

Fluid System Components Hydrogen Plants

Description

Hydrogen Basics

- Characteristics of hydrogen
- Gas purity

Fluid System Components Hydrogen Plants

- Hydrogen generation and storage
- Hydrogen in fuel cells, hydrogen as a reducing agent in the chemical industry, in the steel production, for desulfurization in the petrochemical industry, food industry, in the mobile sector and many other applications

Tubing, flanges, threads and fittings in hydrogen plants

- Material requirements
- Corrosion - Hydrogen embrittlement
- Cleaning requirements
- General requirements for tubes (steel - stainless steel)
- Fittings, threads and flanges
- Tube cutting and bending in hydrogen systems
- Dimensioning of tubes - Permitted flow velocities

Valves and pressure regulators in hydrogen systems

- Requirements for valves and pressure regulators in hydrogen systems
- Material, lubricant and cleaning requirements
- Design considerations for valves
- Sizing and calculation of valves and pressure regulators
- Hydrogen and Hydrogen / Natural Gas Mixtures

Other fluid system components

- Check valves - Deflagration safety devices
- Filters - Pressure transducers - Sensors
- Control valves - Coaxial valves - Butterfly valves - Safety valves - Solenoids

Technically permanent leak tight