

A grayscale background image of industrial machinery, showing large circular openings with bolted flanges, likely part of a large vessel or reactor. A thick blue diagonal band cuts across the top left corner of the image.

Steel apparatus engineering and rubber coating

HAW – In cooperation with the GBT Company Group



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Steel apparatus engineering from the inventor of industrial rubber coating

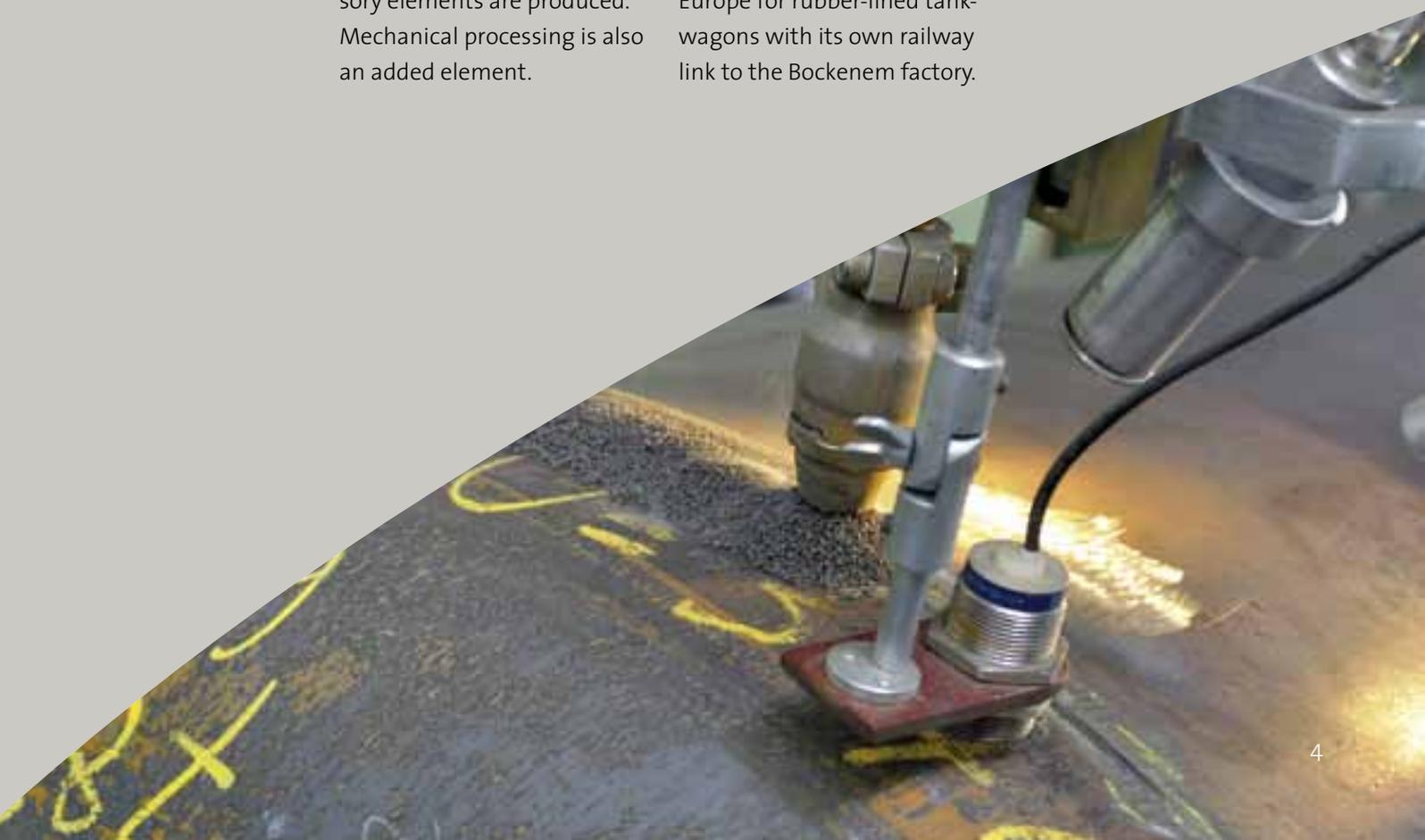
We haven't only been what we are today since yesterday. And what we do today, we could already do earlier than others: HAW Linings GmbH is the inventor of industrial rubber lining and is one of the leading German specialists in steel and apparatus engineering. We have worked in close cooperation with the GBT Company Group since 2010.

At the Bockenem site in the Harz, steel components and apparatus, pressure vessels, pipelines and accessory elements are produced. Mechanical processing is also an added element.

