

# CRITICAL SERVICE VALVES

**CORTEC is setting industry standards with our reliable compact critical service valve designs.**

## **CORTEC MODEL “D” COMPACT TRUNNION BALL VALVE**

### *Typical Critical Service Valves Metal Seated*

The CORTEC Metal Seated “D” Series Compact Ball Valve is the ideal solution for applications involving abrasives or high temperature or both.

Tungsten carbide coated ball and seats provide the hard surfaces required to resist damage from abrasives and minimize wear while meeting API 6A zero leakage criteria.

Stem and ball designs are robustly designed to accommodate the higher torque requirements of metal seated valves.

The “D” series design has a double trunnion block support to maintain perfect alignment of the ball even at high pressures and temperatures.

### *Typical Critical Service Valves*

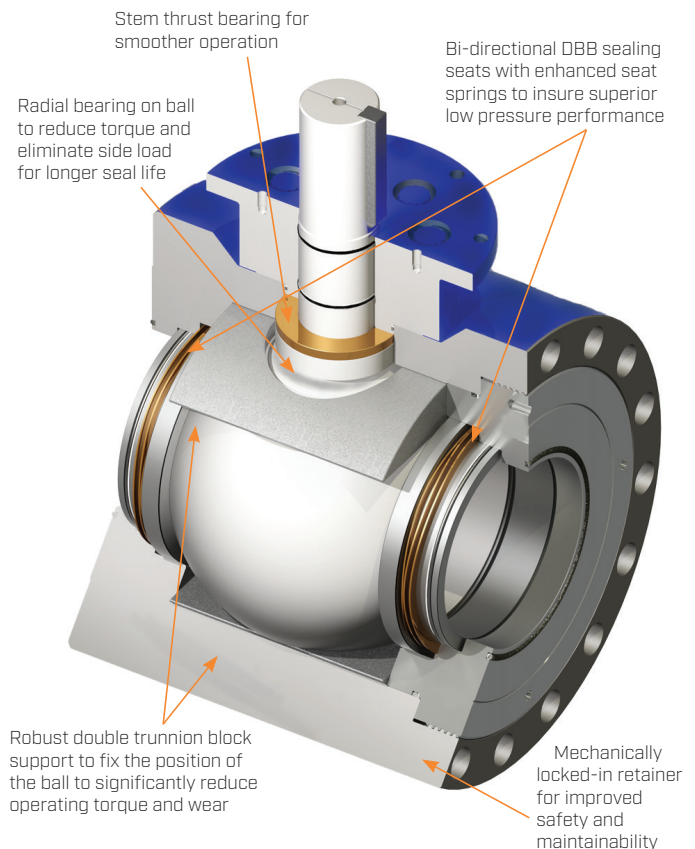
#### **Double Block & Bleed**

The DBB (Double Block & Bleed) feature incorporates spring loaded independent upstream and downstream seats capable of providing bidirectional zero leakage from very low pressures to pressures up to 15,000 PSI.

#### **Design Features And Benefits**

- Sizes ranging from 1/2” to 14”  
(Larger Nominal Sizes Available Upon Request)
- Pressures to 20,000 PSI
- Tungsten Carbide metal-to-metal seat to ball sealing
- Valve bores can be sized to match pipe bore
- CORTEC “LD” series design features primary lip seal technology available upon request
- Valve models can be ordered compliant to:
  - API 6A with or without monogram
  - API 6AV1 “Sand Slurry” certified
  - Certified BSDV (Boarding Shutdown Valve)
  - API 6FA and API 607 fire-test certified
  - API 6D
  - NACE
- Third party certification available upon request
- Multiple end connections available
- Customizable to application requirements
- Manual lever/gear or power actuated

