HELSA

SCHWECHAT (Christian Birgfellner). **** Schwechat, April 28, 2008 – The large-scale revamp of the HDS1 plant at OMV Refinery in Schwechat/Austria was mechanically completed by EDL exactly according to the stipulated date after a 14 months' engineering and construction period. Just on the same day commissioning of the plant started and only five days later the product as specified could be delivered to the tank farm. Mission completed!****

Flashback

In late February 2007 EDL Anlagenbau GmbH was awarded by OMV Refining & Marketing GmbH a contract to execute engineering, procurement and construction management (EPCM) services for a large-scale revamp of the approximately 40 years' old hydrodesulphurization plant HDS1 at the Schwechat Refinery. The objective was to reduce the sulphur content of fuel oil extra light to less than 10ppm. Beside this, the revamp was also aimed at increasing the capacity by more than threefold (!) - from 1,000 tpd to 3,500 tpd.

The HDS 1 plant shines in new resplendence

Even when the project started the project team knew that this job was extremely demanding time-wise due to the far-reaching replacements and modifications to the plant during running operation - among plant engineering firms also referred to as 'sportive activities'. In fact, all required engineering, procurement and construction activities went along the critical path - from the very first day there were no considerable time reserves available.

Complete modernization

The scope of plant modifications was another big challenge for the project team. Except for one vessel all mechanical equipment had to be replaced or considerably be modified. Furthermore, the majority of pipelines had to be re-laid. Because of new apparatuses, vessels, machinery and piping as well as due to a new control concept and the high demands on plant safety, the automation and instrumentation engineers were also faced with a challenge. From field instruments up to the control system nearly all loops had to be renewed.

For this reason, all measures regarding 'modifications' of the HDS1 plant were of such a scope as required for a new plant, however, with the proviso that all work had to be implemented under operating conditions within the battery limit of the existing plant. The layout engineers were very concerned about this fact that probably brought them one sleepless night or another. Where to put all this stuff?

Equipment arrangement and installation required by the process technology as well as dismantling and retrofitting work to be done during the 28 days' plant shutdown period had to be considered as well as operation and maintenance issues of the completed plant. And there was always the pressure of time. A challenge tailor-made for the revamp specialist EDL.

Precision work

After myriads of drafts, discussions with all engineering disciplines, structural engineers and, needless to say, with the future operator the optimal solution was worked out. Existing plant parts were overbuilt with up to 30 m high reinforced concrete or steel structures to take up the new equipment. Existing pipe routes had to be included in these new steel structures. Other mechanical equipment had to be squeezed between existing equipment.

Because of the tight project schedule there was a big overlapping between engineering and implementation period. This situation required an extremely quick and flexible response to the steadily changing project requirements.

Rotating Lances

Based on a PDS model all individual revamp stages were charted. The construction schedule generated out of this model did not necessarily contributed to an easing of tension among the project team. Tenor: It is getting very tight. And on top of that civil work had to be done during winter time.

Along with this, some other obstacles had to be overcome. The civil engineering company Pörner + Partner felt much concerned about foundations. Some of them had to be deepened for static reasons. Due to local space conditions piling was not possible, neither sheet wall piling since vibrations coming along with this work would have led to a malfunction in the running operation. The solution was to use the high-pressure jet grouting method in which cement emulsion is injected by a rotating lance under high pressure into the ground.

Delivery times for equipment were relatively long due to heavy workload at vendors. That was an additional burden for the tight time budget anyway. Delayed deliveries for part of the equipment caused to permanently modify the construction schedule.

The Plant Shutdown

At the end of March 2008 the HDS1 plant was shut down, and on March 31st the core shutdown started. In the following 28 days people worked 24 hours a day in order to dismantle parts of the plant no longer required, what was the majority of them, to install new equipment items, among them some 50 % of all piping, and a large part of field instruments as well as to execute tie-ins to existing units and off-sites. Moreover, some apparatuses were dismantled, retrofitted, newly installed and connected to pipelines. Up to 300 people worked in a very confined space in the plant. This fact demanded a great deal of the safety officers.

In order to meet the deadline no single day had to be wasted. All team members knit together. Each individual had to put his best leg foremost in order to cope with the challenges by April 28, 2008. Despite this tension all problems occurring were always solved between the client OMV, construction companies and the EDL construction management on a partnership basis. And there was still room for this special 'Viennese snide humour'.

