FLO-TITE valves & controls

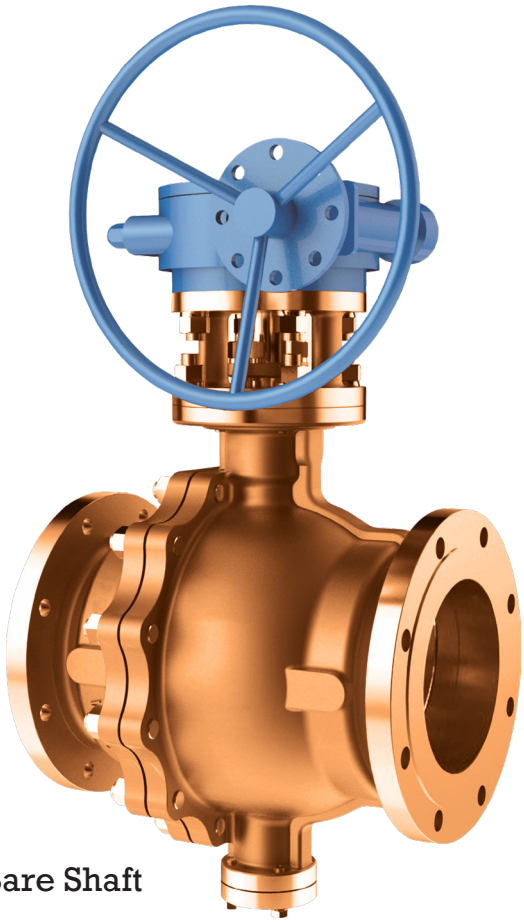
HI-TEK SuperAlloy

# Ball Valves Series SuperAlloy Valves

**Trunnion Mounted Ball Valves** | **General Highlights**

## Applicable Seat Materials

- PTFE
- RPTFE (15% Glass Filled)
- RPTFE (25% Carbon Filled)
- PEEK
- Nylon
- Devlon
- PPL
- Other materials can be supplied upon request



## Specifications

- Trunnion mounted ball design
- Side-entry
- Split body construction (2-PC or 3-PC)
- Full bore & Reduce bore
- Blowout-proof stem
- Locking device
- Anti-static device
- Soft seats
- Fire safe /non-fire safe design
- ISO mounting pad
- Self cavity pressure relief
- Ends: Flanged, Wafer, NPT, BW, SW
- Operation: Lever, Gear, Electric, Pneumatic actuator, Bare Shaft

| ASME Flanged ball valve as citing | |
|---|---|
| Design | ASME B16.34, API 6D |
| Testing | API 598, API 6D |
| Face-to-face | ASME B16.10 |
| Flange ends dimensions | ASME B16.5 |
| Pressure temperature rating | ASME B16.34 |
| Visual Inspection of casting | MSS-SP-55 |

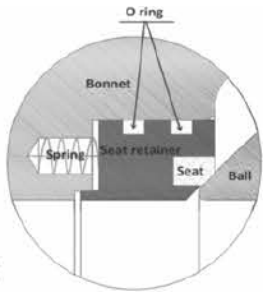
| Size/Pressure Produce Range | | Operator |
|---|---|---|
| Pressure | Flange(Trunnion) | |
| 150LB | 4" up to 48" | 4"~5" Lever<br>6"~48" Gear |
| 300LB | 4" up to 48" | 4"~5" Lever<br>6"~48" Gear |
| 600LB | 3" up to 40" | 3"~40" Gear |
| 900LB | 3" up to 32" | 3"~32" Gear |
| 1500LB | 2" up to 32" | 3"~32" Gear |
| 2500LB | 2" up to 24" | 3"~24" Gear |

Notes:
- Other designs are available upon request. BS EN17292, DIN, JIS, GB. Etc.
- Other ends criterion: Threaded NPT—ASME B1.20.1; Socket Weld—ASME B16.11; Butt Weld—ASME B16.25;BSPP/BSPT—BS21

## Trunnion Mounted Ball Valves Design Features

### Seat Design

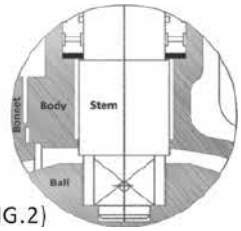
The standard seat design is primary soft seal, and secondary metal to metal seal. Seat insert is designed as pressure-in type which is easy for maintenance. (Fig. 1)



(FIG.1)

### Blowout-Proof Stem

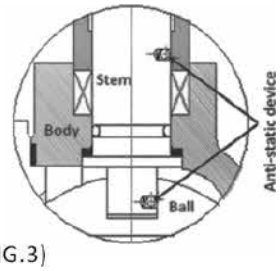
The stem is made separately from the ball with integral T-type shoulder to be blowout-proof. It also functions as the backseat to assure stem sealing safety at all pressures. (Fig. 2)



(FIG.2)

### Anti-Static Device

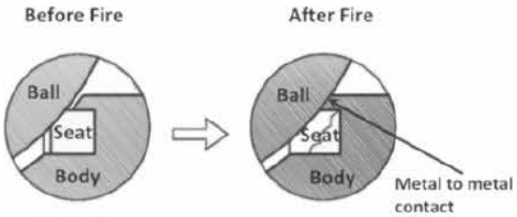
When operating the valve, the friction between the ball and the non-metal seat will produce static charges. To avoid static sparks, an anti-static device (spring loaded ball) is placed between the ball, stem, and body forming an electrostatic channel and effectively removes the static electricity. This prevents the risk of ignition. (Fig. 3)



(FIG.3)

### Fire Safe (Option)

Trunnion ball valves confirm to API 607 and API 6FA standards.
When the seat is damaged by fire, it collapses which forces the ball and body to touch. This prevents the risk of any internal or external leakage. (Fig. 4)



(FIG.4)

### Locking Device

Lever operated ball valves with locking device. Facility for mounting a locking device for prevention of accidental valve operation in provided figure. (Fig. 5) Gear operated ball valves with this locking device is available upon request.


(FIG.5)

Notes:

- Emergency sealant injection system are available upon request.