

BOCHEMIE a.s. FEROPUR®

Bochemie is a manufacturing chemical company. History of Bochemie as an independent entity dates back to 1991, when Bochemie was detached from Lachema Group. In 1994 company was privatized and from that time until the end of 2007 its name was BOCHEMIE s.r.o. (Ltd), now BOCHEMIE a.s. (joint-stock company). However, chemical production on the premises of the current company started as early as 1904 and since then it has continued until these days and the current form of Bochemie, which is a continuator of the original chemical plant.

Our manufacturing programme is comprised of five basic groups which are specific with their specialization, target groups and export territories:

- Disinfection in Health Care and Agriculture
- Wood preservation – preparations for wood and masonry protection
- Consumer Goods – cleaning agents for households and professionals
- Material for Accumulators
- **Surface Treatments of Metals - FEROPUR®**

FEROPUR® is a solid concentrate of chemicals to be used for safe preparation of the melt for reducing pickling technology

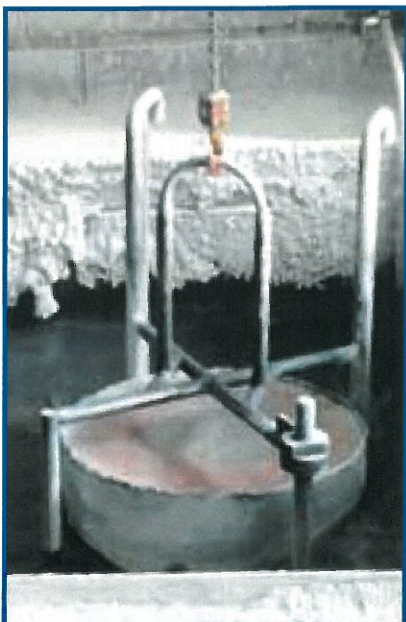
Reducing pickling technology with FEROPUR is the most efficient pre-treatment technology for descaling and it is distinguished by versatility for all stainless steel grades and special alloys as well as the alloys of tungsten, molybdenum, titanium, tantalum, zircon, columbium, copper, etc. Technology is especially used for descaling of wires, bars, tubes, pipes, plates or precision products as mechanical parts. Technology removes only oxidized and other undesirable layers without loss on the raw material.

Besides others FEROPUR brings:

- no production of harmful NO_x and CrVI
- minimal loss of raw material
- highest attainable cleanliness of metal surface
- lower production of a sludge in acids
- lower consumption of acids within descaling
- highest production capacity of pickling equipment
- practically has 100 % efficiency of descaling

FEROPUR is supported by:

- complex engineering services
- complete deliveries of devices (part of Bochemie Group's engineering and manufacturing company Ekomor)
- training of staff consultations and technological services



Advantages of the reducing melt technology with Feropur against oxidizing melt technology:

- reducing melt technology is more universal
- high-quality surface after only one pass of material through the pickling line suitable for further technological operations, e.g. heat galvanizing, application of plastic materials, application of paints, coating and application of insulation
- ideally descales ferritic and martensitic steel grades with high content of Cr which are hardly descalable in oxidizing melts
- waste material of reducing melt technology with Feropur does not contain CrVI
- descaling of various types of material does not require changes of melt composition which is necessary in oxidizing melt technology
- lower production of sludge and lower consumption of acids in pickling section after reducing melt technology with Feropur
- lower temperature of the melt than in the oxidizing melt technology reduces energy costs

Advantages of reducing technology with Feropur against DuPont reduction technology are:

- removal of handling with sodium and hydrogen in operating conditions
- Feropur is not self-ignitable
- working place with Feropur is more hygienic and more safety
- substantial increase of device lifetime and easier maintenance
- the passage from DuPont technology to reducing technology with Feropur requires minimum investments



SOME OF REFERENCE PLANTS USING FEROPUR

Reducing pickling line with Feropur in Italy.
Commissioning in year 2006.
Annual production capacity 35.000 MT.



Reducing pickling line with Feropur in Spain.
Commissioning in year 2005.
Annual production capacity 35.000 MT.



Reducing pickling line with Feropur in Spain.
Commissioning in year 2003.
Annual production capacity 35.000 MT.



Reducing pickling line with Feropur in UK.
Commissioning in year 2001.
Annual production capacity 35.000 MT.



SOME OF REFERENCE PLANTS USING FEROPUR

Reducing pickling line with Feropur in China. Commissioning in year 2007.
Annual production capacity 60.000 MT.



Reducing pickling line with Feropur in South Korea. Commissioning in year 2006.
Annual production capacity 75.000 MT.



Reducing pickling line with Feropur in China.
Commissioning in year 2009. Annual production capacity 75.000 MT.



OUR BUSINESS PARTNERS

LOCATION

Outokumpu Stainless
(*Outokumpu*)

UK

Deutsche Edelstahl Werke
(*Schmolz & Bickenbach*)

Germany

BGH Edelstahl

Germany

Fagersta Stainless
(*Outokumpu*)

Sweden

Cogne Acciai Speciali

Italy

Roldan S.A.
(*Acerinox Group*)

Spain

Aceros Inoxidables Olarra

Spain

Posco Specialty Steel
(*POSCO*)

South Korea

Viraj Profiles

India

Talley Metals
(*Carpenter Technology*)

USA

Baoshan Iron & Steel Co.

China

Dongbei Special Steel

China