



**PROCESS PLANTS OF THE FUTURE**  
*We create productivity*

**ONE OF 55 BITUROX® BITUMEN PLANTS  
LICENCED BY PÖRNER**

**Customer:** OJSC NZNP

**Site:** Novoshachtinsk, Rostov/Russia

- Project:**
- Biturox® bitumen oxidation plant for the production of road grade bitumen
  - Two Biturox® reactors of 660.000 TPA capacity at continuous operation
  - State-of-the-art off gas treatment and heat recovery for optimal energy efficiency and environmental compatibility



## PLANT ENGINEERING ON A SOLID FOUNDATION

Investing today in the better process plant of the future,  
with a trusted engineering partner

**Building a process plant is a complex task.**

A new production facility is created within the shortest possible time to form the basis of the company over many years, and even decades.

Difficult decisions have to be taken: product quality and capacity, technology selection, location, installation variants, selection of key components: all of these criteria form the framework for a long period of production.

For the intensive phases of design and construction a partner capable of coping with the challenges in a reliable manner is needed.

Pörner Ingenieurgesellschaft, with a wealth of experience of over 2000 projects executed worldwide, undertakes project organization and management from a single source.

Whether minor conversions or investments exceeding € 100 m, Pörner enjoys the trust of leading industrial companies from conceptual design through to commissioning.

Integrated project management, high-level process competence, international experience and the network of over 500 engineers and specialists provide for the better industrial plant of a lasting higher value. We call it Anlagenbau 4.0.



Andreas Pörner



Peter Schlossnikel

*In the long term it is useful and economical to opt for the better. Pörner provides the basis for this.*

Andreas Pörner, Managing Shareholder of the Pörner Group

*The unique investment in a better, intelligently designed plant pays off over the years and decades by higher productivity and lower operating costs.*

Peter Schlossnikel, Managing Shareholder of the Pörner Group



## A NETWORK OF ENGINEERING COMPETENCE

The Pörner Group headquartered in Vienna (Austria) operates at eight locations in Europe.

With companies and offices in Austria (Linz, Kundl), Germany (Grimma) and Romania (Ploiesti), the wholly-owned subsidiaries EDL Anlagenbau Gesellschaft mbH based in Leipzig (Germany), JSC Gazintek based in Kiev (Ukraine) and OOO Pörner Russia based in Moscow (Russia) the top-performing engineering network is unique in Central and Eastern Europe.

All subsidiaries have a uniform structure and are able to design and construct complete plants independently by their own specialists using the most up-to-date tools.

Over many years the Group has been well-connected with leading licensors and partners, suppliers, construction and assembly contractors. It is thus possible to execute complex projects flexibly and cost-efficiently on schedule using state-of-the-art technologies.

### The Pörner Group offers:

- Custom-tailored service models
- Personnel continuity for long-term cooperation
- Cost savings by optimized operating processes
- Independence of third-party interests
- Global presence

## THE PÖRNER GROUP

Engineering and contracting for the process industry

Pörner provides the entire range of conventional engineering services to design new industrial plants and extend or modernize existing ones. For international projects, plants are supplied and built on a turnkey basis if requested.

### Innovative technology and service provider

Applying state-of-the-art technologies in all parts of the world is one of our core competences.

Based on the numerous references of the Pörner Group the customer can be sure that his investment is entrusted to a proven partner who can rely to the expertise of hundreds of executed projects, special know-how and well-proven solutions.

Specialists, with many years of experience in plant engineering, are a hallmark of the company. The combination of long-serving experienced lead engineers and dynamic young talents explains the Pörner project teams' performance.

### The Pörner Group designs, supplies and constructs industrial process plants for:

- Refineries
- Petrochemical and
- Chemical industry
- Gas industry
- Power and environmental industry
- Industrial production and
- Pharmaceutical industry



*Working methodology and structuring of plant engineering is natural for us. We ensure the smooth running of the project according to clearly defined guidelines.*

Thomas Rieder, Project Manager Pörner Vienna

#### **POLYETHYLENE PLANT**

**Customer:** Borealis Polyolefine GmbH

**Site:** Schwechat/Austria

**Project:** Construction of PE4 polyethylene plant and extension by a black colouring unit

## **REALIZING A BETTER PLANT WITH PÖRNER**

Experience and innovation for a better plant – Pörner engineering and contracting from a single source

Selecting the best technologies, equipment and systems, a high degree of automation and digital integration within the understanding of Industry 4.0 produces a better plant that remains competitive for many years by:

- Maximum product quality and flexibility
- High energy efficiency and low utility consumption
- High plant availability and safety
- Low maintenance costs and opportunity of expandability
- Optimum environmental compatibility

The Pörner specialists have the know-how to plan, design and procure plants with future-oriented detail solutions. The investor gets a process plant as if made out of one piece for long-term, high productivity and operational safety.

#### **Anlagenbau 4.0**

Anlagenbau 4.0 stands for Pörner's mission to design, plan and implement the better process plant (the „Anlage 4.0“) together with the customer, for the given purpose using the most advanced resources (processes, systems, components, automation).

The range of digital tools and intelligent networking enables the Pörner engineers and specialists to fully develop their expertise in a specific project.



**PCK „KLEINER 16“ REFINERY SHUTDOWN**

**Customer:** PCK Raffinerie

**Site:** Schwedt/Germany

**Project:** Modernization during the shutdown 2016:

- Crude oil 1 unit: replacement of vacuum column and stripper column
- Replacement of regenerator in FCC plant
- LCO recovery project at FCC plant

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Regenerator parts (270mt): 80 % prefabricated as modules

Logistics: Setting up temporary drive-over bridges (avoiding lifting over pipe racks)

EDL project execution: handover to PCK on time and on budget



*It is our aspiration to be a competent partner and consultant of leading refineries and chemical companies.*

Michael Haid, Managing Director of EDL Anlagenbau



**REVAMPED**  
BY PÖRNER GROUP

## REVAMPED BY PÖRNER – FIT FOR THE FUTURE

### Sustainable productivity at optimal conditions

Upgrading existing plants to become state-of-the-art by way of conversion pays off.

A REVAMP by Pörner means, not only to renew the existing facilities but also to accomplish comprehensive process improvements regarding product quality, efficiency and operational safety.

