

OHL REPORT

2024

THE BEST LNG SOLUTIONS

ohl-gutermuth.de



LOW TEMPERATURE TESTS SUCCESSFULLY COMPLETED

Over the last 20 years, OHL Gutermuth has supported more than 50 LNG projects. The global company supplies quality valves that have passed cryogenic tests in accordance with the highest global standards. OHL carries out the cryogenic test procedures independently at its Altenstadt headquarters – including as a service for external companies.

At the start of 2024, OHL Gutermuth is involved in eight international LNG projects that the industrial valve manufacturer supplies with highly functional valves. These are used, for example, in LNG tank farms and are optimised for this sector. The special valves produced in the company's own production facilities, such as the KXT butterfly valve, have to pass extensive functional tests before delivery. OHL carries out the cryogenic tests using state-of-the-art technology on modern test benches. The cryogenic test procedures are carried out in various different steps: first, liquid nitrogen is pumped into a large tank at -196°C . During the next step, the valves are immersed in the liquid nitrogen until they are thoroughly chilled. Gaseous helium is then used

to test the end-to-end consistency. This ensures that all components are ice-proof. OHL places the highest demands on the tightness and operational safety of all components at extreme temperatures.



ABOUT THE COMPANY

The beginnings of OHL Gutermuth go back to 1867, when OHL was founded in Limburg. Almost 60 years later, the Gutermuth company was founded in Frankfurt. The two companies merged in 1992. Today, OHL Gutermuth Industrial Valves is a leading manufacturer of industrial valves with its headquarters in Altenstadt and serving customers all over the world.

Testing service for external companies

The company has state-of-the-art equipment for testing processes and regularly invests in technical equipment. Among other things, the valve manufacturer has a test bench for valves with welding ends with a capacity of up to 48" 2,500# and innovative welding robots. The company has been carrying out valve tests for external customers for many years now.

TRADE FAIR REVIEW FROM DÜSSELDORF TO NEW ORLEANS

The 2023 trade fair year included a full programme for both exhibitors and visitors.

In 2023, OHL attended numerous trade fairs, for example the 9th International LNG Congress in Düsseldorf: a forum for gas companies,

local companies, LNG shipping, lorry and fleet owners, manufacturers and service providers. Among the topics discussed were the development of LNG infrastructure, Bio-LNG and synthetic LNG. At the Sulphur + Sulphuric Acid Conference and Exhibition in New Orleans, we met up with

partners from the sulphur and acid industry. There were discussions at the highest level about supply markets and industry updates. Our presence at DIAM in the Jahrhunderthalle in Bochum was a must for us, because the trade fair combines the exchange of ideas about innovative

valves, sealing and system technologies with a family-like atmosphere.



To the trade fair dates

SAVE THE DATES

MESSETERMINE 2024

ABU DHABI:

20.05.2024 – 23.05.2024

Middle East Sulphur Conference (MEScon) The Conrad, Abu Dhabi Etihad Towers

FRANKFURT AM MAIN:

10.06.2024 – 14.06.2024

ACHEMA

DÜSSELDORF:

03.12.2024 – 05.12.2024

VALVE WORLD EXPO

More at: www.ohl-gutermuth.de



“A GREAT PLATFORM TO BUILD A CAREER.”



As managing partner, Professional Engineer Wolfgang Röhrig deals with the structure of the company, the expansion of the international team and the local apprenticeship situation in Altenstadt. As a medium-sized company with headquarters and production facilities in Altenstadt, OHL has always invested in training its own specialists. In an interview for the OHL Report, Wolf-

gang Röhrig provides an insight into the personnel structure and the strengthening of the global project business.

How many apprentices does OHL Gutermuth currently have?
Professional Engineer Wolfgang Röhrig:

“We currently employ four apprentices in Altenstadt – one of them will successfully complete her apprenticeship with us in the spring. Another of our young employees recently travelled to Canada for a project. Before that, he travelled to Japan with us. We offer our staff a great platform to build a career. We are always happy to welcome newly qualified employees and to support their professional development.”

OHL expanded its global project business in 2023.
Professional Engineer Wolfgang Röhrig:

“Exactly, we are expanding our international project business. In addition to the teams in our branches throughout the world, we hired an employee in Dubai in 2023 who is responsible for our business partners there. We were also able to strengthen our international team in Altenstadt with two new members of staff. Thanks to their excellent technical expertise and their skills in the Korean and Indian business landscape, they provide valuable support

for international sales and project management.”

