HP VALVES

global partner in flow solutions

engineered valve products and specialized services

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rising energy demand, diversified, stable and sustainable

Decarbonization

Access to affordable, reliable, flexible and sustainable power is fundamental to modern life. As the world is shifting towards a lower carbon future, our customers are leveraging the role of natural gas for powering the world today and tomorrow.

Our valves are used for a variety of applications in the energy industry today, such as fossil-fuelled power plants, combined heat and power (CHP) or biomass and waste to energy. As these plants continue to change technology, reduce emissions, and improve efficiency for the environmentally compatible and resource-saving generation of power, product characteristics are getting more and more demanding.

The Energy Mix

Our high-pressure valves, solutions, and services are used by major power producers, EPC-companies, and manufacturers of turbines, HRSGs, and utility boilers for power generation around the globe.

Our customers power the world, and it is our mission to help maintain their position as world leaders in performance and quality, from decentralized industrial applications to high efficiency power plants, providing a reliable and affordable basis for renewables in a diversified energy mix.

Renewables

Renewable energy is playing an increasingly important role worldwide and is a key technology for a sustainable energy sector. Our valves are used for a variety of applications for renewable energy today.

Providing a future-proof source of electricity and contributing to lower CO_2 emissions, power produced from biomass is increasingly economically viable. In this field our high-pressure valves, solutions, and services are used to ensuring a stable power supply.

Concentrated solar thermal power is worldwide becoming a more and more important source for power generation. With a daily start-up and shut-down high demands are placed on CSP-plants. Our valves support numerous CSP-plants all over the world, converting this inexhaustible energy source into electricity.

We understand changes that power plants have to make due to developments in the world of energy.

We think along and continuously improve our products and services to keep up with changing demand.

our respond to changing demands

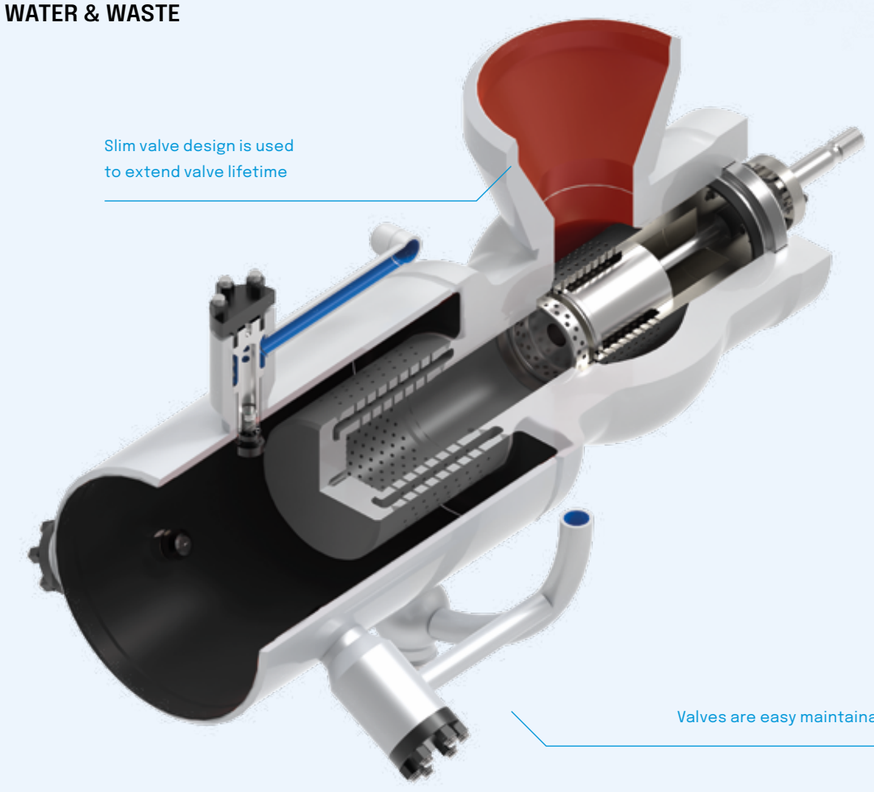
By taking the lead in product development, service capabilities and process improvements, we respond to the continuous changes in each market.

Using our expertise in design and manufacturing of high pressure valves, product and process improvements we have built a range of products that provide top reliability and good long-term value despite high pressure drops, vibrations, tight shutoff requirements, and corrosive environments.

We continuously innovate using the newest techniques, the latest generation of materials and manufacturing philosophy.

