



ENVIRONMENTAL TECHNOLOGY

CHEMICALS

METALLURGY



THE COMPANY



EXPERTISE THROUGH PERFORMANCE



PROCESS PLANT ENGINEERING



SULPHURIC ACID/ GAS CLEANING



guarantees optimum solutions for your particular application based on experience and know-how that is specific to environmental technology and chemical plant engineering.



HUGO PETERSEN has developed from the traditional firm of the same name that was established in 1906 in Berlin and is an engineering company specialising in general plant engineering now based in Wiesbaden. HUGO PETERSEN has many years wide-ranging experience in process plant engineering, primarily in the field of sulphuric acid processes and gas cleaning.

Together with its main shareholder, Chemieanlagenbau Chemnitz GmbH (CAC), a company with over 40 years experience in the international plant engineering business, HUGO PETERSEN

THE COMPANY

Technologies for our clients:
Our know-how is your success.

implements turnkey new plants from initial consultancy right through to commissioning.

In addition, HUGO PETERSEN can offer its clients improvements and revamps of existing plant systems.

Initial consulting, planning and implementation take place within the context of a lean company organisation with experienced engineers and specialists.

In all respects, many years of experience guarantee expertise over a wide range of possible applications.



THE COMPANY



EXPERTISE THROUGH PERFORMANCE



PROCESS PLANT ENGINEERING



SULPHURIC ACID/
GAS CLEANING



is a company that has a global presence with expertise in the design and construction of industrial plants as well as in the delicate consultation processes that take place beforehand.

Amongst our clients we have, in particular, national and international investors, primarily in the fields of

- Metals & Minerals
- Environmental Technology
- Chemical Plant Engineering



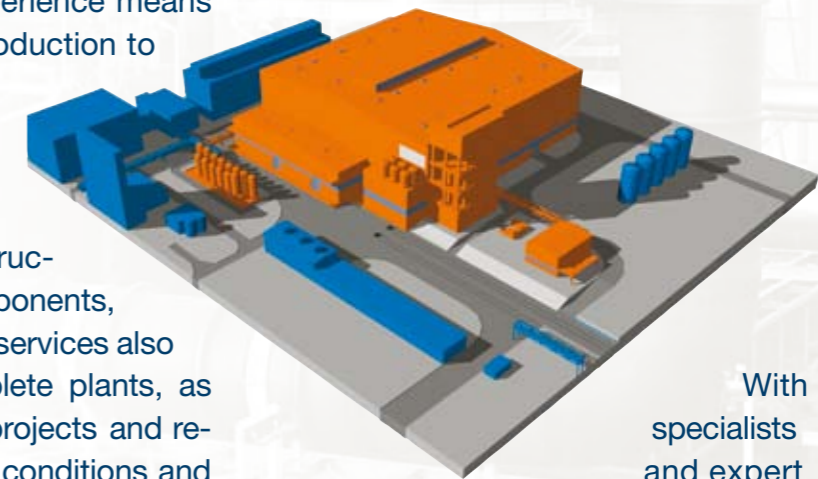
For clients from the chemicals and metallurgical industries, as well as those in metals processing, HUGO PETERSEN GmbH's breadth of experience means not just an efficient introduction to new methods and processes, but also their full implementation. In addition, along with design and construction for individual components, the company's range of services also covers supply of complete plants, as well as modernisation projects and revamps in line with local conditions and existing quality requirements. With own technologies and patents in the field of gas cleaning and sulphuric acid, supplemented by licences and

EXPERTISE BY PERFORMANCE

HUGO PETERSEN is your partner in:

- Consulting
- Process Development and Process Engineering
- Project Management
- Technical Engineering
- Procurement and Supply
- Site Supervision Management
- Commissioning
- Turnkey Plant Engineering
- Shutdown Management

cooperation projects, HUGO PETERSEN ensures expertise over a wide range of applications.



With specialists and expert knowledge in these fields of application, HUGO PETERSEN is your partner of choice, supporting you and bringing your project to a successful conclusion.



THE COMPANY



EXPERTISE THROUGH PERFORMANCE



PROCESS PLANT ENGINEERING



SULPHURIC ACID/
GAS CLEANING



stands for innovative engineering technology and future-oriented technologies. Customers can always expect tailor-made solutions that distinguish themselves through

- optimal energy concepts,
- low environmental pollution,
- longevity.



SULPHURIC ACID

Sulphuric acid is particularly important for the chemical industry since it belongs to the most important basic chemicals for decades. More than half of the annual production of the western world is used for the production of fertilizers. In addition sulphuric acid is used, amongst other things, in the synthetic fibre and petroleum industries. It serves in almost all cases only as a medium for the generation of another product, and extremely rarely enters into the final product itself. Subsequently it is constantly to be found as a waste product, so that many procedures for

SULPHURIC ACID MANUFACTURE

following the processes of:

- Dry Catalysis
- Wet Catalysis
- Petersen Tower Technology
- SUPER^{OX}-Technology

recycling have been discussed, tested and some introduced into practice.

