KLINGER Schöneberg

PETROCHEMISTRY

Reliable and proven industrial valves for energy and hydrogen economy.

www.klinger-schoeneberg.de

» **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.

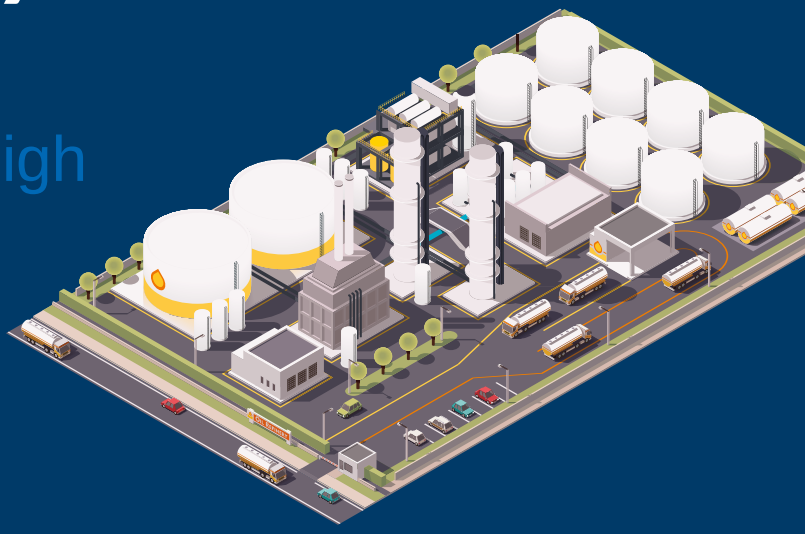
» **VARIOUS INDUSTRIES**
Made of steel for green steel.

» **HEAT & POWER GENERATION**
Valves for sector coupling.

» **MOBILITY**
An important application area for hydrogen.

Petrochemistry

Safe shut-off of liquid and gaseous media as well as high pressure and temperature.



Process description

Among the largest industrial consumers of hydrogen are the petrochemical industry and the upstream oil and gas industry. However, both industries require hydrogen less as a raw material than as a cleaning agent.

Crude oil and natural gas, as well as the refinery products derived from them, contain sulfur-containing compounds that must be removed. This is because the combustion of these compounds, for example in fuels, produces sulfur oxides that are harmful to the environment and damage both catalytic converters in motor vehicles and in other petrochemical processing operations.

To prevent this, the industry uses what is known as hydrodesulfurization on a large scale. In this process, added hydrogen reacts with sulfur on a catalyst to form hydrogen sulfide.

This, in turn, can be isolated to produce a considerable proportion of the sulfur produced worldwide, an important basic chemical. The hydrogen used thus also contributes indirectly to sulfur chemistry.

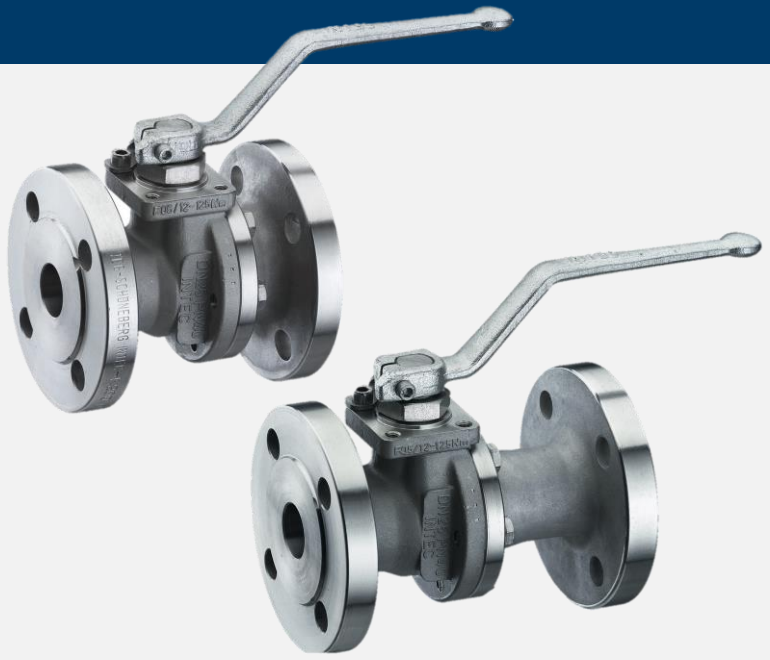
Hydrocracking is another petrochemical process with a high hydrogen demand. It allows heavier and more viscous residues from petroleum refining to be converted into lighter components, from which fuels such as kerosene and diesel can be obtained.

- High pressure and high temperature requirements.
- Hydrosulfurization at 20 to 80 bar and about 320°C to 360°C.
- Hydrogenation process at high temperatures up to 500°C and high pressures up to 250 bar.

KLINGER Schöneberg

KLINGER Schöneberg offers a wide range of design features and resistant materials such as Monel and Hastelloy that ensure safety and reliability in handling sulfuric acids, ethylene, etc. guarantee safety and reliability.

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 K211
trunnion mounted ball, metal seated, both sides spring loaded seat rings

INTEC K221
floating ball, metal seated, single side spring loaded seat ring

www.klinger-schoeneberg.de

trusted. worldwide.

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.

Marcel Goßmann
Business Development Manager / Management Assistent
marcel.gossmann@klinger-schoeneberg.de
+49.6126.950.268