We operate in 5 key markets:

- ENERGY & POWER
- OIL & GAS
- PETROCHEMICALS
- PAPER & PULP
- WATER & WASTE



Flexible power plants

The more-and-more flexible use of combined cycle power plants, requires new techniques and ways to improve the equipment used.

Changing from base load plants to high cycling exposes the valves to higher temperatures and significant temperature fluctuations.

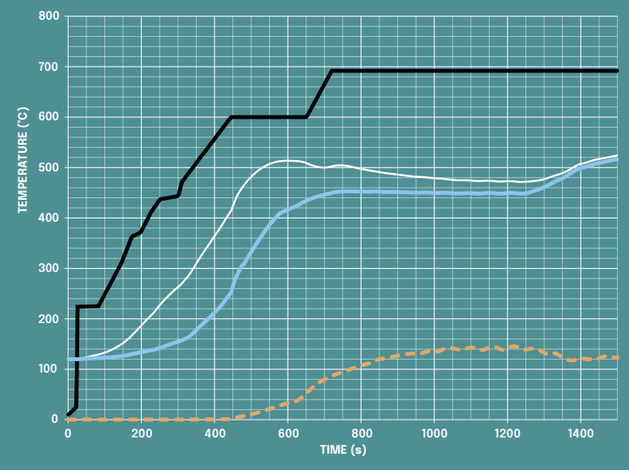
We have invested in research and development to further upgrade our products to make these suitable for tomorrow's power market.

Develop and improve

Serving international oil, gas and chemical companies for almost half a century, we have developed into a professional partner in times of global change.

High temperatures and aggressive and flammable fluids – the extreme conditions require sophisticated solutions. Continuous development created a range of products that are approved for use in critical installations, such as crackers, furnaces, and plants for LNG, LDPE, hydrogen and ethylene.

Cold start-up



world class solutions

Solution provider

The advantage of using forgings instead of castings is the elimination of casting defects, which results in higher quality and longer lifetime.

We only offer the highest quality solutions, which includes selecting forged steel materials for the most critical valves, suitable for cycling operation using the highest temperatures and pressures.

Valve Lifetime

In tomorrow's energy mix, conventional fossil fuel power is combined with renewables, such as solar and wind energy. Fluctuations in the supply of power by these renewables require the combined cycle power plants to operate under highly cycling conditions.

This cycling has a severe impact on the mechanical equipment, valves included. Rapid changes in temperature and pressure are impacting the performance of the complete system and inducing metal fatigue.

The impact on high pressure valves has been evaluated under different conditions such as cold-, warm- and hot-start, load rejections & shutdowns.

By using finite element analysis (FEA or FEM), a variety of insights was gained about critical locations on a valve, potentially reducing valve lifetime.

These new insights have been applied to new designs for main steam valves, with an significantly extended lifetime suitable for future's state-of-the-art cycling power plants.

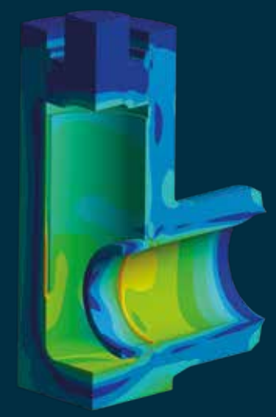
Critical Drain Configurations

Another aspect of the load changes, so-called cycling, in power plants is the generation of condensate. In the past, the formation of condensate only occurred a few times per year during the cold start.

With an increase in the number of (cold) starts, the condensate formation frequency and volume is significantly increased.

This calls for reliable and adequate draining to protect the installation from (condensate induced) wear and tear and to reduce steam losses during the starts.

We have a complete range of valves - ready for use in the most critical drain applications - capable of handling the increased operation frequency as is demanded for today's power generation.



Finite element analysis (FEA or FEM) is a computerized method for predicting how a product reacts to real-world forces, vibration, heat, fluid flow, and other physical effects.

improving and responding to market developments

We aim for long-term relationships: with our customers and suppliers and develop from customer-supplier to a partnership. We continuously improve our products and services to match the trends, developments and requirements in the international market. Discover and understand together how we can tackle the challenge of now, and in the future. Please contact us to identify how we can support you on your valve needs, now and in the future!

service teams support our customers world-wide with inspections, engineering support, valve upgrades and repairs.

