



COMPANY PROFILE
Chemoprojekt, a. s.



CHEMOPROJEKT

Characteristics of the company



Nitric acid unit, 1500 MTPD,
Nitrogénművek Rt., Hungary

Chemoprojekt, a.s. is Czech Design, Engineering and Contracting Company, which has been operating since its foundation in 1950 as a leading supplier for the organic and inorganic chemistry sector, petrochemistry, crude oil refining, natural gas processing, pulp and paper production, biofuels, power generation and environmental protection.

Based on its extensive experience in the chemical industry sector, particularly chemical engineering and technology, Chemoprojekt offers the following services:

- Turn - key project execution
- Engineering, design and consulting services, statutory proceeding
- Procurement
- Construction execution, assembly, supervision
- Commissioning, testing, after hand-over services
- Analyses and studies
- Research and manufacturing activities in the field of chemical materials
- Training of the personnel

Chemoprojekt medium-term product strategy is focused on the following fields:

- Inorganic chemistry, nitrogen chemistry (diluted and concentrated nitric acid, urea including granulation, ammonia, nitrogen fertilizers)
- Organic chemistry, hydrogen, nitrobenzene, aniline, polyphenylen ether (PPE)
- Biofuels of 1st and 2nd generation
- Refineries, petrochemistry (oil, gas)
- Industrial infrastructure and pipelines
- Food processing industry – breweries, sugar refineries

After successful audit in July 1996, LRQA awarded Chemoprojekt the ISO 9001 Quality Certificate for Design and Project Management. In July 1997, the certification was extended to Procurement and Complex Engineering Services. The present certificate is after recertification in July 2005 valid until end of July 2009. Chemoprojekt is also holder of the certificate ISO 14001. Since 2003 Chemoprojekt has validated environmental management system in accordance with European Council regulation, which is known under term EMAS.

Strategy of the company according to products

INORGANIC CHEMISTRY	ORGANIC CHEMISTRY	BIOFUELS	RAFINERY /PETROCHEMISTRY	INDUSTRIAL INFRASTRUCTURE	FOOD PROCESSING INDUSTRY	NEW TECHNOLOGIES
nitric acid, ammonium nitrate, urea including granulation, ammonia production, chlorine chemistry	aniline, polyphenylene ether (PPE), nitrobenzene, polyvinyl chloride (PVC), amino chemistry, cyanide chemistry	Biofuels of I. and II. generation, biomass	refineries, petrochemistry, gas processing	pipelines, compressor and pumping stations	breweries, sugar refineries, distilleries	hydrogen, waste incineration

Butadien unit, 120.000 t/day,
Butadien Kralupy, a.s.,
Kralupy n. Vltavou, Czech Republic

Property structure

At the end of 2001, the ownership structure of Chemoprojekt changed. The former majority shareholder since 1995, Krebs/Technip of France sold its share in Chemoprojekt to private investors. Since the beginning of 2002, the main shareholder of Chemoprojekt, a.s., SAFINA, a.s., which core business is focused on precious metals and their application in the industries became gradually the absolute majority owner of Chemoprojekt. Chemoprojekt itself is the sole owner of VUAB Pharma a.s., the producer of raw materials and dry injections in the pharmaceutical industry (Research Institute for Antibiotics and Biotechnology). In December 2008 Chemoprojekt has won the tender for 98,85 percents of state share of the company Technoexport, Inc.

Quality Policy

This system is configured to continually improve its effectiveness at each stage of the work cycle, and to ensure the involvement and professional development of personnel at all levels.

All employees engaged in work under the Chemoprojekt, a. s. name are responsible for developing and delivering a product that fulfils Client's needs and ensures Shareholder's benefits.

To achieve this milion, the company management has set up a Quality Management System in compliance with ISO 9001:2008 standard. Full policy is available on the web.

HSE Policy (Health, Safety, Environment)

Chemoprojekt, a.s. considers as an essential corporate objective the continuous improvement of the health and welfare of the personnel, the safety of plants and the prevention of the environment (HSE). Company management implemented Environment Management System according to ISO 14001:2004 and EMAS. Full policy is available on the web

Information and design tools

CAD system (based on Intergraph products):

COMOS FEED, PDS, SmartPlant Instrumentation, SmartPlant Electrical, InRoad Survey, InRoad Site, Speedikon, Frame Works+, Cadkon B, SmartSketch, Microstation, Autocad

Engineering calculation:

Process: Chemcad, CCTerm, Pro/II
Mechanical: MICROPROTOL (ASME, AD-Merkblatter)
Piping: CAESAR II
Civil: ESA PT, IDA-NEXIS
Electrical: ETAP

Office system (based on Microsoft products):

