

## TECHNICAL SPECIFICATIONS – BALL VALVES TRUNNION & FLOATING

### 1. Test and Certification Standards

- ANSI B16.34
- API 6FA
- API 607
- API 6D
- API 598
- MSS-SP-61

### 2. Basic Design

- ANSI B16.43
- API 6D/ISO 14313
- MSS-SP-72
- ANSI B16.5
- API 598
- MSS-SP-84
- ANSI B16.10
- MSS-SP-44

### 3. Material Standards

- ANSI B16.34
- ASTM Section 1
- NACE MR-01-75

### 4. Quality

- ANSI B16.34
- MSS-SP-53
- MSS-SP-93
- ASTM Section 3
- MSS-SP-54
- MSS-SP-94
- API Q1
- MSS-SP-55
- ISO 9001

### 5. Features

- Anti-static Device
- 125-250 RMS RF Flange Finish
- Blow-out Proof Stem
- Field Repairable
- Bubble Tight Sealing
- 100% Hydro Tested
- Material Traceability
- Visual Position Indicator
- Bi-directional (seals in both directions)
- Low Torque

### 6. Trunnion Mounted Style Design Features

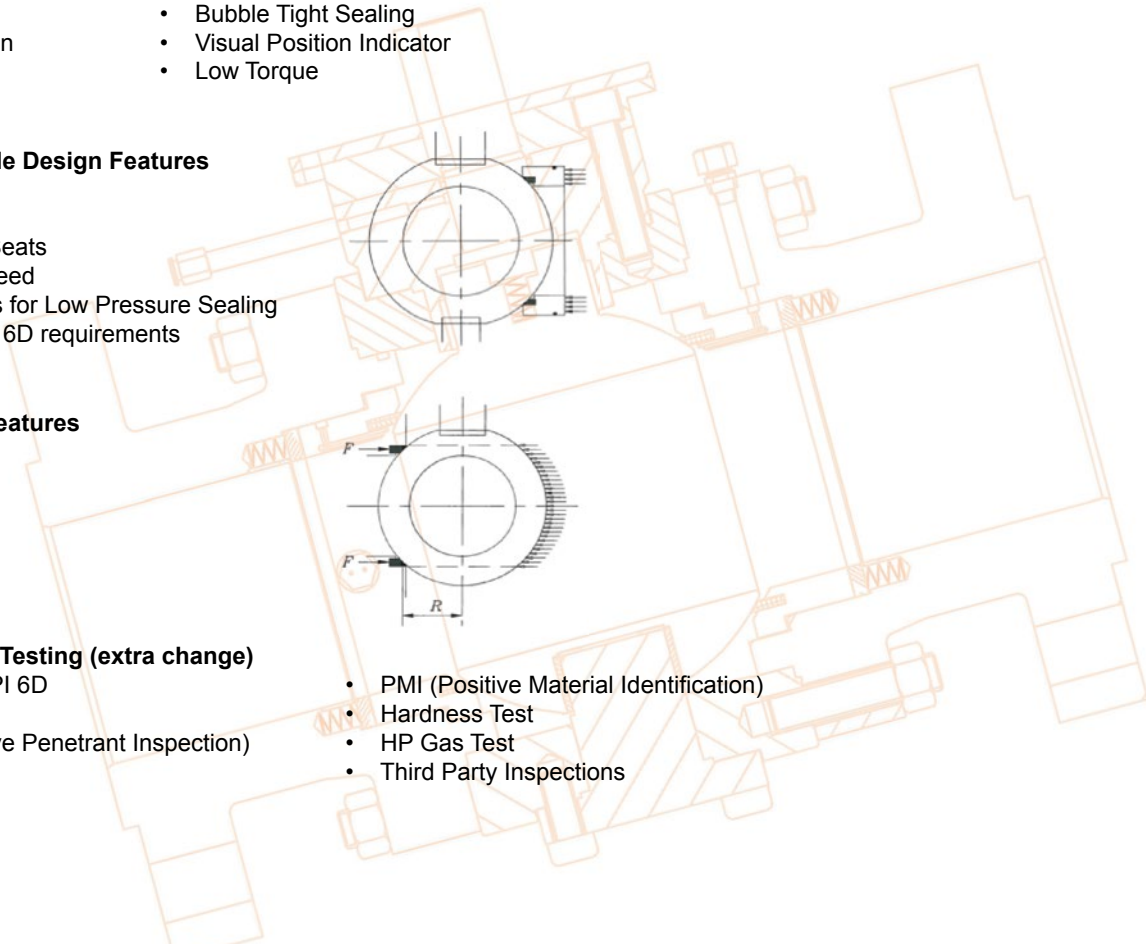
- 2 and 3 PC Design
- Trunnion Mounted
- Pressure Activated Seats
- Double Block and Bleed
- Spring Loaded Seats for Low Pressure Sealing
- Manufactured to API 6D requirements

### 7. Floating Ball Design Features

- Floating Ball Design
- Stainless Steel Trim
- Adjustable Packing
- Lever/Gear included
- Tested to API 598

### 8. Available Special NDT Testing (extra charge)

- NDT According to API 6D
- PMI (Positive Material Identification)
- UT Examination
- Hardness Test
- DPI Examination (Dye Penetrant Inspection)
- HP Gas Test
- RT Examination
- Third Party Inspections



## 9. Material Certification

All certificates will be API 6D/EN type 3.1 for metallic pressure retaining parts (body, bonnet, closure ends) and major trim components: stem/trunnion/body-seat-ring.

The following components/ parts will be certified as follows:

EN 10204/ DIN 50049 type 3.1: Body, Closures, Bonnet/ Top cover, Lower trunnion, Ball, Stem, Seat

EN 10204/ DIN 50049 type 2.2: Gaskets/ o-rings, Bolting

Hydraulic and functional final tests certification is in accordance with EN 10204/ 2004/ 3.1.

## 10. Painting

Valves will be painted in accordance with APV standard paint specification. Dedicated painting procedures will be issued in case of order.

## 11. Packing

Export grade packing will be provided <<(heat treated pallets)>>. Packaging is included in our unit prices and it is suitable for ground freight and in accordance to <<ISPM 15 Standard>>.

## 12. Documentation

Technical documentation will be submitted in accordance with the order. In addition we can submit the following documents as required at bid and/or order stage.

- Full set of catalogues for all items quoted
- APV standard terms and conditions
- Standard packing procedure specifications
- Standard APV painting specifications

## 13. Design

Valve design according to API 6D – minimum thickness according to ASME B16.34 + corrosion allowance – bolting sizing according to ASME B16.34.

## 14. Testing

Final testing and inspection in accordance with API 6D/ API 598.

Testing will be carried out with the valves installed on standard test benches.

- Hydrostatic body test (each valve)
- Hydrostatic seat test (each valve)
- Operation test tests (each valve)
- 100% Visual examination, 100% dimensional check included
- No other special tests included as standard.