The required investment only costs a fraction of a new plant.

Pörner plans in advance the dismantling activities, the installation of new equipment and connecting elements in a precise manner to carry out construction measures in a well-coordinated manner with little impairment of the running production during a short shutdown. Smart logistics enables a safe delivery of partially oversized equipment.

In the last 10 years Pörner completed over 100 revamp projects for customers of the refinery, petrochemical and chemical sectors of industry.

**REVAMPED by Pörner** offers several advantages:

- Improvement of product quality
- Increase in capacity
- Improve automation and monitoring
- Increased operational safety and availability
- Reduction of energy consumption
- Optimization of operating costs
- Improvement of plant safety and environmental compatibility

## GAS-TO-LIQUID CATALYST PLANT

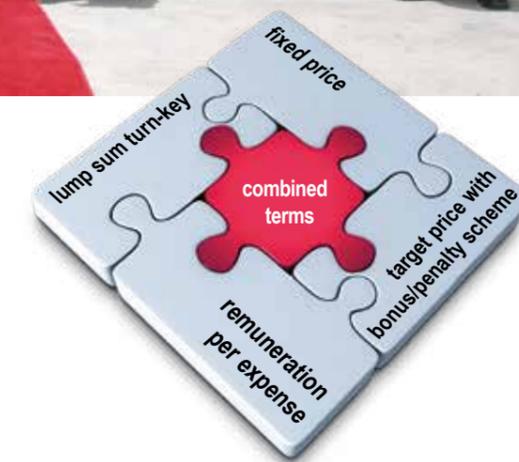
**Customer:** Süd-Chemie Qatar WLL

**Site:** Messaieed (Near Dohar)/Qatar

- Project:**
- General contracting of the first production plant of high-tech catalysts for gas-to-liquid processes
  - Direct implementation of the large-scale plant without intermediate step of a pilot plant
  - Design, engineering and construction within just 16 months



THE 3D-MODEL



## GLOBALLY ACTIVE



Our international references offer the customer the confidence to entrust their investment to a partner with worldwide experience.

**Michael Volkmann**, Managing Director of Pörner Romania

Based on our own technologies (Biturox®) Pörner has been operating internationally since 1978 already and has therefore a wealth of experience when it comes to executing complete projects in countries with different cultures.

Pörner constructs process plants under various geographical and climatic conditions (Siberian cold, tropics, and desert). The project execution takes into account the requirements of local authorities and integrates the services by local suppliers and construction contractors into a unified whole.

Pörner designs plants in accordance with major international standards, DIN, ANSI, ASTM, GOST etc. Local construction supervision and commissioning (based on the own technologies in particular) are done by experienced specialists. Pörner has executed more than 500 international projects in over 50 countries.

### Features

- Custom-tailored contract depending on the project size
- Engineering based on international and national standards
- Design in line with local conditions
- International contracting with subcontractors
- Local supervision and commissioning



### 3 LARGE-SCALE REVAMPS IN TURNAROUND

**Customer:** OMV  
**Site:** Schwechat/Austria  
**Project:** During the refinery shutdown in 2016 three revamp projects were accomplished at the same time:  
 1. Revamp HDS3: reactor replacement  
 2. Revamp DEA2: product yield improvement  
 3. Revamp RD4: production increase and optimum plant operation

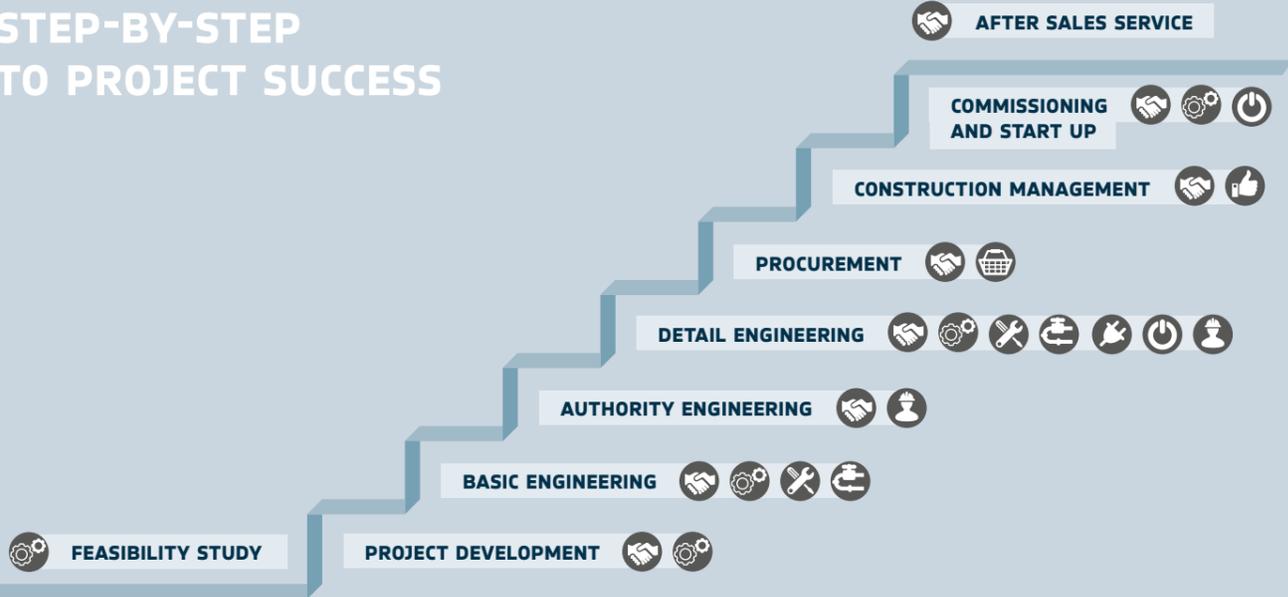
Finalizing the three large-scale revamps almost at the same time during this plant shutdown, was an engineering, process and above all planning challenge. The planning of the reactor transport logistics alone took about two years.



