

## **Ball Valve Specifications for Clean and Pure Steam Applications-(SB7)**

## 1. High Purity Ball Valves ½" thru 6"

High Purity ball valve shall be a three piece design with ISO 5211 Integral Actuator Mounting Pad, removable swing-out center section, non-exposed body bolting and encapsulated body seals. The ID of the valve flow path (ball, seats, ends) shall be the same ID as the tubing it is attached to provide minimal hold-up volume and drainability as per latest **ASME BPE SD-3.12.** 



- A. Body Materials 316L Stainless Steel ASTM A351 CF3M. (Standard DT-4/Table DT-3)
- B. Ball Materials 316L Stainless Steel ASTM A479 or ASTM A351 CF3M. (Standard DT-4/Table DT-3)
- C. End Connections
  - a) Clamp style 316L Stainless Steel A351 CF3M (dimensions per latest ASME BPE, Part DT-10)
  - b) **Extended Buttweld (ETO)** 316L ASTM A-270, Chemical composition and dimensions per latest ASME BPE table DT-3, DT-1 and DT-5. (dimensions per latest ASME BPE, Part DT-9)
- **D.** Stem 316L Stainless Steel ASTM A479, Live-loaded, Blowout proof design. Packing to be a combination of (thrust bearing) PEEK (Poly Ether Ether Ketone) and seals conforming to latest ASME BPE SG-4.
- **E. Seats** Pure TFM, (FDA, USP 23 Class VI), Non- slotted, designed to meet latest ASME BPE SD-3.2.2, SD-3.4.2, SG-4 and rated to withstand continuous flow of saturated steam at a minimum temperature of 266°F (130°C) for a duration of 100 hr minimum under continuous steady-state conditions.
- **F.** Interior Finish Polished to meet latest ASME BPE specification DT-12 and table SF-6.
  - a) Mechanical Polish to SFV 1
  - b) Electro-Polish to SFV 4
- **G.** Markings Valves shall be marked to conform to latest ASME BPE DT-3.
- **H.** Packaging Valves to be packaged to conform to latest ASME BPE DT-13.
- I. Ball valve shall be SVF "CleanFLOW" Part # SB76666AT