

TECHNICAL SPECIFICATIONS
SS 316L BALL VALVES

Stainless Steel 3 Piece Ball Valves must conform to the technical specifications mentioned below.

General Requirements:

- i. Type: 3 Piece, Full Port
- ii. Ends: Butt Welding Ends, Sch. 40
- iii. Operating Temperature: 150°C
- iv. Operating Pressure: 10 bar
- v. Rating: 150 lb., according to ASME B16.34 – 2004, Table 2-2.3
- vi. Valve Dimensions according to ASME B16.34 – 2004, Section 6
- vii. End to End Dimensions according to ASME B16.10 – 1992, Table 1

Materials of Construction:

- i. Body, Ball, Bonnet, Stem, Nuts, Bolts, Washer & Handle: F316L according to ASTM A182 / A182M-04
- ii. Seat and Stem Packing: 15% R-PTFE

Chemical Composition:

- i. Carbon: 0.03%
- ii. Manganese: 2.00%
- iii. Phosphorous: 0.045%
- iv. Sulfur: 0.03%
- v. Silicon: 1.00%
- vi. Nickel: 10.0-15.0%
- vii. Chromium: 16.0-18.0%
- viii. Molybdenum: 2.0-3.0%

Required Material Tests:

- i. Corrosion Testing: Practice C: ASTM A262-02a
- ii. Pressure Testing: Section 7: ASME B16.34 – 2004

Product Marking: each valve shall be marked with the Section 20 of ASTM A961 – 04 as:

- i. ASTM Specification Number, Grade and Rating, Identification Number, Rating and Heat Number
- ii. Name/Mark of Manufacturer

Finish and Appearance:

- i. The finished parts shall conform to the dimensions and finish as specified on the order.
- ii. Surface Finishing: the product shall conform to the requirements of ASTM A961 – 04.

Mill Test Certificate:

Product certification must be compliant with Section 19 of ASTM A961-04 and Section 16 of ASTM A182/A182M-04. All test reports, as mentioned above shall be furnished to the purchaser.