*We achieve the given, ambitious goals under extreme cost and time constraints by individually adjusted project structures and optimized workflows. Best practice in terms of safety and quality is a must.*

Wolfgang Kursch, Managing Director EDL Anlagenbau

## STEP-BY-STEP TO PROJECT SUCCESS



## ENGINEERING SERVICES OUT OF ONE SINGLE SOURCE

When up-to-date digital tools join 45 years of experience in project execution

In terms of an integrated complete performance Pörner provides the whole range of engineering services of all disciplines.

The customer has only one contact: the Pörner project manager. He only needs one core team for higher-level controlling, decisions and approvals.

### Complete performance without interfaces

- All planning activities (basic and detail engineering, procurement, logistics etc.) by Pörner specialist departments
- Pool of over 500 engineers and specialists
- Engineering capacities for large-scale projects (650.000 hrs/a)
- Experienced specialists using state-of-the-art tools for extraordinary tasks

Pörner has strong process and automation teams and its own C/S/A staff. So, your plant rests on solid foundation.

- Project Management
- Process Engineering
- Apparatus & Equipment
- Piping
- Electrical
- Instrumentation & Automation
- Structural Engineering & HVAC
- Procurement & Logistics
- Construction & Installation Supervision

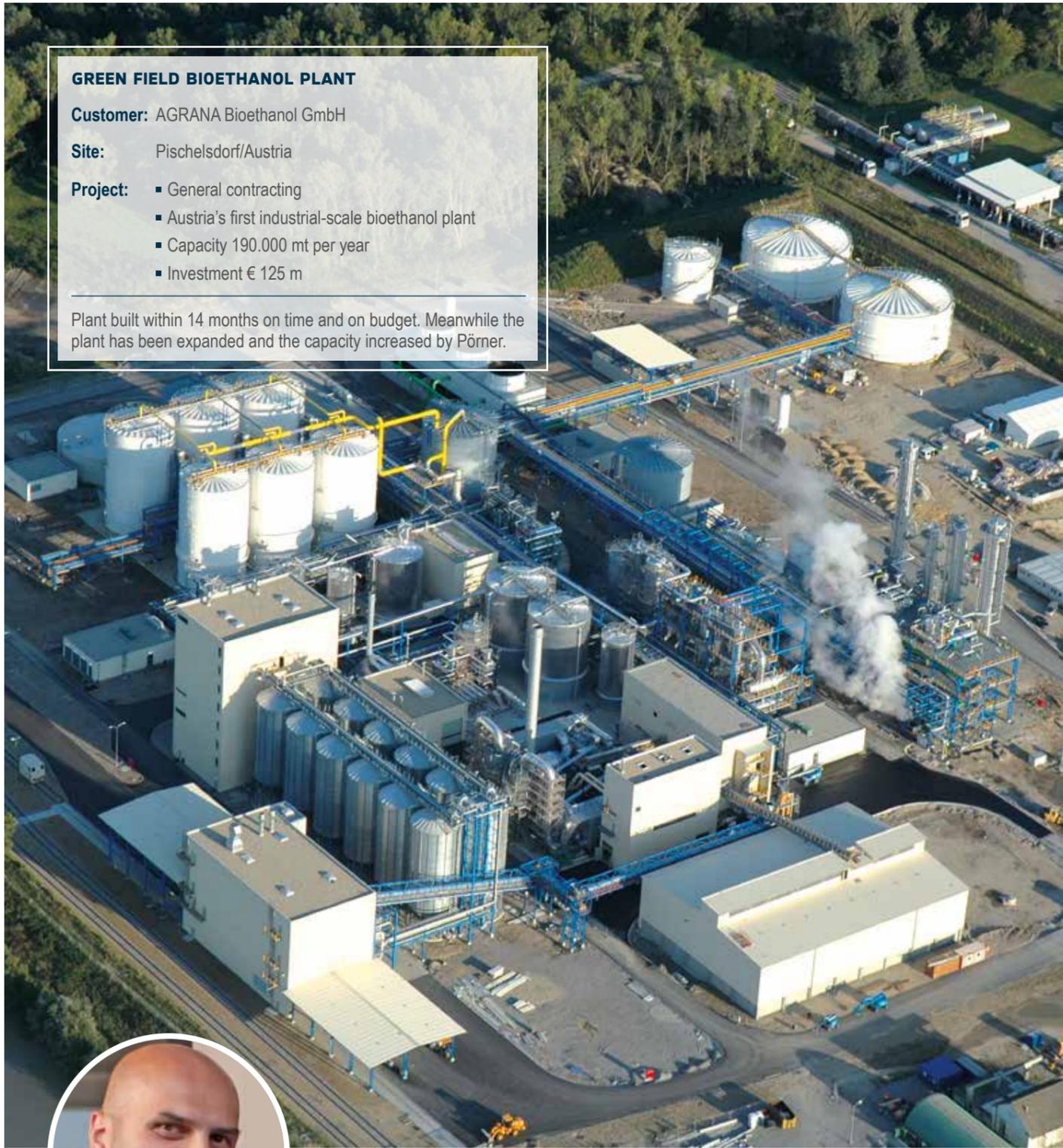
## GREEN FIELD BIOETHANOL PLANT

**Customer:** AGRANA Bioethanol GmbH

**Site:** Pischelsdorf/Austria

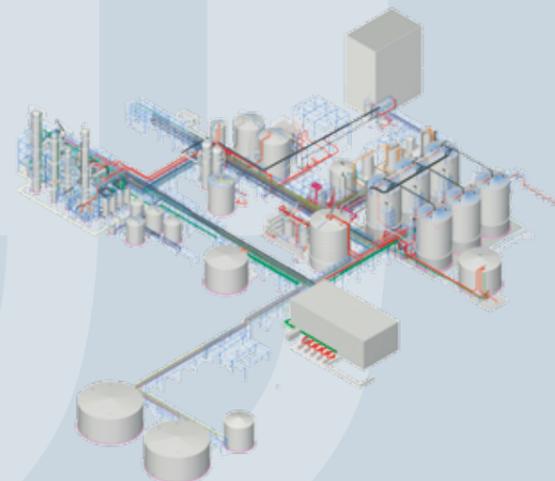
- Project:**
- General contracting
  - Austria's first industrial-scale bioethanol plant
  - Capacity 190.000 mt per year
  - Investment € 125 m

Plant built within 14 months on time and on budget. Meanwhile the plant has been expanded and the capacity increased by Pörrer.



