



- **Size Range:** 2" to 24" – class 150 / 2" to 16" – class 300 / 2" to 16" – class 600
- **End Connection:** Flange End – ASME B16.5 / Butt Weld – ASME B16.25 / RTJ & Etc.
- **Face to Face:** ASME B16.10
- **Testing Standard:** BS EN 12266-1 & Design Standard: BS1873
- **The standard flange facing is RF with smooth finish on the gasket surface. Other end connections & details available on request.**
- **Material:** Shell: WCB, WC1, WC6, WC9, LCB, LCC, C5, C12, CF3, CF8, CF3M, CF8, CF8M, CF8C, CD4MCu, Hastelloy, Inconel Duplex Stainless Steel

**Trim:** 13%Cr Steel, SS304, 304L, 316, 316L, 321, 347, F51, Monel

- **Operation:** Hand wheel operated, Gear Operated, Pneumatic, Hydraulic, Chain wheel, electric Actuator
1. **Body:** Body is cast with integral flanges meeting operating conditions with reinforcement to reduce stress. Flanged end and Butt weld end are available with ASME specification.
  2. **Bonnet:** Bonnet is cast with integral yoke for better alignment and fewer parts. All bonnets are precision machines with exacting tolerance as the body for exact alignment of the stem and disc center.
  3. **Seat Ring:** Renewable seats are hard faced and machined to minimize wear. The seat rings are seal welded to the body. Integral Seat is provided for Austenitic Stainless Steel valves. High Quality deposits of Stellite 6 & other hard facing alloys are assured by use of controlled preheating and automatic plasma arc facing and controlled cooling process.
  4. **Disc:** Disc is Ground and lapped to mirror finish. Differential hardness difference of 50 BHN is maintained between disc and seat.
  5. **Stem:** Rotating stem with precision ACME threads are machined and burnished to mirror finish to 0.8 microns for low torque. Stem has long engagement with stem nut for accurate sealing.
  6. **Disc Nut:** Disc nut secures stem to the disc. It permits the disc to rotate about the stem axis and aid in tight sealing for trouble free service compensating for disc wear.
  7. **Thrust Washer:** Hard Thrust washer prevents galling.
  8. **Stem Nut:** Precision machined stem nut engage the stem for accurate control of wedge position.
  9. **Gland:** Two piece gland for ease of alignment and exerts even pressure on the packing without binding the stem.
  10. **Gland Flange**
  11. **Body Stud Nut**
  12. **Packing:** Die Molded Grafoil rings with top and bottom braided rings provides ultimate sealing for wide range of service. Assures long packing life and avoids pitting on stem.
  13. **Back Seat bush:** Precision Machined bush helps for replacement of packing at open position.
  14. **Gasket:** Spiral wound metallic gasket with Grafoil enclosed in tongue and groove arrangement.
  15. **Eye Bolt & nut:** Swing type eye bolt for ease in replacement of packing
  16. **Solid Groove pin**
  17. **Hand Wheel:** Hand wheel are standard up to 10". Gear operator can also be given on request
  18. **Hand Wheel Nut**