Result

ALL powerfully acted in concert and therefore the order was fulfilled on time without any industrial accident. Thanks to the judicious work of all safety officers and the considerate acting of the site managers, foremen and fitters the first-aid boxes could be kept closed. After all, each person got home without any injury – the greatest success. The HELSA (HELSA stands for fuel oil extra light, sulphur-free) HDS1 revamp is another successful milestone for EDL Anlagenbau and the Pörner Group. ■

EDL fully committed to TOTAL projects

REFINERY SHUTDOWN. *Symbiosis between engineer and owner*

LEIPZIG (Peter Sonntag). T&I 2008 is the almost unnoticeable name of the recent shutdown at TOTAL Raffinerie Mitteldeutschland GmbH incl. its POX methanol plant in Leuna. But it stands for expenses amounting to some EUR 200 million for a regular safety check. Apart from necessary maintenance work performed during the general overhaul and inspection the shutdown was characterized by implementing various, wide-ranging projects at the same time. One of the most challenging jobs during the refinery shutdown was undoubtedly the installation of a new DCS in the POX methanol plant. Beside this replacement that was linked with setting up a new control room, a great number of other projects thoroughly prepared by engineering companies like EDL had to be integrated into existing units with respect to hard- and software. A big challenge for the many firms involved and for the owner.

View over TOTAL Refinery during the shutdown

EDL - one of the first

In late 2005 TOTAL refinery signed frame contracts with engineering companies for the first time. This new quality of cooperation should turn out to be an advantageous measure to prepare and execute T & I and beyond, since until that time contracts of this kind were only used when working together with assembling companies.

During almost three years of joint work, the cooperation with the engineering partner EDL has become an integral part with clearly defined procedures. The engineers from Leipzig support i.e. TOTAL's investment department to define tasks often initiated by the refinery's process department or the operating personnel. In a few days the idea is developing through a description of the intended modification into the project in closest cooperation. Once the way has roughly been fixed, the engineering stages follow: from studies, basic- through detail engineering up to implementation and integration into the existing units. EDL could more and more play a part in structuring and executing processes. Thanks to a longstanding cooperation the engineering company is actively involved in the preparation of job descriptions for individual projects. The symbiosis reached between engineering firm and owner leaves for both parties enough room required to concentrate on the own and essential services. After having performed 10,000 engineering hours initially agreed upon for 2006, TOTAL has already made sure of 27,000 engineering hours for itself in 2008 to be executed by EDL. And today it is foreseeable that the scope will significantly be exceeded towards the end of the year.

In June 2008 after having passed the acid test 'general overhaul', Reinhard Kroll, the refinery's CEO, pronounced himself in favour of another prolongation of tried and tested engineering frame contracts. A success that all parties involved feel happy about. ■

FIRM´S OUTING 2008

35 years Pörner - An engineering company on tour

VIENNA (Margot Simonis). The board of management and works council of Pörner Ingenieurgesellschaft Vienna (Austria) invited their employees to a five day excursion to Sicily under the motto "Pörner celebrating its 35th anniversary"– in return for the high personal commitment of each employee contributing to the constant growth of the Pörner Group.

On April 29th 2008 evening a charter plane took off at Bratislava airport, on board 110 travelers. Three busses drove the weary tourist party to Campofelice di Rocella, a small village 30 miles east of Palermo. Large palm trees, hot and salty air were the first greetings of Sicily in the darkness of a mild spring night. Only a short nap later we were welcomed by bright sunshine, a great relief after the frosty temperatures in Austria.

Sicily with a size of 25,000 km² (one third of Austria), about five million inhabitants and a long and eventful history is worth seeing. Various peoples left their traces in the stony landscape: Graeco-Roman temples and theaters in Syracus, Taormina and Piazza Armerina as well as huge stone buildings of the Normans in Monreale and Cefalu or the castle Caltagirone put up by the Arabs deliver proof of the centuries passed by.

We had the choice between five different excursions. Many of us visited the capital Palermo and Monreale, a place of pilgrimage with its famous cathedral. There we unexpectedly got into a Sicilian folk festival – typically vivid and colorful.

Others set out early in the morning on a special trip to Mount Etna, with its 3,345 meters the highest and oldest volcano in Europe. The mountain road crosses a big field of lava from 2002 for several times - a clearly visible sign for the enormous power between the tectonic plates of Africa and Europe. And then up on the top the landscape is dusty and dead. Quite disconnected from reality you feel like being on the moon, except for the garish red ladybugs sitting on frozen snow. On our way back we passed small villages built up on the rock faces. There, far inside the country, people took cover from pirates in the Middle Ages.

In the afternoon some of our courageous co-workers crossed the canyon of Alcantara. Others visited the island Vulcano. The healing effects of thermal springs and sulphurous mud were already known to the Romans.