*We promise to create advanced plants and in doing so strictly meet the targets of budget and time.*

**Christian Birgfellner**, Head of Pörrer Project Execution



## EVERYTHING UNDER CONTROL

The Pörrer Group designs and constructs highly productive process plants: from one single source – from one single piece.

As a process-oriented engineering company, we assist our customers from the very first idea to the plant completion: each project phase is tailored to the special customer's requirements.

The industrial plant operator is often short of personnel resources or experience to implement a complete plant engineering project with many interfaces alone.

Inadequate project execution usually leads to budget overruns and delays with higher expenses.

The Pörrer experts undertake the project management and entire execution including cost and schedule control, technical planning and procurement, logistics and site management to the plant completion in a responsible and holistic way.

### The service portfolio

#### Project development

- Consulting
- Conceptual design
- Technology selection
- Project study incl. cost calculation
- Authority engineering

#### Studies

- Feasibility studies
- Environmental impact assessment
- Safety analysis/safety reports
- Expert opinions/test reports
- Market studies

#### Project management

- Project execution
- Coordination and scheduling
- Contracting
- Claim management
- Training of plant operatives
- After-sales service

#### Engineering services

- Licence
- Basic engineering/FEED
- Detail engineering
- Procurement/global sourcing
- Construction and site supervision
- Commissioning

## RECYCLING: PREMIUM BASE OILS FROM USED OIL

**Customer:** PURAGLOBE GmbH

**Site:** Tröglitz/Germany

- Project:**
- Technological quantum leap: the world's first extraction of base oils Group III from used oil
  - Extension of the HyLube2 plant already planned and designed by EDL by another process stage on schedule and within budget

Used oil hydrogenations are a big step towards sustainability



*A proper preparation and conceptual design provides the best conditions for a smooth project execution.*

**Matthias Haring**, Project Manager EDL Anlagenbau



**ANLAGENBAU 4.0**  
we create productivity

## PÖRNER CONCEPTUAL DESIGN

### Thought through from the beginning

It all starts with the idea to invest in a new plant. For the efficient implementation, Pörner defines the product comprehensively within a conceptual design.

Besides the determination of the technology, all components of the plant are conceptualized technologically and calculated so that the project scope and the required resources are transparent and verifiable from the beginning.

#### Pörner assists the investor from the onset by:

- Determining the requirements and targets
- Selecting the most suitable technologies
- Structuring the units and guarantee-related systems

- Conceptual design in close cooperation with customer, designing the key equipment, systems and buildings

- Budgeting of all services and supplies required
- Operation scheduling incl. critical measures, sequences and delivery dates

Pörner prepares the entire documentation (FEED, conceptual design) for the permitting process by the owner and for advance information of the authorities.

The profound preliminary project forms the firm basis (scope, costs, and deadlines) of a successful implementation project.



**FCC UNIT REVAMP**

**Customer:** PCK Refinery

**Site:** Schwedt/Germany

**Project:** Increasing the flexibility of refinery operations in three shut-downs by:

- Replacement of FCC main column
- Reactor replacement
- Regenerator replacement
- LCO recovery



## CORE COMPETENCE: PROCESS ENGINEERING

Process engineering as the driving force of plant construction is of special significance to Pörner.

More than 50 process engineers of the Pörner Group develop and optimize process plants, thus securing the plant operator's major competitive advantages for many years.

New processes are developed individually in cooperation with leading research institutes and partners from a laboratory scale to testing at pilot plants through to the construction of a commercial initial plant (upscaling).

When it comes to planning complex systems, the ongoing supporting process department ensures the optimal design of the technological components.

**Focus areas of process design include:**

- Process simulations (stationary and dynamic)
- Energetic and safety-related process optimizations
- PINCH analyses
- Batch processes
- Lab and pilot plant tests



**REVAMP OF GAS STORAGE PLANT SCHÖNKIRCHEN**

**Customer:** OMV-GAS

**Site:** Schönkirchen/Austria

- Project:**
- Modernization of Austria's largest gas storage farm for a continuous gas supply
  - Replacement of the old control system for the new one during on-going operation
  - Revamp in stages without interruption of gas in- and out-sourcing



**ACCOMPLISH MORE TOGETHER**

**Pörner Integrated Network Engineering**

When it comes to complex new facilities and extensive revamps, Pörner applies advanced network technologies.

**On site presence ...**

A task force team is set up by Pörner for a permanent direct cooperation on site. It is responsible for project execution and coordinates all engineering and execution activities.

During the course of the project the team is complemented by project engineers to meet specific requirements.

