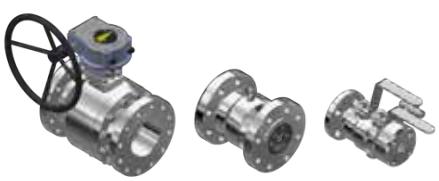
MERWEDE

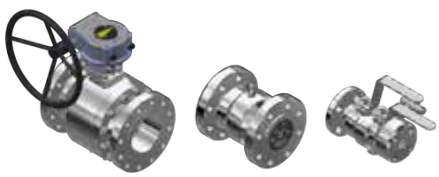


MERWEDE HYDROGEN VALVES
READY TECHNOLOGY

Merwede Valves was founded in the early 1950's and developed into a multi-disciplinary company that strived for the highest possible level of customer satisfaction. Operating in a world-wide niche market of custom engineered valve manufacturing, Merwede Valves is playing a historical role in supplying valves for all types of extreme applications and services. Additionally, the Merwede valves product lines are delivered to the client locations in unequaled short lead times.

The company headquarters is in The Netherlands at Hardinxveld-Giessendam, twenty minutes east of Rotterdam. Located on the banks of the beautifull river "Merwede" that gave its name to the company.

We believe that the success of our company for a greater part is due to the dedication and knowledge of the people who work there. The success of Merwede Valves is measured in many ways, with most important to us being the confidence our customers place in our products and performance.



MERWEDE HYDROGEN VALVES
READY TECHNOLOGY

MERWEDE - HYDROGEN-READY SOLUTIONS

Hydrogen, also known as H2, plays a crucial role in the energy transition. As an energy carrier, Hydrogen enables the transfer of energy from one place to another for its widespread applications such as clean mobility, the energy sector, and as a process gas in the industrial sector. Merwede is uniquely positioned to support your initiatives today and into the future to facilitate the energy transition. We enable your demands through our comprehensive portfolio of innovative flow control solutions.

FOR A COMPLETE H2 VALUE CHAIN

Hydrogen Applications

Merwede continues to supply valves for hydrogen service to customers across the globe, active in the chemical and petrochemical industry. Merwede's product portfolio ranges from moderating & shutoff to instrumentation valves across all sizes & pressure classes. Our H2 valves are designed to meet the most challenging process conditions.

OUR PRODUCT RANGE

Merwede hydrogen valves are designed and tested to deliver unmatched integrity, safety, and durability. Our wide range of product portfolio or customers has a one-stop solution for their most challenging services. Special care for material selection is taken to withstand the embrittling properties of Hydrogen.

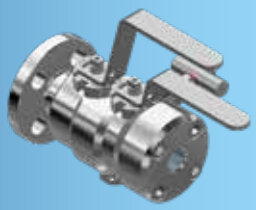
TRUNNION MOUNTED BALL VALVE

Merwede offers a wide range of Trunnion mounted ball valve solutions, are built for various applications.

- Press.Upto 690bar
- Temp. Upto 500deg C
- Wide range of sealing for zero leakage

AXIAL CHECK VALVE

Merwedes Axial check valve range provides lowest pressure drop saving over all energy cost on compression, pumping and sized to the flow.



INSTRUMENTATION VALVE

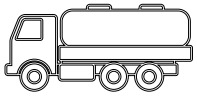
Merwede designs and manufactures a wide range of valves for instrumentation and measurement. Ranges includes SBB, DBB, Manifolds etc

APPLICATIONS

Merwede's product strategy is focused on gas transmission and storage application. Merwede's wide range of tailor made valves are suitable across the hydrogen supply chain in all sectors: * shipping * pipelines * storage.

Shipping

Pipelines



Storage

Ammonia

Petro chemicals

Steel and fertilizer industries

TYPES OF HYDROGEN PRODUCTION

GREY HYDROGEN	BLUE HYDROGEN	TURQUOISE HYDROGEN	GREEN HYDROGEN
PROCESS STEAM METHANE REFORMING GASIFICATION	**PROCESS** STEAM METHANE REFORMING GASIFICATION WITH CARBON CAPTURE	**PROCESS** PYROLYSIS	**PROCESS** ELECTROLYSIS
SOURCE METHANE COAL	**SOURCE** METHANE COAL	**SOURCE** METHANE	**SOURCE** RENEWABLE ENERGY

GREY HYDROGEN

Grey hydrogen is produced fossil fuels (SMR). The use of grey hydrogen entails substantial co2 emissions. Grey hydrogen is unsuitable for road towards net-zero emission goals

BLUE HYDROGEN

Blue hydrogen is a method of producing grey hydrogen but involves carbon capturing and storage (ccs) to lower the green house gas emissions.

TURQUOISE HYDROGEN

Turquoise hydrogen utilizes natural gas as feedstock with no CO_2 production. The pyrolysis process produces carbon in methane into solid carbon black

GREEN HYDROGEN

Green hydrogen is produced using renewable energy. This is the most suitable method for a fully sustainable energy transition

MERWEDE

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