Detailed work on a large-scale characterises our expertise: Steel apparatus with lengths and weights which can still be transported by road are manufactured. The steel processing methods such as turning, grinding, CNC milling and planing (the latter on workpieces up to 16 metres in length) are also designed for dimensions that you do not find every day.

And: HAW operates the largest autoclave in Europe for vulcanisation, as well as the largest centre throughout Europe for rubber-lined tank-wagons with its own railway link to the Bockenem factory.

As a specialist for steel apparatus engineering, we manufacture both directly on behalf of customers and also for projects of the GBT Company Group. In doing so, complete projects are technologically planned from one source, organised without any time gaps and seamlessly implemented.



We know what matters. For more than 110 years.

- Consulting, planning, engineering
- Steel production and repair
- Stripping, grit blasting
- Rubber lining and vulcanisation
- Production-parallel quality assurance

- Inspection and maintenance of plant parts
- Application of all materials and components with specialised technicians in the factory and on-site
- Repair and maintenance service
- Supervising in the application

- Materials advice on the basis of resistance studies
- Guarantee for the complete work
- Extensive after-sales service



Thinking in all dimensions. Targeted and effective action.

Process safety, environmental protection, optimisation and value maintenance of industrial plants. These are the areas of activity and the

strengths of HAW. Here, we convince with a wide range of proven corrosion-resistant materials, and with apparatus of practically all dimen-

sions individually tailored to the customers wishes.



Products and processes from HAW have been broadly used in many industries and areas of application for decades:

■ **Chemicals industry:**

Reactors, process and storage containers, absorbers, scrubbers, pipelines

■ **Energy sector / environmental protection:**

Flue gas scrubbers, ducts and chimneys, absorbers in waste incineration facilities, sewage water treatment plants, pipelines

■ **Transport:** Tank wagons, tank trailers, tank containers

■ **Metal ore processing:**

Process and storage containers

■ **Chlorine production:**

Chlorine electrolysis cells, HCl electrolyzers, pipelines

■ **Metalworking industry:**

Pickling and plating containers, columns

■ **Pulp and paper industry:**

Bleaching towers, mixing tanks, flue gas scrubbers

■ **Fertiliser production:**

Process and storage containers

You can find further important areas of use for materials and components from HAW Linings in the:

■ Pharmaceuticals industry

■ Textiles industry

■ Electronics industry

■ Sewage industry

■ Oil and gas processing and transport

■ Automotive industry



Steel apparatus engineering

HAW produces steel components and apparatus, pressure vessels, pipelines and accessory elements in dimensions and weights which can still be transported by road.

Mechanical processing of steel components in all usual processing methods is also an added element.

- Turning
- Grinding
- CNC milling
- Planing

Workshop rubber lining

For new and renewed rubber lining, HAW has a very extensive range of advanced and proven lining materials as hard and soft rubber lining based on natural or synthetic rubber.

The range covers all process steps required for the highest quality rubber lining:

- **Stripping** Heat, high water pressure, pyrolysis
- **Surface preparation** Grit blasting
- **Semi-finished goods production** Rubber sheets on own roller head system
- **Application / rubber lining** Original HAW materials and procedures

- **Vulcanisation** In Europe's largest autoclave (saturated steam and hot air)
- **Mechanical processing** Steel and rubber surfaces
- **Painting / exterior painting** Atmospheric corrosion protection



Site rubber lining

As an alternative to workshop rubber lining, these can also be carried out on-site at the customer or the construction site. Site rubber lining makes it possible to provide even large, non-transportable components made of steel or concrete with high quality HAW corrosion protection.

Also in site rubber lining, HAW convinces with a complete range of services from one source:

- Preparation of a detailed project folder
- Organisation and coordination of the construction site by HAW engineering and project manager
- Coordination of heavy and special transport
- Delivery and proper storage of the material
- Provision of the entire construction site equipment
- Scaffolding construction
- Stripping and steel repair
- Sandblasting
- Application and lining
- On-site vulcanising
- On-site quality control
- Technical documentation

In addition, HAW provides a 24-hour service for repair and maintenance. Alternatively available as a temporary contract service or a long-term on-site service.



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The GBT Company Group: Specialists in cooperation

A whole is more than the sum of its parts. One plus one is much more than two – especially when new, joint strengths are created from the connection of individual efforts, when specialists link their knowledge to new expertise and when distinct knowledge inspires the enthusiasm to try something new. Just like in the GBT Company Group.