**... and linked with the engineering office**

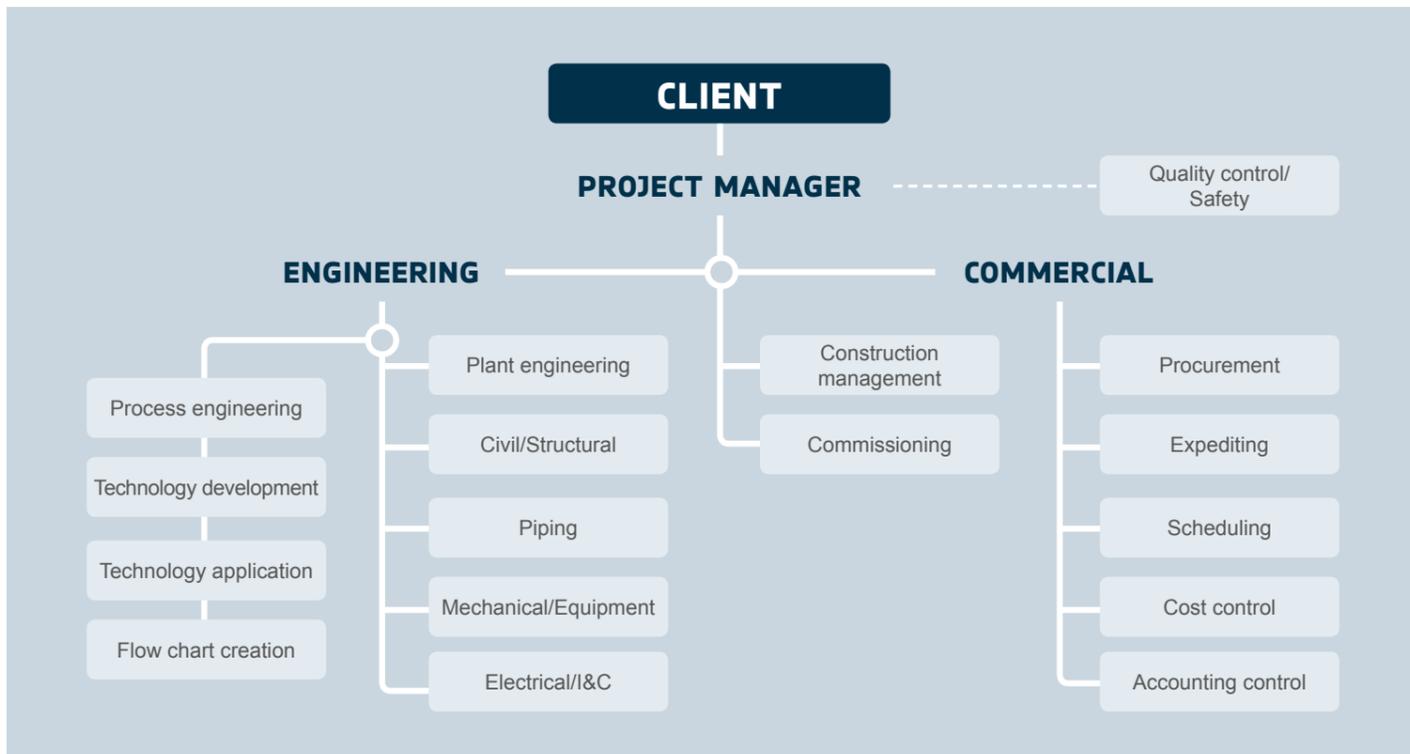
The main part of engineering can then be handled efficiently at the engineering office by experienced project engineers and specialists of all disciplines.

State-of-the-art tools, such as intelligent 3D design, discipline-specific software like project management and planning systems are available via smart interfaces.

**Pörner Integrated Network Engineering**

means efficient and close cooperation of all specialists involved in a project by:

- Individual structuring to the project organization
- Monitoring and coordinating of all project activities
- Targeted implementation of the best specialists from all Pörner subsidiaries
- Utilization of all engineering capacities of the Pörner Group for complex projects
- Digital plant documentation in project database
- Global availability





Manufacturing of the new HDS3 reactor at MAN for OMV, Austria



Transport of the long-item absorption column to Sexsmith/Canada



*To get the better plant, contracts for supply and services shall not be awarded to the lowest but to the best bidder. Thus, the quality advantages will multiply.*

Peter Mitterer, Head of Procurement Pörner Vienna

## PURCHASING FROM THE BEST

### Think locally – act globally

A complex project requires clearly structured procurement processes.

Characteristics, scope of supply and interfaces need to be agreed in detail for all pieces of equipment and systems, to avoid quality defects and gaps in procurement and logistics. Strict procurement controlling minimizes the risk of delayed delivery.

Standardized purchasing activities are routinely performed by Pörner for own and customer projects. Long standing business relationships with the best suppliers and contractors worldwide provide Pörner with comprehensive technological and commercial knowledge of the market.

Customers get the best technological components available on the world market. They are combined with locally procured standard equipment at reasonable prices (e.g. tanks, vessels, steel structures).

Pörner's expediting and inspection routines make sure that everything is supplied on time and at the agreed quality.

#### Best value for budgets

- Coordination of pin-pointed delivery of all plant components
- Standardization of the supplier guarantees
- Completeness of the documentation
- Quality and interplay of all components



*Safety comes first. Life and health of our people is of top priority. Our aim is therefore: Zero accidents!*

Tom Eckl, Chairman of the Pörner works council and Safety Officer Pörner Vienna

## CONSTRUCTION AND INSTALLATION – PREPARED AND COORDINATED FOR EXACT TIMING

### Built with security, fast and efficient

To realize construction and installation of process plants quickly and safely, Pörner coordinates seamlessly the subcontractors working in parallel.

Construction and installation are integrated parts of project execution: all measures from preparation of construction site through to completion are included from the beginning. As early as in the detail engineering phase, major construction sequences are simulated by 3D models (e.g. inch-perfect installation of a new column).

The Pörner scheduling includes the optimization of all delivery and time-critical construction sequences. The contractors are commissioned based on uniform performance contracts.

Experienced construction supervisors, together with department specialists respond to schedule deviations by immediate troubleshooting. Special focus is put on the maximum compliance with safety and environmental standards.

Technical qualification, international experience and, last but not least, the soft skills of the Pörner engineers ensure a high quality of execution in all areas at the shortest possible construction time.



**GLOBAL COOPERATION OF THE INTERNATIONAL PROJECT TEAM HEADED BY PÖRNER GRIMMA**

**NORILSK NICKEL**

**Customer:** PJSC MMC Norilsk Nickel

**Site:** Norilsk/Russia

**Project:** Planning of an off gas desulphurization plant for a nickel factory

- Reduction of sulphur oxide emission by 95%
- Capacity 600,000 TPA sulphur
- Environmental project consisting of 25 plant sections
- International project team headed by Pörner
- Digital execution (176,088 electronic documents in 20,707 files)



*Pörner is used to design plants in extraordinary conditions, e.g. for Norilsk Nickel with temperatures up to -57°C, permafrost soil and transports solely by sea or river.*

Albert Traxler, Pörner Sales Manager for GUS



**ANLAGENBAU 4.0**  
we create productivity

## DIGITAL DOCUMENTATION, ACCURATE AND COMPREHENSIVE

Beyond simulation and discipline-related software, Pörner uses integrated project databases and smart 3D systems with database deposit.

Complete digitalization boosts the efficiency of plant engineering projects in terms of communication, workflow monitoring and documentation.

Advanced communication systems link the Pörner locations with each other and the customers as well as their construction sites wherever they are in the world.

With Anlagenbau 4.0 the entire workflow is documented with the associated data (schemata, drawings, speci-

cations etc.) over the entire implementation period. The minimizing of potential error sources are reduced by less data redundancies.