On Sunday evening we said goodbye to Italy, but not without tasting the excellent food and wine once again. And at the end, all of us agreed that we got to know not only the beauty of Sicily, but also each other better during these few days. ■

JUMPING INTO THE FLOODS

EDL sponsoring triathlon

LEIPZIG (Ulrike Fischer). It is quite known that EDL again and again breaks new ground when implementing projects. However, EDL is not only active in the plant engineering sector, but also open to other kinds of activities. So the swimming contest within the 2nd Middle German Company Triathlon was sponsored by EDL together with Leuna Harze GmbH. The competition took place in Rossbach near lake Hassesee (Saxony-Anhalt) on July 12th, 2008. More than 120 teams of different companies (among them TOTAL Refinery, DOMO, DOW, Leuna Harze), institutions and sports clubs participated in the competition that also served as a platform to bring companies from Middle Germany together in a sporting environment. Unfortunately, EDL could not select a team for this year's triathlon. But their day will come. ■

CONTINUATION OF PAGE 1: CHOREN SUNDIESEL®

sioned. Meanwhile, the next plant units are shortly before their hot commissioning. At the same time the first optimizations with respect to availability, ease of handling and safety are being performed.

Biofuel made from wood chips

Now, CHOREN and EDL intensively work on the completion of the plant together with Shell that has been supporting the CHOREN process as technology partner and since 2005 also as investor.

First process stage Carbo-V®-gas production

In a few months, sellable diesel fuel, also known as SunDiesel®, shall be produced in a four-shift operation. The output of the Freiberg plant will completely be taken over by Shell. It is expected that further and even higher investments in similar plants will follow. Fuel quality in conjunction with climate protection is not only well received by politics, but is also attractive from the economic point of view. EDL is proud of having contributed by its engineering and process know-how to this development. ■

Project manager H. Kosch

Exterior view of the Beta plant in Freiberg

Transport logistics for Russia

VIENNA (Peter Mitterer). Process plants consist of very diverse components - vessels, pumps, compressors, piping, power supply systems, process control systems etc.

These components are manufactured and marketed by specialized companies located throughout the world or at least across Europe. Transport logistics take care that the right items are made available to the right customer at the right price in the right quantity and in the right quality at the right place at the right time. (Seven rights acc. to E. Grosvenor Plowman).

Russia as business partner

Eastern Europe and in particular Russia have been one of the major export markets for Austrian medium-sized companies, and also for the Pörner Group for many years.

Russia has turned out to be a reliable partner that implements its investment projects vigorously and in a goal-oriented way. The same is expected by its vendors. And you will seldom be disappointed, provided you stick to certain rules.

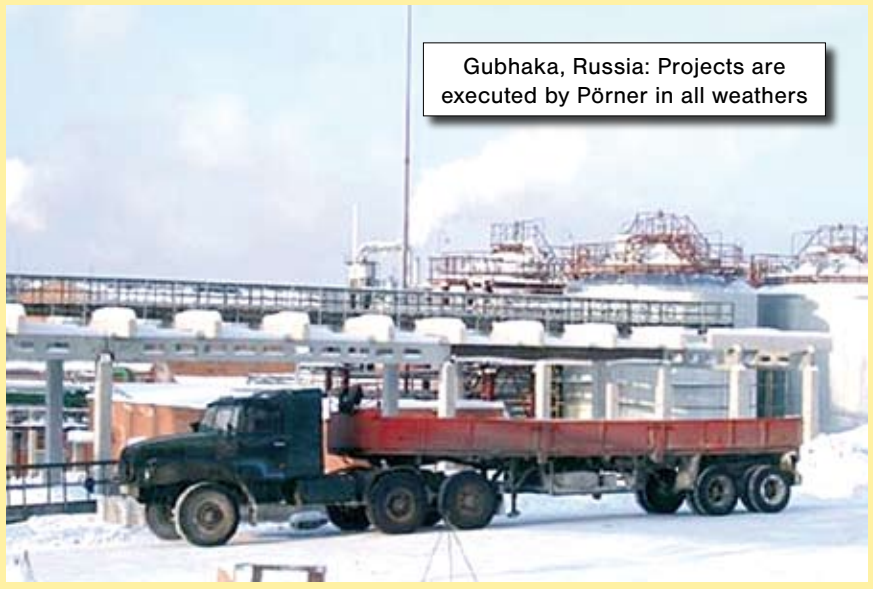
The Russian contract

Supply contracts with Russian customers are often brief and free from legal mantraps. You experience a certain handsale quality as you can surely find it in self-conscious and reliable partners only.

Contracts are most often executed bilingually, in English and Russian, and therefore, require a certain command of the (foreign) language by the vendor of the plant.

Russian customs

THE obstacle for transports to Russia are Russian customs authorities. When goods are imported to Russia it turns out whether the supply contract was formulated conclusively and interpreted correctly.