More than 100 years of experience are connected in the company group with the dynamics of a rapidly growing association of specialists, making a service system that

sets an example throughout the market in terms of density and range.

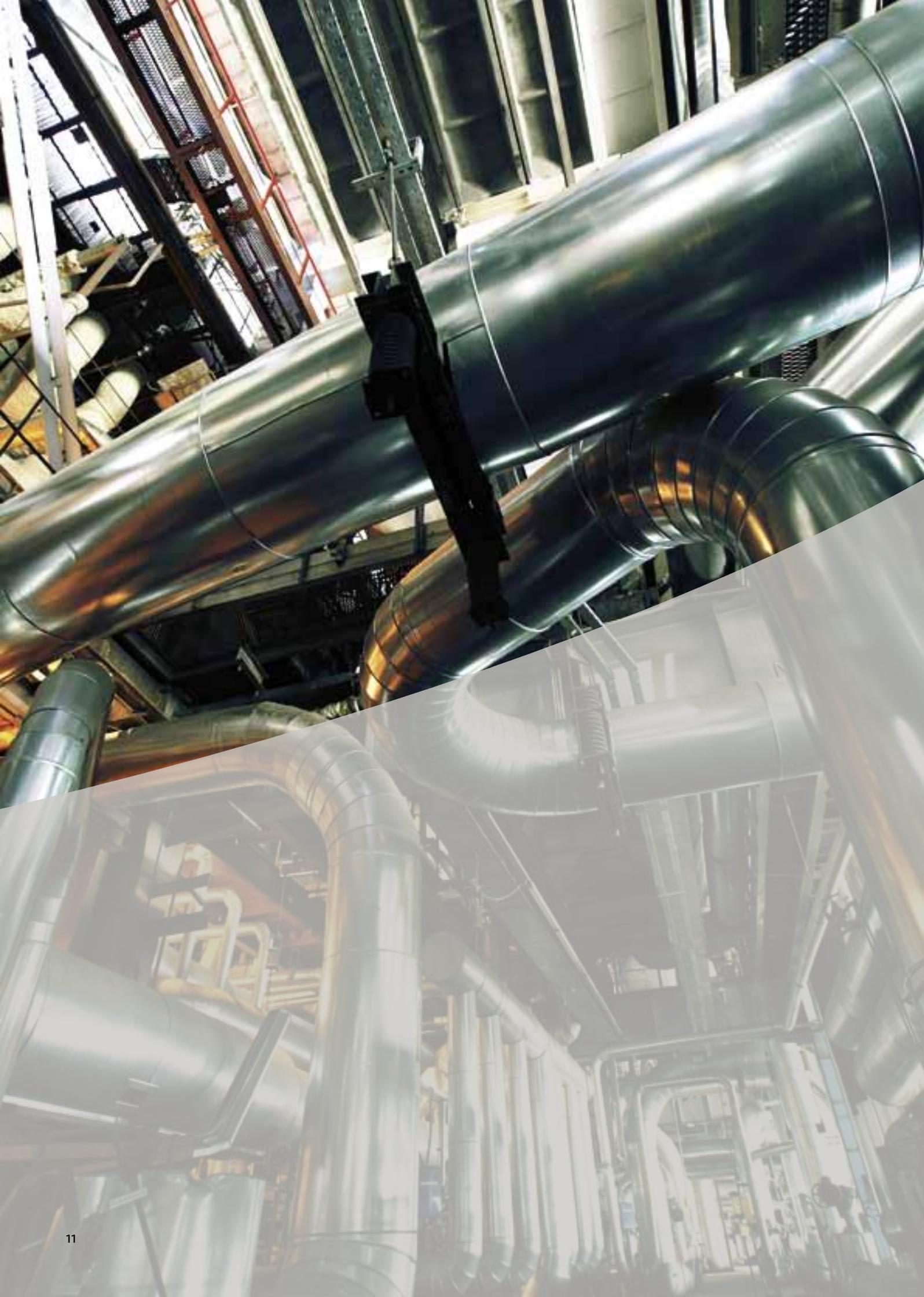
Six sites in Germany and Europe, partner companies and representations in the USA, China, India and Switzerland – this is the group's basic geographic data.

More than 300 employees from 15 nations – this shows the open-mindedness and flexibility of our community and stands for transfer of knowledge without limits.

Dedication and success in the most demanding sectors of

industrial plant engineering as well as plant development and coating technology; this is proof of the wide-ranging expertise under the GBT Company Group umbrella.

This is how our services connect perfectly with the high demands of our customers. Now we've come full circle – for what really matters are good connections.



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