Typical Metal Seated “D” Trunnion Design DBB Ball Valve



# CORTEC CRITICAL SERVICE & BSDV BOARDING SHUTDOWN VALVES

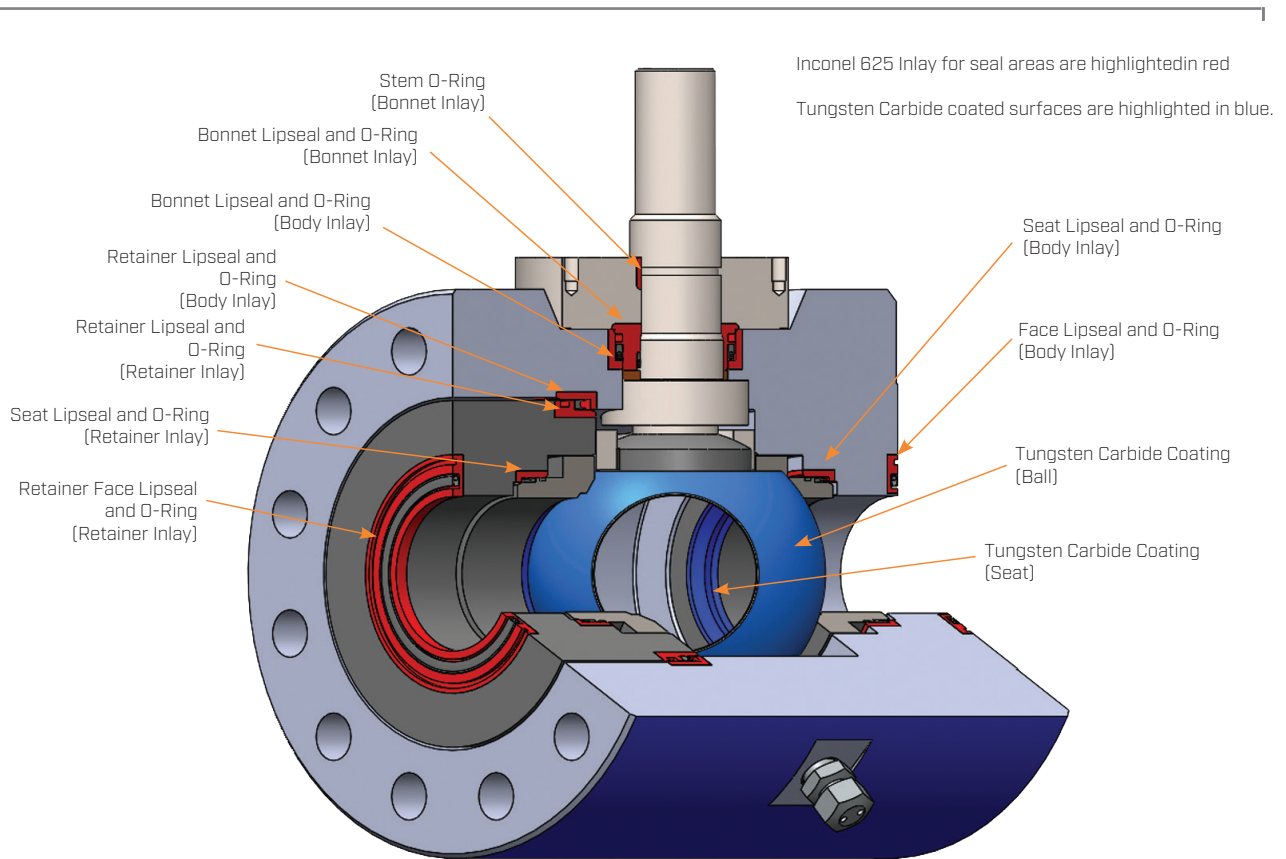
## Typical Critical Service Valve

For valves used in critical applications such as BSDVs (Boarding Shutdown Valves), CORTEC's metal seated valves are designed to function in the most extreme conditions to which they may be exposed. This includes temperature, pressure, flow rates with abrasives and other adverse conditions. In addition, BSDVs are manufactured using materials and sealing elements that are designed to last for the life of the well.

For long term operability, attention is given to all sealing areas, not just the bore sealing mechanism (seat to ball seal). For this reason, CORTEC has developed the "LD" Series Ball Valve. This valve uses specially designed spring energized lipseals in all primary sealing elements.

Special attention has been given to the design of these lipseals to ensure reliable sealing from very low pressures to full rated working pressure. Additionally the materials used in sealing gland areas are selected for long term reliable sealing.

CORTEC's designs include provisions for Inconel 625 overlays, in accordance with API 6A, to greatly improve sealing reliability and longevity in all areas of the valve. Please consult with your CORTEC representative for additional information.



Typical Critical Service Design



No other valve manufacturer strives to exceed their customers' needs and expectations more than CORTEC.

**Critical Service Valve Sales • 225-421-3300**