MS WINDOWS, MS Office, MS Project 2003

Communication system:

ON-LINE: Praha-Litvínov, Praha-Brno, Internet, Intranet, Praha-construction site www.chemoprojekt.cz, Microsoft Exchange+OWA

Networks:

MS Windows server

Information system:

IS INFOS 2001, Bach System, ASPI, Intranet, public folders MS Exchange

Emission Reduction
Urea Plant 600 MTPD
Chemopetrol Litvinov
Czech Republic

Selected key projects in realization

Butadien Kralupy, a.s., Czech Republic

Butadiene production unit with the capacity 120.000 t/year. Scope of work is „turn-key project“. It consists of licence, design, delivery of equipment, civil works, unit erection, precommissioning, commissioning and start-up, incl. training of personnel.

Process licensor: JSR Corporation, Japan

Beginning of the works in 2007, Start-up: 2010

Revamp of urea unit, GRODNO AZOT, Republic of Belorussia

The current unit with the capacity of 1000 MTPD will be modified and intensified up to 1400 MTPD. Besides, a new granulation unit with the capacity of 1200 MTPD will be installed. Technology used for intensification and for the new granulation unit will be traditionally from Dutch company Stamicarbon B.V. Part of this project will also be an installation of high-pressure compressor CO₂ from traditional Chemoprojekt's supplier German company MAN TURBO.

Contract contains complex engineering activities and technology supply. Construction part and installation will be provided by the client.

Nitric acid, BorsodChem, Kazincbarcika, Hungary

Nitric acid 68%, dual pressure process, capacity 660 MTPD.

Process licensor: Grande Paroisse

Beginning of the works on 2007.

FAME unit, Preol, a.s. (AGROFERT Holding), Lovosice, Czech Republic

Capacity: 100 kt/year. Oil mill – pressing and extraction unit for capacity 400 kt rapeseed/year. Chemical neutralisation for vegetable oil. Three-stage continual esterification of neutralised oil to methyl ester based on Desmet Ballestra technology. Chemoprojekt provides this project as turn-key including all the needed off-sites.

Nitric acid, ZAK, Kedzierzyn-Koźle, Poland

Nitric acid 60%, dual pressure process, capacity 900 MTPD.

Process licensor: Grande Paroisse

Beginning of the works on 2008, Expected finishing of the unit 2011.

New granulation units, NAK Novomoskovsk, Russian Federation

New granulation units with the capacity of 2000 MTPD and 1400 MTPD will be installed. Technology used will be traditionally from Dutch company Stamicarbon B.V.

Beginning of the works on 2007, Expected finishing of the unit 2008 and 2009.

Urea unit. ZAO FOSAGRO AG. Cherepovetz, Russian Federation

Urea unit with capacity 1500 MTPD. Process licensor: Stamicarbon.

Recent key projects

Nitric acid unit, Bayer Polyurethanes (Shanghai) Company Ltd., China

Nitric acid production unit with capacity of 1230 MTPD, concentration of product 68% of weight. Production is determined for polyurethanes (MDI) manufacturing. Scope of work of Chemoprojekt is consisting of procurement of license for process, elaboration of Basic Design, overall technical coordination, technical support of elaboration of Detail Design by Chinese consortium partner (SINOPEC Shanghai Engineering Co.

Ltd.), elaboration of technical parts of Contracts with suppliers of critical equipment and technical support of Project and construction management. Basic Design elaboration is running since February 2006 and in parallel selection of key long lead equipment. Start-up of the unit: 2009.

Nitric acid, Grande Paroisse, Grand Quevilly, Rouen, France

Capacity: 1500 MTPD. Product concentration: 62% of weight. Production is designed for nitric fertilizers manufacturing. Project works on the FEED (Front End Engineering Design) have started together with selection procedure for supply of equipment with the long term delivery time in June 2006. Start-up of the unit: 2009

FAME unit, MEROCO,a.s., Leopoldov, Slovak Republic

Capacity: 100 kt/year. Acid degumming unit. Sunflower oil dewaxing unit. Physical deacidification of degummed oil. Three-stage continual esterification of neutralised oil to methyl ester based on Desmet Ballestra technology. Chemoprojekt provides this project as turn-key including all the needed off-sites..

Nitric acid, Nitrogénművek Rt., Pétfürdő, Hungary

Nitric acid 60%, dual pressure process, capacity 1500 MTPD.

Process licensor: Grande Paroisse

Contract was signed 1/2005. Production has started in 2007. Chemoprojekt provided this project as turn-key.