When the system is handed over to the operator, the entire documentation is available in digital form – as the basis for maintenance, optimizations and expansions.

### PROPANE DEASPHALTING PLANT (PDA)

**Customer:** H&R Ölwerke Schindler GmbH

**Site:** Hamburg/Germany

- Project:**
- Construction of a propane deasphalting plant
  - Production of deasphalted oil from vacuum residue by way of liquid extraction
  - Solvent used: propane

**SDA PLUS**  
EDL•TECHNOLOGY



*The Pörner Group runs four of our own pilot plants and works closely with leading research institutes so that our customers can always build on customized, innovative solutions*

Rolf Gambert, Process Division Manager EDL Anlagenbau



SDA pilot plant in Leipzig/Germany

**BITUROX®**  
BITUMEN OXIDATION TECHNOLOGY

**SDA PLUS**  
EDL•TECHNOLOGY

**FORMALDEHYDE**  
+ DERIVATIVES

**SILICATE**  
PÖRNER RICE HULL TECHNOLOGY

## TECHNOLOGY PORTFOLIO OF THE PÖRNER GROUP

**With innovative technologies one step ahead of the competitors**

Beyond the general engineering capacity to design and implement plants based on provided processes, the Pörner Group has their own time-tested processes and technologies that are used worldwide.

Our own labs and pilot plants are available for the practical evaluation of raw materials and piloting of products and as basis for the plant process design (Basic Design Package).

To continuously improve the plant equipment and in particular the products, Pörner closely works with the world's best specialist system and component suppliers following the Anlagenbau 4.0 concept.

The special focus on highly demanded special products has always been the basis for numerous reference plants. Pörner has thus the know-how to achieve high product qualities custom-tailored for the world market, and to this end design the plants for optimal output, energy efficiency and environmental compatibility.

### Proprietary technologies of the Pörner Group:

- Biturox® technology for bitumen
- Solvent Deasphalting (SDA plus) for residue processing
- Solvent extraction for base and tender oils
- Aromatics extraction: BTX
- Dewaxing/Deoiling
- Hydrotreating/Hydrofinishing of base oils and waxes
- Lubricant blending
- Formaldehyde and formaldehyde derivatives
- High-tech silicate of rice hulls
- Power to X: e-fuels and e-chemicals

**BITUROX<sup>®</sup> PLANT PARCO**

**Customer:** Pak-Arab Refinery Ltd. (PARCO)

**Site:** Mid-Country Refinery near Multan/Pakistan

**Project:** Engineering and construction of a Biturox<sup>®</sup> plant for road grade and industrial bitumen with a capacity of 165,000 TPA



## GLOBAL MARKET LEADER IN BITUMEN PLANTS

The Pörner Group is the licensor for the Biturox<sup>®</sup> process, the leading bitumen oxidation process for the production of premium bitumen grades in modern refineries.

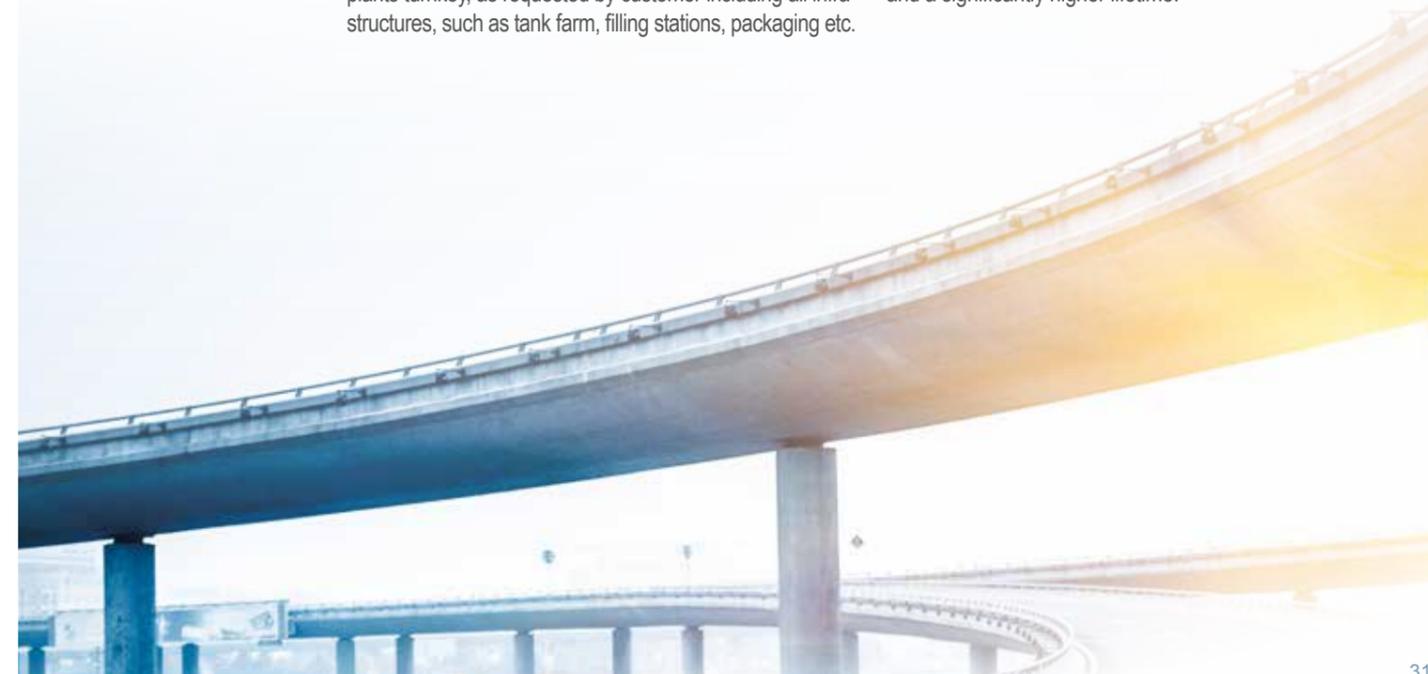
The Biturox<sup>®</sup> process applies controlled oxidation to produce high-quality bitumen from a larger range of crude oils and refinery feedstock.

