# **4.3 Cryogenic Globe valves**

Cryogenic globe valves are designed exclusively for the handling of cryogenic liquids on bulk storage tanks, transports, and pipelines. These globe valves are used for throttling services, provide positive shut off and offer a long, low-maintenance service life.

The valves have been carefully designed and constructed to get maximum rigidity and reliability for long service life and trouble free even under heavy-duty operation.

## Valve range and alternatives:

Cryogenic globe valve range goes from 150# up to 2500# and from  $\frac{1}{2}$ " up to 72" and can be bolted bonnet (BB) or pressure seal design (PS) depending on pressure ratings and project specifications.

At customer's request, different configurations can be manufactured:

- Discs can be fitted as parabolic design.

- Body design can be standard pattern, angle pattern type or straight pattern type.

- Valve can be design as a stop check valve. A stop check valve design has the advantages of the check valve, working as a non-return when it is in open position and the advantage of the globe valve for shut off.

# Sealing system:

AMPO Valve's globe valves are built with metal to metal technology. On cryogenic globe valves, the seats are integral with the body and the disc has a stellite overlay in order to hardener.

On cryogenic globe valves, the back seat is integral with the bonnet. The conical back seat plug is integral with the stem and seats when the valve is in the fully open position. This allows re-packing of the gland under full service conditions.

#### Design and construction:

The design and construction of the cryogenic range of AMPO Valves, is based on the requirements and codes of practice of the American and British Petroleum, Petrochemical and Power Industries.



The standards and codes used are from the following institutions:

- API American Petroleum Institute.
- ASME American Society of Mechanical Engineers.
- ASTM American Society for Testing Materials.
- BSI British Standards Institution.
- MSS Manufacturers Standardization Society.

Globe valves are designed to comply with the following standards:

- BS1873
- API 600
- ASME B16.10
- ASME B16.25
- ASME B16.5
- ASME B16.47
- ASME B.16.34
- BS 6364
- ASME VIII

# GLOBE VALVES

## **BOLTED BONNET**

Standards: Classes: Sizes: Construction:

**Temperature:** 

API, BS, MSS, ASME, ASTM 150 lbs up to 2500 lbs 1/2" up to 60"

Bolted bonnet and Presure seal. Extended bonnet (Gas column). Flanged and butt weld ends. Manual and motor-operated. Throttling Service Globe valves. Metal seats. Down to -196°





EXAMPLE





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