FAME unit, SETUZA, a.s., Ústí nad Labem, Czech Republic

Capacity: 100 kt/year. Trippledegree continual esterification of plant's oil to methyl ester based on Desmet Ballestra technology. Beginning of the construction on 05/2006. Operation start-up realised 2007. Part of the unit is also a modifier unit of plant's oils (acidity and humidity removal). Chemoprojekt provided this project as turn-key including all the needed off-sites.

Intensification of aniline unit, BorsodChem MCHZ, s.r.o., Ostrava, Czech Republic

Request for production intensification created increase in MDI production in the plant BorsodChem. This project of increase in capacity up to 150 000 tons/year of aniline included construction of new hydrogen unit and new production of hydrogen. Chemoprojekt, a. s. provided this construction as turn-key project. In the new hydrogen unit, supplied by Haldor Topsoe, Chemoprojekt provided projecting and delivery of construction part and connecting points. The project had begun in May 2003 and both units have started operation in June 2005.

Reconstruction of K11chamber and "D" distillation, Chemopetrol Litvinov, Litvinov, Czech Republic

In January 2005, Chemoprojekt provided inspection of the current not working units of high-pressure hydrogenation of chamber K11 and "D"distillation, including BDEP documents, for the reason of the planned reconstruction and operation renewal. The contract for implementation was signed in August 2005. Both units have started test operation on the 23.6.2006, 4 weeks before deadline. The units were approved and have fully started to operate on the 14.7.2006.

Glycerin unit, SETUZA, a.s., Ústí nad Labem, Czech Republic

New glycerin production unit that will replace the old one, thus increasing efficiency, quality of the output and improving the impact on the environment. Production unit processes the waste glycerin waters from SETUZA a.s. plants (from fatty acids splitting and FAME production). Technology of refining, vaporization and distillation is licensed by Cimbrria Sket.

Capacity: 12 000 t/year of pure glycerin with the concentration of 99,7%. Quality of output according to all required parameters is in compliance with the use in drugstores. Plant is equipped with odor neutralizer. Production has started in 2004.



Mother liquors processing
DIAMO s.p., Stráž pod Ralskem
Czech Republic

Chemoprojekt, a.s.
Třebohostická 14
100 31 Praha 10
Czech Republic
Tel.: 00420 261 305 201
Fax: 00420 261 305 341
e-mail: info@chemoprojekt.cz
[http:// www.chemoprojekt.cz](http://www.chemoprojekt.cz)

Branches of Chemoprojekt, a.s.

Litvínov, Czech Republic

Contact person : Mr. Petr Hora

Tel.: +420 476 762 501

Mobile: +420 724 635 613

Fax: +420 476 762 536

E-mail: phora@chemoprojekt.cz

Brno, Czech Republic

Contact person: Mr. Jan Rádł

Tel.: + 420 544 520 002

Mobile: +420 724 635 620

Fax: + 420 544 520 044

E-mail: jradl@shemoprojekt.cz



Intensification of Aniline unit
BorsodChem MCHZ, s.r.o.
Ostrava, Czech Republic

Subsidiaries abroad

Slovakia

Contact person: Mr. Tomáš Cvengroš

Tel.: +421 317 701 643

Fax: +421 317 701 644

Mobile: +421 911 402 147

E-mail: tcvengros@chemoprojekt.cz

Romania

Contact person: Mr. Ovidiu Tudor

Tel./Fax: +400 211 68 16

E-mail: safinarom@upcnet.ro

China

Contact person: Mr. Zdenek Hrdlicka

Tel: +420 728 815 675

Tel: +86 159 21 55 66 39

Fax: +86 21 58 35 91 99

E-mail: zhrdlicka@chemoprojekt.cz

Iraq:

Contact person: Mr. Thair Aldabagh

Mobile: +964 7901 774 247

and +964 7702 947 703

Fax: +442 079 006 238

E-mail: thair.aldabagh@arwadco.com

taldabagh@chemoprojekt.cz

Russia

Contact person: Mr. Stanislav Maselnik

Tel./Fax: +7 499 973 24 25

Mobile: +7 916 641 98 54,

and +420 733 690 339

E-mail: chemoprojekt-moskva@volny.cz

Republic of Belorussia

Contact person: Mr. Oleg Tarasov

Tel.: +420 261 305 426

Mobile: +420 724 635 632

E-mail: otarasov@chemoprojekt.cz

Middle East

Contact person: Mr. Munther Al Mutlak

Mobile: +962 79 6691 621

Fax: +962 65 6830 00

E-mail: munther50@yahoo.com

Ukraine

Contact person: Mr. Roman Kharchenko

Tel: +38 0532 602 837

Fax: +38 0532 602 839

Mobile: +38 050 304 24 69

E-mail: roman@amarant-bio.com.ua