This bitumen has better thermal qualities and a high aging resistance.

The Pörner Group licences, designs and supplies Biturox<sup>®</sup> plants turnkey, as requested by customer including all infrastructures, such as tank farm, filling stations, packaging etc.

Within four decades the Pörner Group has granted over 50 Biturox<sup>®</sup> licences and put over 40 bitumen production plants into operation worldwide. The designed annual capacity of all Biturox<sup>®</sup> plants operating in India covers 80% of the national bitumen demand.

High-quality bitumen binders produced by Biturox<sup>®</sup> enable to build high-speed roads with less bitumen consumption and a significantly higher lifetime.



*With over 50 licences and 40 years of practical experience in engineering and construction of bitumen plants Pörner is global market leader in bitumen technology.*

**Wolfgang Heger**, Pörner Sales Manager for international projects

## FORMALDEHYDE + DERIVATIVES



Delivery of the long item absorption column

### FORMALIN PLANT FOR LANXESS

**Customer:** LANXESS AG

**Site:** Krefeld-Uerdingen/Germany

- Project:**
- Engineering and construction of a turnkey formalin plant for the production of 150,000 TPA formalin 32%
  - Process unit including downstream off-gas treatment and heat recovery systems, methanol tank and unloading facility as well as formalin double tank
  - Plant figures for methanol and power consumption fall below the contractually fixed guarantee and expected figures



*Pörner designs, engineers and constructs plants for the formaldehyde technology family as an EPC contract partner incl. ancillary, utility and infrastructural facilities.*

**Gerhard Bacher**, Managing Director of Pörner Grimma



## COMPETENCE CENTRE FOR FORMALDEHYDE AND DERIVATIVES

Pörner runs a technological competence centre for products based on formaldehyde at the office in Grimma.

For more than 20 years production plants for formaldehyde and products from this important basic chemical are implemented for international customers in cooperation with specialized licensors and know-how partners.

### Basic product: formaldehyde made from methanol

In close cooperation with the long-time licence partner Dynea SA the silver catalyst process for formaldehyde production has been constantly improved to become the best of its kind.

The silver catalyst process is the safest, most environmental- and most resource-friendly formalin process, with low energy and media consumption and a cost-effective 100 % re-generable catalyst. Technical and economic process comparisons as well as over 20 plant references confirm this.