PROJECTS

- Engineered Solutions
- Project Management
- Document Control
- Quality Assurance
- Logistics Services

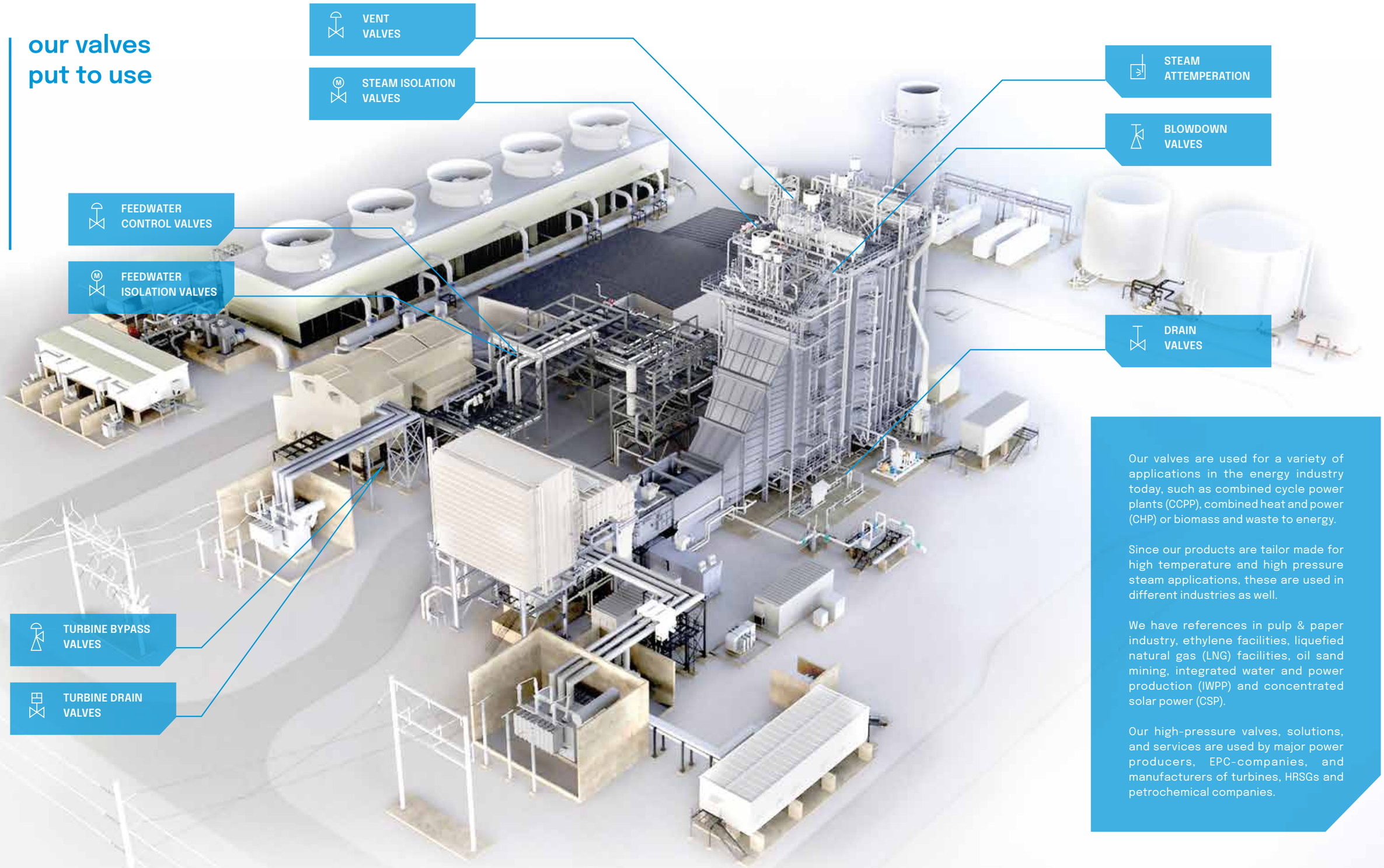
SERVICE AND SUPPORT

- Technical Solutions
- Spare Parts
- Consultancy Services
- Quality Assurance
- Logistics Services

With over 40 years of international valve experience as original equipment manufacturer (OEM), we are your reliable partner for the supply of new valves, valve-upgrades, valve repairs and custom-made solutions.

Did you know a combined cycle power plant operates with over 1,000 pcs of valves available from our product portfolio?

our valves put to use



Our valves are used for a variety of applications in the energy industry today, such as combined cycle power plants (CCPP), combined heat and power (CHP) or biomass and waste to energy.

Since our products are tailor made for high temperature and high pressure steam applications, these are used in different industries as well.

We have references in pulp & paper industry, ethylene facilities, liquefied natural gas (LNG) facilities, oil sand mining, integrated water and power production (IWPP) and concentrated solar power (CSP).

