CRANE

# **CRYOFL**

**Keeping Cryogenics Cool** 



# CRANE CRYOFLO<sup>TM</sup> Liquid Hydrogen Bellows Seal Globe Valve

CRANE CRYOFLO™ Bellows Seal Globe Valves stop Hydrogen loss by minimizing heat transfer rates, reducing pipeline latency in liquid transfer applications and leveraging bellows zero-leak design.

- Enhanced engineered design offers best-in-class heat transfer, greatly reducing Hydrogen loss.
- 2 Innovative valve internals (standard and jacketed designs) deliver improved CV in your application, improving liquid transfer times.
- 3 Unique cartridge replacement system allows for in-line repair, solving the toughest challenges with minimal down-time.

Designed for LH2 and other key industrial gases such as LIN, LOX, LAR, LHe, and LNG. Rated to -269°C (-452.2°F)





**CONTACT US** 





# CRYOFLO™ Cryogenic Bellows Seal Globe Valve (BSGV)

#### **Size Range**

½" to 6" NPS

#### **Pressure Ratings**

• 300 psi MAWP

#### **Assembly Configurations**

- Vacuum Jacketed and Non-Jacketed
- Extended bonnet/stem per MSS-SP-134
- Custom extended bonnets/stems available

#### **Operating Options**

- Manual
- · Linear Actuation
- · Pneumatic Actuation

#### **End Connections**

- · Pipe stub ends
- Butt-weld

#### **Compliance**

- MSS-SP-134
- ISO 15848
- · Fire Safe
- Oxygen cleaned per CGA G-4.1 and EIGA Doc200

#### **Typical Applications**

• Production, transportation, transfer, and storage of Hydrogen and other cryogenics.

### **JACKETED BSGV FEATURES**



Easily convert from manual handwheel to actuation.

Unique cartridge replacement system for efficient in-line maintenance

Proven bellows design for high life cycle

Vacuum barrier and Improved design minimizes heat leak and media boil-off.

Innovative valve internals deliver improved CV while maintaining highest industry bubble-tight shut-off standards.

## CRANE CRYOFLO™ vs. competition cost saving per year

Model represents the typical liquid hydrogen storage transfer cost and product loss based on a 1.5" BSGV, 4 hours of tank transfer per day with 2 valves involved in each tank transfer assuming a base LH2 price of \$9.00/kg.









CRANE CRYOFLOTM
SAVINGS/YEAR
\$24,000/tank
IMPROVES CV AND HEAT
TRANSFER FOR ENHANCED
FLOW & MEDIA CONTAINMENT

TYPICAL SOLUTIONS CURF

**CURRENT BEST-IN-CLASS** 

CRANE CRYOFLO™ ADVANTAGE

#### **CRANE CHEMPHARMA & ENERGY**

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