### Downstream products

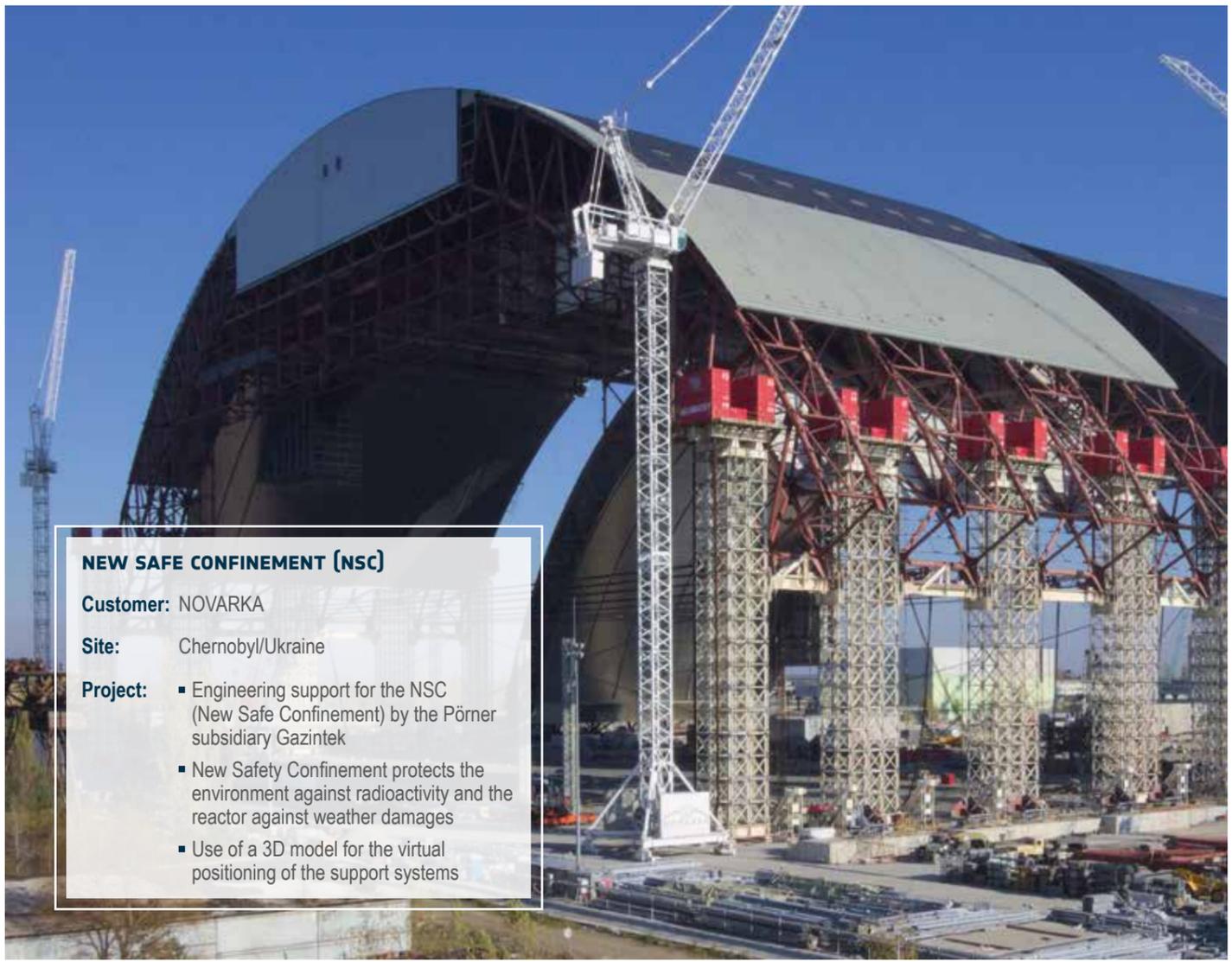
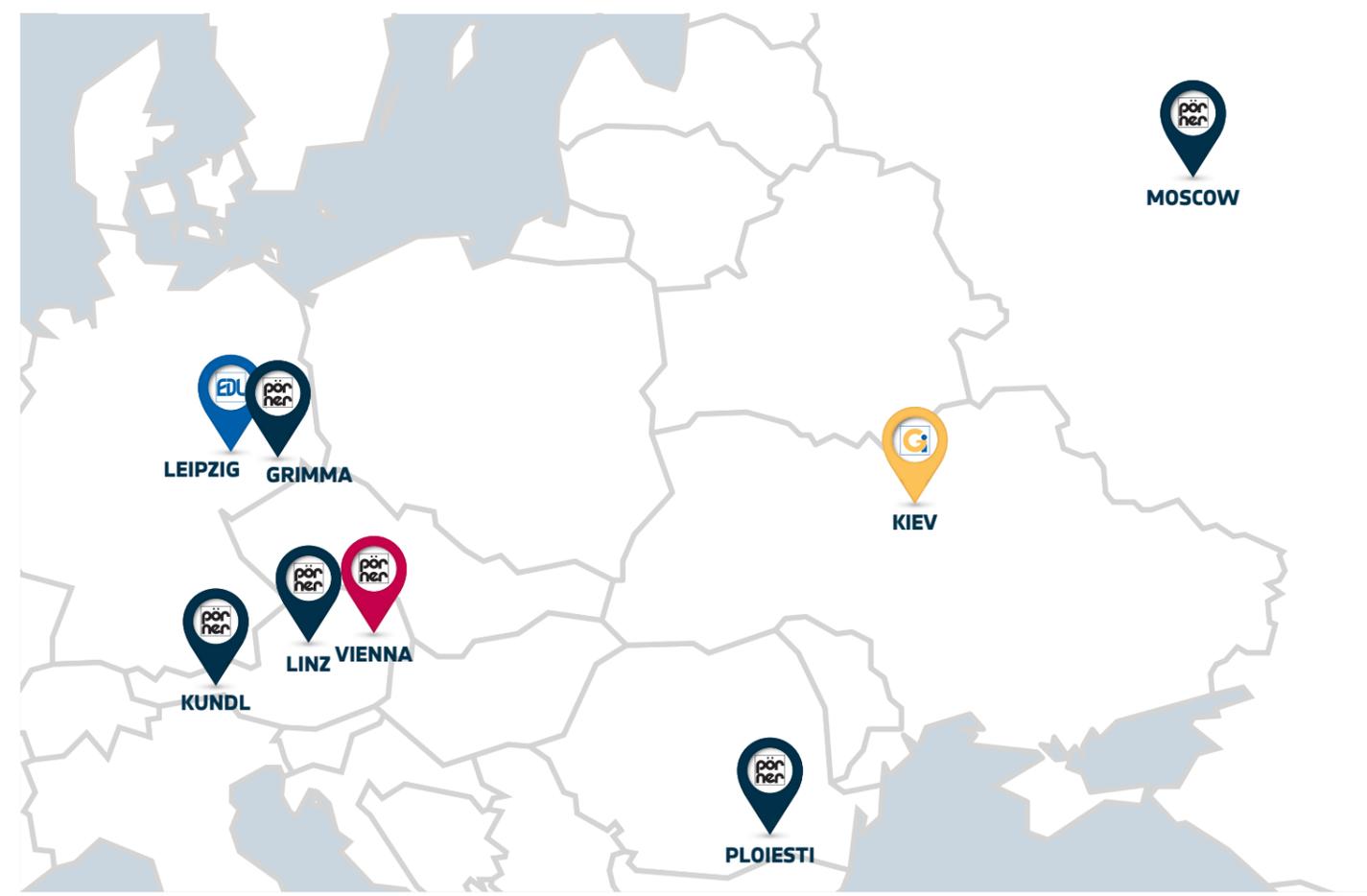
UFC, Hexamine, Pentaerythritol, POM, UF, MUF, MF, PF resins, Novolake and Bakelite



## QUALITY/CERTIFICATIONS

All Pörner locations have a TÜV-certified quality and safety management system according to EN ISO 9001:2015 and the safety certificate SCC\*\*: 2011; an essential condition to design and construct industrial plants in a reliable, safe and environmentally friendly way.

Since 2012 the Pörner Group has been certified in Russia and thus entitled to do engineering, construction and installation work for Russian refineries according to Russian standards.



**NEW SAFE CONFINEMENT (NSC)**  
**Customer:** NOVARKA  
**Site:** Chernobyl/Ukraine  
**Project:**

- Engineering support for the NSC (New Safe Confinement) by the Pörner subsidiary Gazintek
- New Safety Confinement protects the environment against radioactivity and the reactor against weather damages
- Use of a 3D model for the virtual positioning of the support systems

## FOR MORE THAN 45 YEARS IN THE PROCESS INDUSTRY ...

... the Pörner Group is a significant plant engineering company in Central Europe. The engineering network, with eight subsidiaries, offers industrial customers local coverage combined with international expertise.

- PÖRNER VIENNA**  
Head office, plants and units for refineries, petrochemical and chemical industries, energy and environmental facilities, bitumen oxidation (world market leader) – Austria
- PÖRNER GRIMMA**  
Chemical process industry, technology centre for formaldehyde and its derivatives – Germany
- GAZINTEK KIEV**  
Gas and liquefied petroleum gas facilities onshore and offshore – Ukraine
- PÖRNER LINZ**  
International plant engineering, plants for the steel and chemical sectors of industry – Austria
- PÖRNER ROMANIA**  
Refinery equipment, petrochemical industry, power and environmental systems, general plant engineering – Romania
- PÖRNER KUNDL**  
Pharma plant engineering and industrial building services – Austria
- PÖRNER GROUP RUSSIA**  
Refinery and chemical plants, power and environmental facilities, general plant engineering – Russia; legally entitled to close national contracts
- EDL LEIPZIG**  
Refinery and chemical plants, revamps, proprietary special technologies – Germany



# ENGINEERING & CONTRACTING

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**VIENNA | LINZ | KUNDL | GRIMMA | LEIPZIG | PLOIESTI | KIEV | MOSCOW**