Our high-pressure valves, solutions, and services are used by major power producers, EPC-companies, and manufacturers of turbines, HRSGs and petrochemical companies.

isolation valves

We provide a full range of high quality forged and casted steel valves, suitable for on-off and throttling applications.

- GATE VALVES
- GLOBE VALVES
- CHECK VALVES
- BALL VALVES
- BLOWDOWN VALVES
- STRAINERS
- NON-RETURN VALVES

Our products are continuously improved to be suitable for today's market needs.

Valve design upgrades may include upgrades of material selections, welding of critical components. Furthermore, options to extend valve body lifetime by avoiding the use of welded seats are available.

We are your partner for the supply of a complete range of valves, from small bore valves up to large bore valves.

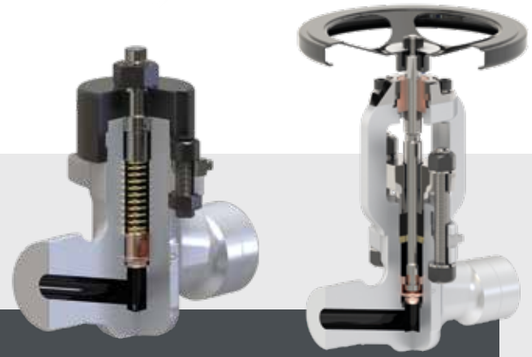
Large bore high pressure valves are available in pressure sealed bonnet and can be offered in forged steel or casted steel materials. Small bore high pressure valves are always offered in a forged steel material and include an integral or bonnetless design.

Together with our strategic alliance partners, we provide solutions for low pressure valves with a bolted bonnet type as well.

We provide full warranty coverage, spare-parts and field service assistance for all valves supplied through our company.

Our valves are supplied with a package of documentation, including a cross sectional drawing, operating and maintenance manual and certificate package per EN 10204. Additional documentation is available upon request.

Valve design and valve materials are available per ASME, EN, DIN and API. Download our product catalogues for more information.



engineered solutions

using latest material standards

maintainable products

Visit our website to learn more about our solutions and to download the latest product datasheets.

steam conditioning valves

We have the experience, knowledge and the resources to manage customer demands of complete steam conditioning systems.
With over 100 years of experience in steam conditioning systems developed in Sweden, we are a world-leading supplier of this type of systems.

Forged valve body with uniform thickness and trim design optimized to withstand thermal cycling.

- BYPASS VALVES
- STEAM CONDITIONING VALVES
- ATTEMPERATORS
- DESUPERHEATERS
- FEEDWATER HEATER BYPASS SYSTEMS
- DUMP TUBES

Our products are custom engineered to meet your demands, include latest product developments and meet market standards.

great rangeability and high shut-off class

easy replacement of spare parts

high temperature and thermal cycling

Visit our website to learn more about our solutions and to download the latest product datasheets.

control valves

Our control valves have been designed for each of the typical control applications to handle flashing, cavitation and critical pressure drop conditions while considering noise and vibration for new installations as well as retrofits.

We focus on the engineering and supply of high quality forged or casted steel control valves for severe- and critical service applications.

Valves are engineered to accommodate customer demands and include anticavitation trims to avoid cavitation damages.

- FEEDWATER VALVES
- CONDENSATE VALVES
- SPRAYWATER VALVES
- CHOKE VALVES
- PRESSURE REDUCTION VALVES

bolted bonnet for easy maintenance

noise control

solutions engineered to order

Visit our website to learn more about our solutions and to download the latest product datasheets.

spare parts and field services

We offer spare-parts and tools for our complete range of products, including upgrade trims for valves in operation. Field services can be provided world-wide and we are actively supported by local service companies.

valve seats are repairable using our genuine reseating tools

- VALVE CONSUMEABLES
- REPLACEMENT AND UPGRADE PARTS VALVE SERVICE, REPAIR AND UPGRADES
- MAINTENANCE TOOLS

Spare-parts and tools can be offered with short delivery times for world-wide express delivery.

It is recommended to use OEM-parts to guarantee proper performance of the valve and its internals after installation. The use of non-genuine parts may lead to severe damage of valves and other internals and is therefore not recommended.

We have contracts with world-wide service partners and valve-parts are available from stock from our three locations in The Netherlands, Sweden and the Republic of South Korea.

Our team can support you with recommendations for part-upgrades needed for your existing valves.