Gubhaka, Russia: Projects are executed by Pörner in all weathers

Now it becomes clear how well project managers, logisticians, the selected forwarding agents and their subsuppliers (customs agents, carriers etc.) and last but not least customer's customs agents work together.

Procedere to obtain operational approval: Beside the GOST-R certificate (certificate of compliance) the plant owner needs a metrologic certificate for each instrument as well as a RTN Permit to use (RTN = Rostech-nadzor). These certificates have to be obtained by the supplier of the plant. Every customer can show the best plant as an exhibit only, if the RTN certificate is submitted late or not at all!

Russian customs authorities want to get detailed information about:

- the goods to be imported (or better the customs tariff number), weight and price of the goods

and, moreover, they very thoroughly check

- completeness of delivery and
- approval for operation in Russia.

As regards the latter item the so called GOST-R certificate is required. This certificate can be obtained by the respective manufacturer or by the supplier of the entire plant.

Every missing document, every inconsistency carries the risk of delays in transit and thus, of high, not estimated costs (standing time for trucks, warehouse charges, penalty due to delay in delivery, increased costs and time for interim solutions, etc.).

Russian roads

As means of transport trucks are still favored, at least for transporting goods allotted to a certain project. If railway or ships were used in this case, it would be necessary to consider pre-carriage and oncarriage what makes the cheap main transport again unattractive. And inland navigation is not possible throughout the whole year.

Even very big packages can be shipped on trucks at any time. Exceptional convoys are subject to an (up to three months' lasting) approval procedure in every transit country.

The main advantages of truck transports are:

- delivery acc. to the project progress and
- immediate invoicing of own advanced costs towards the customer.

For a logistician, the only disadvantage of road transports is the recurring ‚paper work'. Every transport has to be announced several times with increasing information content - 30 days, 14 days, 3 days prior to the delivery and within 48 hours after delivery etc.

L/C: The bank of the plant supplier transfers the invoiced amount immediately upon presentation of the agreed documents, i. e. prior to arrival of the goods at the customer's and without check for completeness or quality by the customer. Therefore, each document is checked very thoroughly.

Shipping Documents

One of the essential tasks of a logistician is to organize transports and mainly includes:

- gathering information about transport volume, loading places and dates
- preparation of a logistics concept
- invitation to tender and contract award for transport services.

When transports then leave, the focus is put on the so called shipping documents. These documents

- accompany the goods
- are required to import them into the recipient country
- and are mostly required for effecting payment.

As a rule, these documents also have to comply with the L/C (Letter of Credit or documentary L/C) or other payment conditions.

It makes sense to prepare a set of documents for each truck, even if they leave at the same time, e. g.

- commercial invoice
- packing list
- certificates of origin, of quality, of compliance (GOST-R), of insurance.

Thus, the risk of several trucks getting caught due to missing or incorrect documents is minimized.

The logistician can contentedly lean back when the goods have been delivered in full number and free of defects to the destination and payment has been received on the project account. ■

Road transports in Russia are proprietary know-how of the forwarders. Routes of exceptional convoys are hardly made public in detail. Forwarders that know the right people in the Army can score in this respect. And it often depends on the driver's skills and experience whether he is ordered to drive in convoy (depending on the value of goods) or whether he can evade it and thus, save time and money.

EXHIBITION: NEFTEGAZ 2008

Pörner Group presented itself in Moscow

LEIPZIG, VIENNA (Lydia Barth). The Russian Federation with its huge crude oil and natural gas deposits has always been a good market for plant engineering companies from all over the world. With its continuously growing economy this market is more interesting than ever. The Russian oil and gas companies are now globally acting and just begin to rid themselves of their traditional role as natural resources provider. Based on new visions a large revamping process of existing processing locations in the refining and petrochemical sector has been initiated.

Extending co-operations

Pörner has been maintaining excellent relationships with the CIS for more than 10 years and could successfully complete plenty of projects such as Biturox plants in Nizhnekamsk, Yaroslavl and Chelyabinsk or a formaline plant for Metafrax Corp. in Gubakha.

Pörner's current strategy is to act together with EDL on the Russian market. EDL's complete service portfolio combined with know-how gained in many projects that were implemented over the last years in the refining and chemicals sector, experience with Russia dated back to GDR-times as well as grasp of Russian language and culture are the basis for future success.

The Pörner/EDL booth at the Neftegaz in Moscow

The participation in the Neftegaz exhibition in Moscow in July 2008 was a good chance to present EDL's range of services. This exhibition is the most important venue of the year 2008 for representatives of the oil and gas business and, therefore, an ideal platform.

Just in times of digital communication and virtual worlds it is and remains important to personally meet business partners and establish long-lasting relations. ■