What projects and sustainable energy structures is OHL 2024 pursuing?
Professional Engineer Wolfgang Röhrig:

“Various projects in the LNG and renewable energy sector are currently being planned worldwide. Here, we are actively involved from the development of the special valves to the subsequent maintenance.”



To the current vacancies

TURBINE PROTECTION FOR BIOMASS POWER STATIONS AND CSP PLANTS

The OHL shut-off and control valves are used in steam turbines for power stations that burn biomass and in CSP solar plants. Here, safety and functionality are essential for problem-free turbine operation.

No matter what area of application and what type of turbine is involved, the objective is to always achieve maximum usable power with maximum safety. The risk of overload or failure situations in the working area of turbine installations must be kept to an absolute minimum. The shut-off valves used in these fields have to perform their tasks with flawless functionality. OHL Gutermuth is a specialist in this field. The company supplies industrial valves of all the common connection types and designs as well as custom-made models that are produced to perfectly meet the requirements of the specific turbine, for example regarding size, fluid, and pressure range.

Biomass power station with a steam turbine

When generating energy and heat from solid biomass, biogenic fuels such as residues from wood processing and grain are used and burnt in a steam boiler. The superheated steam is fed into a steam turbine with a generator to produce electricity and can then be used as energy and for district heating, among other things. The valves used in steam turbines must help to maintain the steam cycle and withstand extreme conditions depending on the temperature and pressure rating. The special valves manufactured by OHL Gutermuth fulfil all the necessary guidelines and specifications and are developed by the experienced OHL engineering team specifically for these applications.

**To our special
solutions**



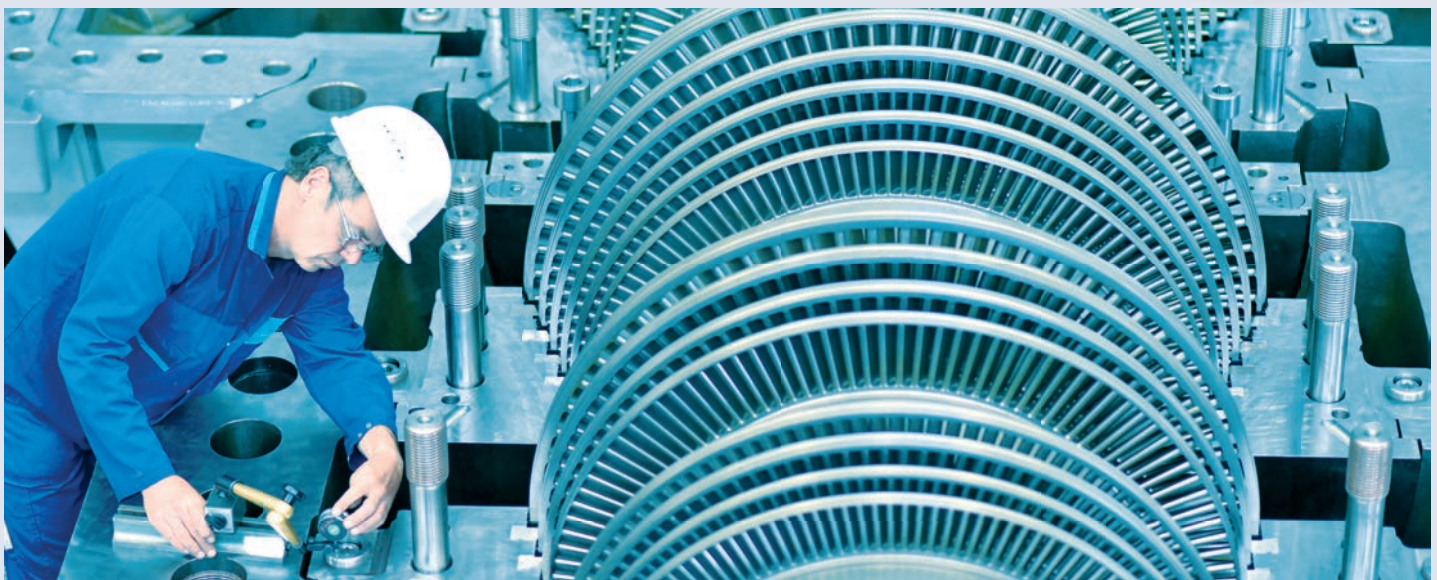
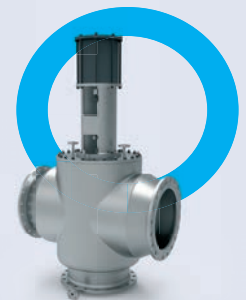
CHINA SPECIAL VALVES FOR THERMOPHYSICAL INSTITUTE

