# L&T Cryogenic Gate & Globe Valves

Services that handle fluids at sub-zero temperatures present several technical challenges. L&T's specially-adopted, extended-bonnet gate and globe valves provide the right solution for such low-temperature and cryogenic services.

L&T offers a range of gate and globe valves (as well as check valves) for low temperature and cryogenic services, used in processing, storage and transportation of liquefied gases such as Ethylene, LPG, LNG, Hydrogen, Helium, Oxygen, Nitrogen and Argon. Low temperature services of up to -46°C are covered by low-temperature carbon steels like LCB and LCC materials. Cryogenic services at -196°C are covered by stainless steel grades like CF8M and CF8.

L&T Cryogenic Gate and Globe Valves are available in ASME Classes 150 to 1500. Refer page 3 for detailed manufacturing programme.

#### **Extended Bonnet**

Optional extended bonnet with vapour column length according to BS 6364 and  $\prime$  or customer specifications is furnished. The vapour column allows the stem packing to be functional by keeping it away from the cryogenic fluid.

#### **Testing and Standards**

L&T Cryogenic Valves are type-tested as per valve standards and specifications of leading oil companies as part of the design verification process.



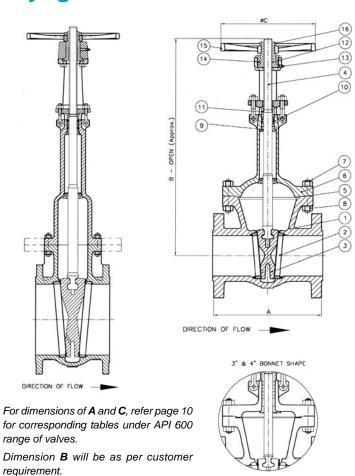


### **Test facilities**

L&T has Cryogenic test facilities for testing valves of temperatures as low as -196° in sizes from 50mm (2") to 1500mm (60"). This ranks one among the largest facilities worldwide.



# **Cryogenic Gate Valves - ASME Classes 150 to 1500**

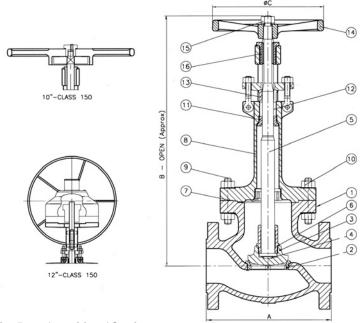


### **Parts List**

| SI. No. | Description    |
|---------|----------------|
| 01      | Body           |
| 02      | Body Seat Ring |
| 03      | Wedge          |
| 04      | Stem           |
| 05      | Gasket         |
| 06      | Bonnet         |
| 07      | Stud           |
| 80      | Stud Nut       |
| 09      | Back Seat      |
| 10      | Packing        |
| 11      | Gland          |
| 12      | Yoke Sleeve    |
| 13      | Grease Fitting |
| 14      | Retainer Nut   |
| 15      | Handwheel      |
| 16      | Handwheel Nut  |
|         | Nameplate      |

Materials of construction are selected, based on the service fluid, temperature and customer specifications.

# Cryogenic Globe Valves - ASME Classes 150 to 1500



For dimensions of **A** and **C**, refer page 12 for corresponding tables under API 600 range of valves.

Dimension **B** will be as per customer requirement.

### **Parts List**

| SI. No. | Description    |
|---------|----------------|
| 01      | Body           |
| 02      | Body Seat Ring |
| 03      | Disc           |
| 04      | Disc washer    |
| 05      | Stem           |
| 06      | Disc Stem Nut  |
| 07      | Gasket         |
| 80      | Bonnet         |
| 09      | Stud           |
| 10      | Stud Nut       |
| 11      | Back Seat      |
| 12      | Packing        |
| 13      | Gland          |
| 14      | Handwheel      |
| 15      | Handwheel      |
| 16      | Yoke Bush      |
|         | Nameplate      |

Materials of construction are selected, based on the service fluid, temperature and customer specifications.