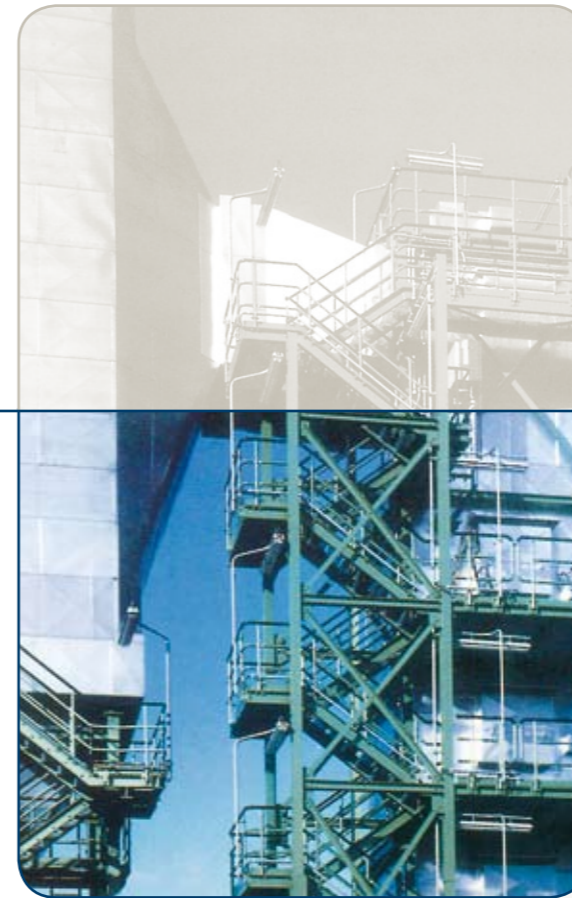
Since 1906, the technology of HUGO PETERSEN is a standing concept for installations for the production of sulphuric acid and oleum. Specifically with the utilization of waste gases from metallurgical processes for acid production HUGO PETERSEN can look back on long-standing experience and own procedures.



Sulphuric acid technologies from HUGO PETERSEN does not only stand for an extensive knowledge of the products and projects, but also for optimized plant technology as well as a high level of flexibility and high operational safety.

Consulting and planning belong to the scope of services, as well as the delivery of components and turnkey plants for the production of sulphuric acid from the various raw materials, such

as, for example, sulphur, pyrite, native zinc sulphide, copper ore, hydrogen sulphide and elementary sulphur. Sulphuric acid is not only a technology for HUGO PETERSEN, but an innovation. With a technology proven over 100 years, HUGO PETERSEN constructs sulphuric acid installations to the highest demands and develops concepts for the best possible sulphuric acid plants in the world.



GAS CLEANING

- Wet Processes
- Dry Processes

GAS CLEANING

The processes developed by HUGO PETERSEN are proven by long-standing experience.

Guaranteed off-gas values, adaptable availabilities, as well as gas quantities from 500 to 500,000 Nm³/h, are convincing arguments.

Components, such as SO₂, HCl, and HF are just as efficiently separated as NO_x, heavy metals, dioxines and furanes.

Wet Processes

Quench, Wash and Absorption Tower – these technologies were conceived for sulphuric acid installations, even be-

fore environmental protection became a duty at every level. At the same time, tailored absorption media are used according to requirement.

SUPER^{OX}-Technology – SO₂-elimination through H₂O₂ dosage with immediate extraction of up to 60 % sulphuric acid in large-scale application.

PETERSEN Aerosol Separator

- Wet Electrostatic Precipitator – maximum efficiency dust and aerosol separation with electrostatic forces with low pressure-loss.



- Turbo Agglomerator – self-supplying aerosol separator for smaller gas quantities by means of centrifugal forces.
- Pressure Drop Separator – repeatedly proven wet separator for mist and gaseous pollutants with middle to large gas quantities under exploitation of acceleration and centrifugal effects.
- Multiventuristystem – high-speed separator for dusts and aerosols, due to construction type suitable for large gas quantities.

Dry Processes

Dry Adsorption and Quasi-Dry-Process – a combination of dust removal, pollutant transposition and adsorption with the addition of various adsorbent materials. These procedures thus have an enormous spread of utilization possibilities.

Activated Carbon Filter – adsorption of dioxines, furanes, and heavy metals by activated carbon.

DeNOx and DeDiox Process – reduction of nitrogen oxide in combination with dioxines and furanes in the presence of a catalyst. Both honeycomb as well as bulk catalysts come into question.

CO-Reduction – the oxidation of CO is also carried out catalytically on precious metal catalysts, and can be used in combination with the V₂O₅ catalysts.

Direct Desulphurization – high temperature integration of acid pollutants in the combustion chamber.



OUR VISION

P It is not imperative to predict the future to the Clients, but rather to provide them with innovative technologies in preparation for the future.



HUGO PETERSEN

OUR KNOW-HOW IS YOUR SUCCESS!

HUGO PETERSEN GmbH
Industriepark Kalle-Albert
Rheingaustraße 190-196
D-65203 Wiesbaden
Germany

Tel.: +49 611 962-7820
Fax: +49 611 962-9099

E-Mail: contact@hugo-petersen.de
www.hugo-petersen.de

Four large, empty, rounded rectangular boxes stacked vertically, likely intended for contact information or a message.