# **Bronze Globe and Angle Valve Features**

### **Detailed Features**

Crane Globe and Angle Valves are highly efficient for regulating flow because disc and seat design 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.

Each valve in this section is classified by its pressure rating. All valves designated as Class 125, 150, 200 or 300 comply with MSS SP-80 Standard Practice.

Body is made of bronze conforming to requirements of ASTM B62 or B61 depending on valve pressure class. Like all parts, bodies are designed to withstand high internal pressures and line strains... and are proportioned to assure a high safety factor under recommended working pressures.

Body Seat Ring is made from high grade material especially selected to perform dependably in the services for which the valve is recommended.

<u>Disc Stem Connection</u> in all valves is designed to hold the disc securely while allowing it to rotate. The result is true, positive sealing with no damage to sealing surfaces.

<u>Conventional Metal Disc</u> has a relatively narrow contact with the body seal. It is recommended for a variety of general services but not for close throttling.

PTFE Disc has the same basic construction as the fully guided metal disc except that the disc is inserted in a disc holder. These pliable discs assure tight sealing and simplify valve maintenance. The PTFE disc is recommended for 150 psi saturated steam, 300 psi maximum non-shock cold water, oil, gas, and air.

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

<u>Stem</u> is made from high grade materials especially selected to perform dependably in the services for which the valve is recommended.

Multiple Choice Seating are engineered for optimum performance on a wide range of services; renewable PTFE disc, regrind bronze seating, regrind and renewable plug type disc and seat ring in hardened 450 BHN, AISI 420 stainless steel. Hardened stainless steel discs and seat rings are performance proven. Needle or plug type seating provides graduated closure for throttling service. PTFE discs assure tight shut-off and are easy to change.

<u>Cylindrical Shaped Body</u> is the strongest and most successful design for withstanding internal pressures and line strains. The extra rigidity imparted by this shape prevents body distortion from line strain.

<u>Large End Hexagons</u> add additional body reinforcement and provide large surfaces for positive wrench grip.

<u>Screwed Bonnet</u> has generous optimum-sized hexagons for easy and positive wrench grip. For an easily remade and positively leak-tight joint, the flat bonnet seating face contacts a 5° inclined face of the body, providing high unit loading with relatively low torques.

<u>Union Bonnet</u> Where service conditions require, generous union bonnet rings facilitate frequent dismantling and reassembly of the bonnets and reinforce the bonnet joint to ensure a tight joint and maximum security under pressure.

<u>Solder Joint Valves</u> conform to ASME B16.18 specification for depth and diameter.

<u>Heat Dispersing Handwheel</u> Open rim, rounded multi-rib design provides a comfortable, positive grip. Handles are sized to provide adequate torque to operate the valve without the aid of levers, hickeys or wrenches.

End Threads are precision cut in accordance to ASME B1.20.1.

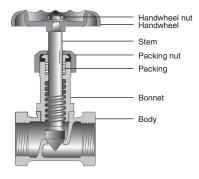
<u>Strong Stem Threads</u> are precision machined to ensure ease of operation and long service.

<u>Crane Bronze Globe and Angle</u> valves have an identification plate which indicates the valve catalog number and the type of disc. Located under the handwheel nut, it permits easy and accurate field reference.

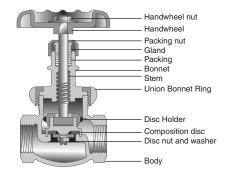
All valves are clearly identified and marked to MSS SP-25 specification.

For pressure-temperature ratings and Cv values, see pages 5-6.

#### NEEDLE VALVE



#### **GLOBE VALVE WITH PTFE DISC**



## GLOBE VALVE WITH METAL TO THE

