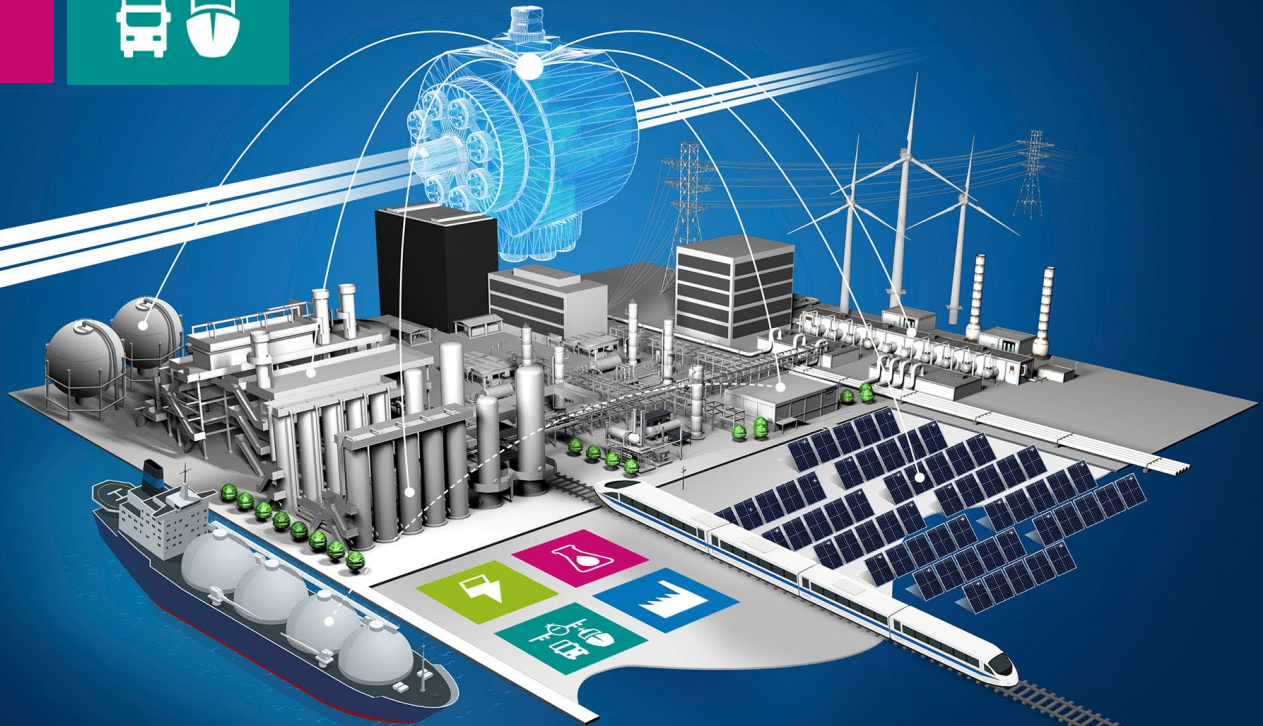


HYDROGEN INFRASTRUCTURE

Reliable and proven industrial valves for energy and hydrogen economy.

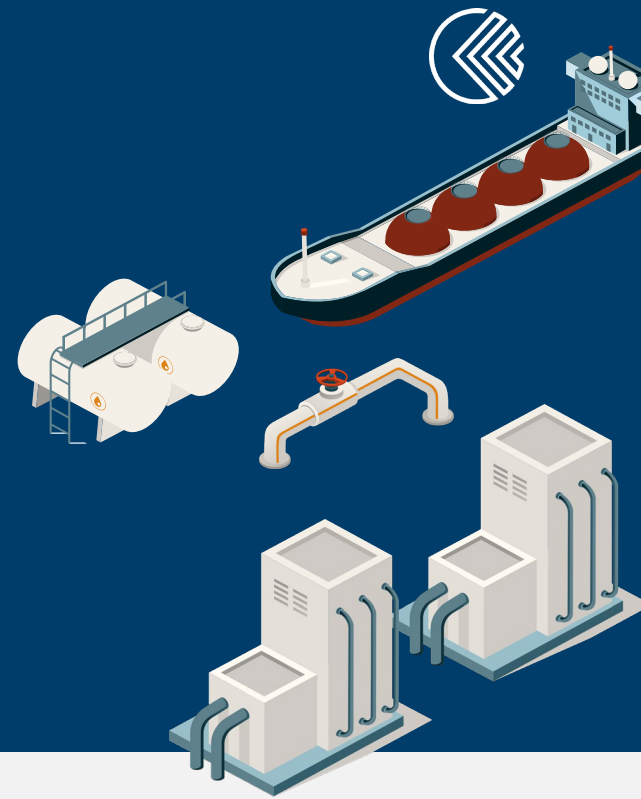




- » **SOLAR POWER PLANTS**
Green hydrogen thanks to solar energy.
- » **ELECTROLYSIS**
Power to Valve for green hydrogen.
- » **REFORMATION**
Valves for gray and blue hydrogen.
- » **HYDROGEN INFRASTRUCTURE**
Proven valves for compression, pipeline transport and storage.
- » **CHEMISTRY**
Chemistry is in our DNA.
- » **PETROCHEMISTRY**
Safe shut-off of liquid and gaseous media, high pressure and temperature.
- » **VARIOUS INDUSTRIES**
Made of steel for green steel.
- » **HEAT & POWER GENERATION**
Valves for sector coupling.
- » **MOBILITY**
An important application area for hydrogen.

Hydrogen Infrastructure

Proven valves for compression,
pipeline transport and storage.



Process description

Hydrogen can be stored after production, transported via gas networks and industrial pipeline systems, and made available.

If the hydrogen is not produced directly at the site of industrial or private use, it must be transported, regardless of the type of production.



Various technical methods are used for this: for example, as gas in high-pressure containers, as liquid gas in insulated containers, further processed into methanol and ammonia, or in liquid form in a carrier medium.

Pipeline transport has established itself as the most economical method, since existing networks are used in some cases.

To be fed into pipeline networks, the hydrogen must be compressed to the operating pressure of the pipeline network.

In this process, piston and turbo compressor stations at certain intervals ensure that the pressure is maintained despite flow losses in the pipeline.



To compensate for differences between hydrogen production and consumption or to balance out fluctuations, hydrogen can be stored in caverns, for example. Cavern storage can assume dimensions of 70 m in diameter and a height of 400 m.

In addition, there is the possibility of storage in other underground storage facilities. In some cases, 3,800 tons can be stored there to feed local industry as well as private households.





Requirements

- » Processing and compression up to 1,000 bar.
- » Supply of chemicals, power plant technology and filling stations in the low-pressure and high-pressure range (70 mbar to 700 bar).
- » Storage at over 200 bar.
- » High demands on tightness - gas tightness at high pressures.
- » Safety of the valve.
- » Long service life even at high pressures.

The handling of hydrogen requires high material quality, safety and process-proven valves.

KLINGER Schöneberg valves offer all this and more.



INTEC K200

Two-piece flanged ball valves



Proven design with perfect technical functionality. The ball valves are available in various material combinations and with different features.

INTEC K200

floating ball, soft seated

INTEC K220

floating ball, soft seated,
single side spring loaded seat ring



INTEC K811

Three-piece high-pressure ball valves



High precision bearings and both sides spring loaded seat ring elements are responsible for safety handling in all applications of the high-pressure ranges.

INTEC K811

trunnion mounted ball, metal seated, both sides spring loaded seat rings



**HAPPY TO PROVIDE
YOU WITH FURTHER
INFORMATION.**



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