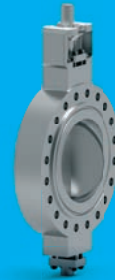
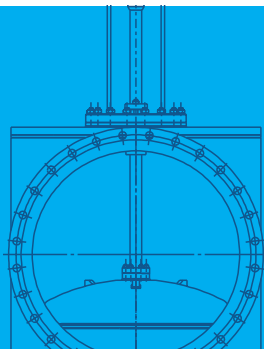
OHL Gutermuth has had special valves produced that can withstand temperatures of up to +2000 °C. The hot gas valves are required by the Chinese Institute of Thermophysics for a test bench for testing aircraft engines.

For a number of years now, OHL Gutermuth has been working with a Chinese business partner whose latest research project requires the construction of two special hot gas valves. The professors responsible have entrusted OHL Gutermuth with the manufacture of the special valves. It took almost 1.5 years from the time the order was placed to the final production and delivery to the warehouses in Altenstadt in December 2023. For the project of the Chinese

institute, OHL worked together with a renowned Cologne-based valve manufacturer for the first time. The partnership is an ideal basis for the realisation of future projects. The hot gas valves, which were specially manufactured for the thermophysical project, have a nominal width of DN 280, and are designed for gas pressures up to max. 40 bar, temperatures up to +2,000°C and gas flow rates up to 70 kg/s. The special valves are controlled by a hydraulic unit with

a complex cooling system, which is equipped with sensors for pressure and temperature control.





GLOBAL AFTER-SALES SERVICE TURBINE MAINTENANCE

As an innovative provider of solutions, OHL optimises the cost-effectiveness and efficiency of every valve order, from the planning stage right through to maintenance.

This includes international after-sales service. OHL technicians are deployed around the globe for repairs, maintenance, testing and the replacement of old valves. The company has numerous branches that can respond at short notice, or an OHL service technician from Altenstadt will travel to the plant to carry out measures such as turbine maintenance.



CANADA DURABILITY: NEW VALVES AFTER 50 YEARS OF SERVICE

OHL Gutermuth has been supplying valves to a business partner in Canada since the early 1970s.

These are used on site in a natural gas treatment process and have proven their durability and safety over the decades. OHL recently began replacing the first valves with new models. Over the past decades, OHL has been responsible for maintenance and servicing and has supported the further development of the project. The OHL team is looking forward to continuing the collaboration in the coming years!



CHINA MOLTEN SALT FOR THERMAL ENERGY

OHL Gutermuth has submitted offers for various projects in which processes with molten salt require special specifications for the robustness of the materials and the overall system.

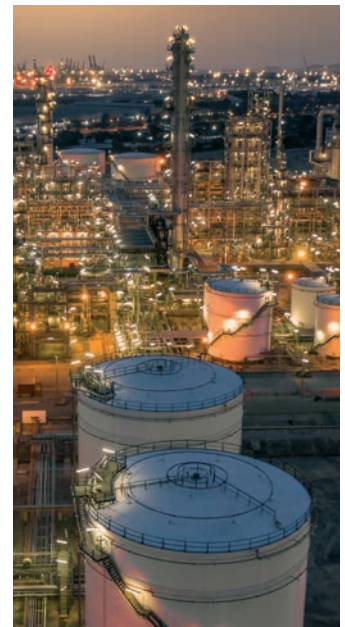
The construction projects of Chinese clients make use of the potential of molten salt for sustainable heat energy transfer. This requires valves that function reliably and are dimensionally stable at high temperatures of up to +1300°C.



UAE NATURAL GAS DESULPHURISATION IN ABU DHABI

OHL Gutermuth delivered the first valves to a client in Abu Dhabi back in 1994.

At that time, 60 valves were installed in a natural gas desulphurisation plant. After 30 years of continuous operation, OHL has begun to replace the first valves with new models. The long service life of the valves with their trouble-free functionality epitomises the combination of sustainability and economy that is at the forefront of the design of every OHL Gutermuth valve.



CHINA – SPECIAL VALVE FOR FCC PROCESSES

For a customer in China, OHL has supplied special valves up to DN 2400, which weigh approx. 20 tonnes each and have to shut off safely at 730°C.

The valves have been designed for the extreme conditions of the material conversion processes in fluid catalytic cracking. The FCC process is generally used in sectors such as natural gas processing, refineries and chemical plants. OHL provides safe, reliable solutions for this type of process engineering, which takes place at extremely high temperatures.