With numerous of valves installed on your facility, our aftermarket team can support you with their maintenance plans, spare-part interchangeability lists and recommendations for warehouse management to reduce downtime of your facility due to missing valve parts.

maintenance and valve repair plans

warehouse management services

OEM parts extend valve lifetime and reliability

Visit our website to learn more about our solutions and to download the latest product datasheets.

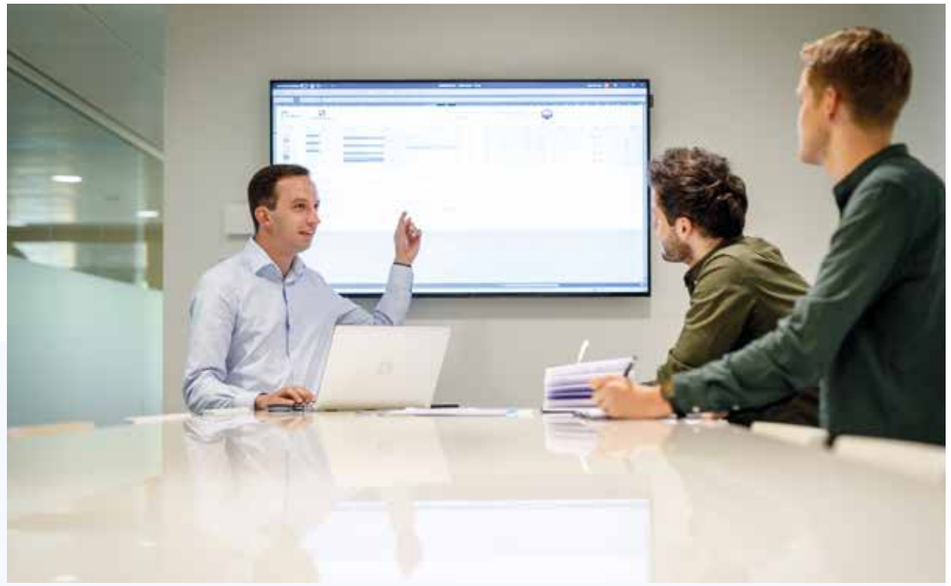
we create flow solutions for the challenges of our global partners

This vision is supported by our mission statement:

'We diversify and innovate to offer engineered products and flexible services for power and steam. As a committed team we exceed expectations to secure growth in a sustainable and profitable way.'

From the very beginning, we have taken the lead in product, service, and process improvements. Responding to the changing demands of customers, We are offering a complete range of complementary services, from technical consulting to full-scale logistics and site services.

We believe that by building long-term relationships with our clients and suppliers, all stakeholders can benefit from learning curve improvements that enhance our mutual competitiveness. Such partnerships enable us to gain a better understanding of your specific requirements, expectations, allowing us to continuously improve our services and product quality.



We are a solution provider and are available 24/7 to accept your challenge!

PROACTIVE

TOGETHER

CUSTOMER DRIVEN

OWNERSHIP

research & development

With office locations in The Netherlands, Sweden and The Republic of South Korea, our Engineers are working in multiple disciplines to continuously develop our existing products, including extensive research on potential new products and market developments pushing for product changes and upgrades.

valve manufacturing

In state-of-the-art manufacturing facilities, our products and solutions are manufactured per the latest industry standards and allow us to maintain flexibility throughout project execution.

consultancy partner

With over 1500 projects already completed, our references with leading companies worldwide reflect our expertise and experience. We can use experiences from previous projects in either industry, to meet the customer challenge and use our competence of expertness for technical solutions, offer expedited manufacturing schedules, flexibility throughout project execution and excellent project management services.

aftermarket services

Our Aftermarket Team is supporting our customers with support to technical issues around the world, recommendations for valve-upgrades or spare-parts as well as field service assistance. Root cause analysis are provided to support our customers to solve their ongoing issues. Our specialists are available 24/7 to support customers with short notice, wherever needed.

quality

All products and solutions provided are developed in accordance with the highest standards for safety and quality. Factories are all approved and certified by the ISO9001, ISO14001 and PED-certificates.

over 40 years of valve experience

The history of HP Valves goes back as far as 1879 when Dikkers began manufacturing valves used in the era of steam-powered industrialization.

HP Valves was founded as an innovative spin-off in 1981, combining the quality and know-how of Dikkers with modern, flexible production. Right from the start, HP Valves focused on the design and production of high pressure forged steel valves and solutions. With over 1500 projects already completed, our references with leading companies worldwide reflect our expertise and experience.

1879

The start of manufacturing valves

1981

Spin-off HP Valves as it is today

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