Engineering Office Andreas Holl

Conceptual Design - Engineering Services - Training - Consulting

Fluid System Components Oxygen Plants

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Description

Oxygen Basics

- · Characteristics of oxygen
- Gas purity
- Technical oxygen / Medical oxygen
- Hazards due to oxygen

Fluid System Components Oxygen Plants

- Oxygen generation and storage
- Oxygen in the chemical industry
- Oxygen in other application

Tubing, flanges, threads and fittings in oxygen plants

- Material requirements
- Cleaning requirements
- General requirements for tubes
- Fittings, threads and flanges
- Tube cutting and bending in oxygen systems
- Dimensioning of tubes

Sealing materials and lubricants in oxygen plants

- Permissible materials
- Limiting oxygen index

Ignition mechanisms in oxygen plants

- Ignition mechanisms in oxygen systems
- Impact zones in oxygen systems
- Permissible flow velocities

Valves and pressure regulators in oxygen systems

- Requirements for valves and pressure regulators in oxygen systems
- Material, lubricant and cleaning requirements
- Design consideration for valves in oxygen systems
- Calculation and selection of valves and pressure regulators
- Joule-Thomson effect

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- Droop for pressure regulators
- SPE (dependency factor) for pressure regulators
- Dome pressure regulators
- Back pressure regulators

Technically permanently leak proof fluid system components

Assembly criteria in oxygen systems