

Iron Globe and Angle Valve Features

Crane globe and angle valves are highly efficient for throttling service because disc and seat designs provide flow characteristics with proportionate relationships between valve lift and flow rate. This assures accurate regulated flow control. The additional advantage of an angle valve is that it provides a 90° turn in piping so fewer joints are required and make-up time and labor are reduced.

Body and Bonnet are normally cast of Crane High Strength Cast conforming to ASTM A126, Class B. Malleable Iron valves are available for higher pressures.

Two types of bonnet construction are available:

Union Bonnet gives added strength and rigidity to the body to withstand internal pressure and distortion. Because it is easy to dismantle, it is used on smaller valves requiring frequent inspection or cleaning.

Bolted Bonnet is the most common design because there is practically no limitation on size. Multiple bolting permits equalized sealing pressure on the gasket against the highest pressures encountered in iron globe and angle valve applications. All bolted bonnet valves in this section comply with MSS SP-85 standard practice.

There are two types of discs supplied in Crane globe and angle valves:

Metal Disc in most valves is fully guided throughout its travel, minimizing vibration of internal parts and assuring true seating. The disc stem connection is designed to securely hold the disc yet permit swivel action. Disc materials are iron, bronze, iron faced with bronze, steel or a nickel alloy.

Metal Plug Disc is conically shaped. This design is universally accepted for rigorous service. Because of the wide seating surfaces, it is not easily harmed by foreign matter or wire drawing. Crane uses stainless steel in this design.

Seats are screwed in and can be reground or replaced whenever necessary.

Stem material is matched to service recommendations for improved operating dependability and life.

Packing non-asbestos rings.

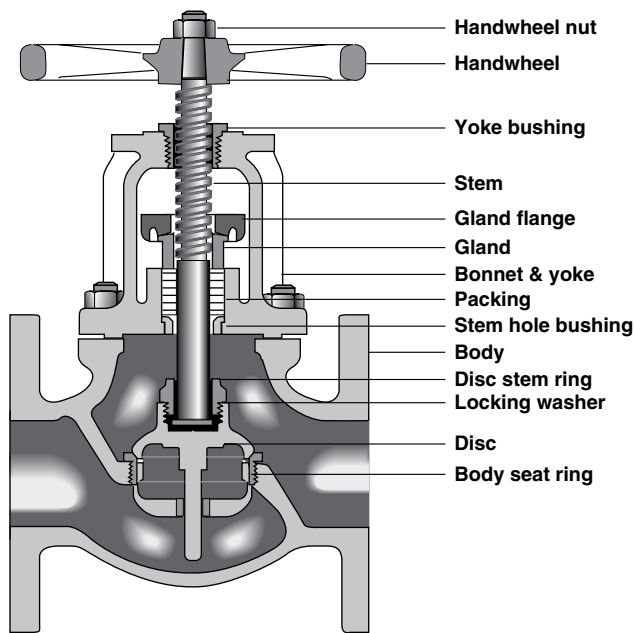
Backseating: Rising stem valves are equipped with backseats. It is recommended that the backseat be used as a means for determining the full open valve position.

For normal operation in the open position, the stem should be backed off so that the backseat is not in contact. This permits the stem packing to assume its intended sealing function and not conceal unsatisfactory stem packing. In the event of stem packing leakage, the backseat can be used to stop stem leakage until circumstances permit a system shutdown and time for packing replacement. Stem packing replacement with the valve under pressure and backseated represents a hazard and should not be undertaken. The hazard is magnified as fluid pressure or temperature increases or when the fluid is toxic.

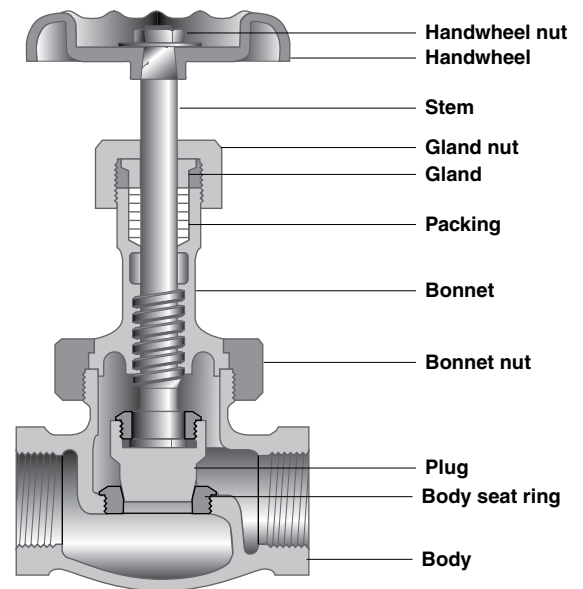
Handwheels are furnished on all valves. Manual gear, hydraulic or motor operators and chainwheels can be supplied when specified.

Face-to-Face Dimensions of flanged end valves conform to ASME B16.10 in their pressure class.

Flanged End Valves adhere to ASME specification B16.1 for their pressure class.



BOLTED BONNET, FLANGED



UNION BONNET, THREADED