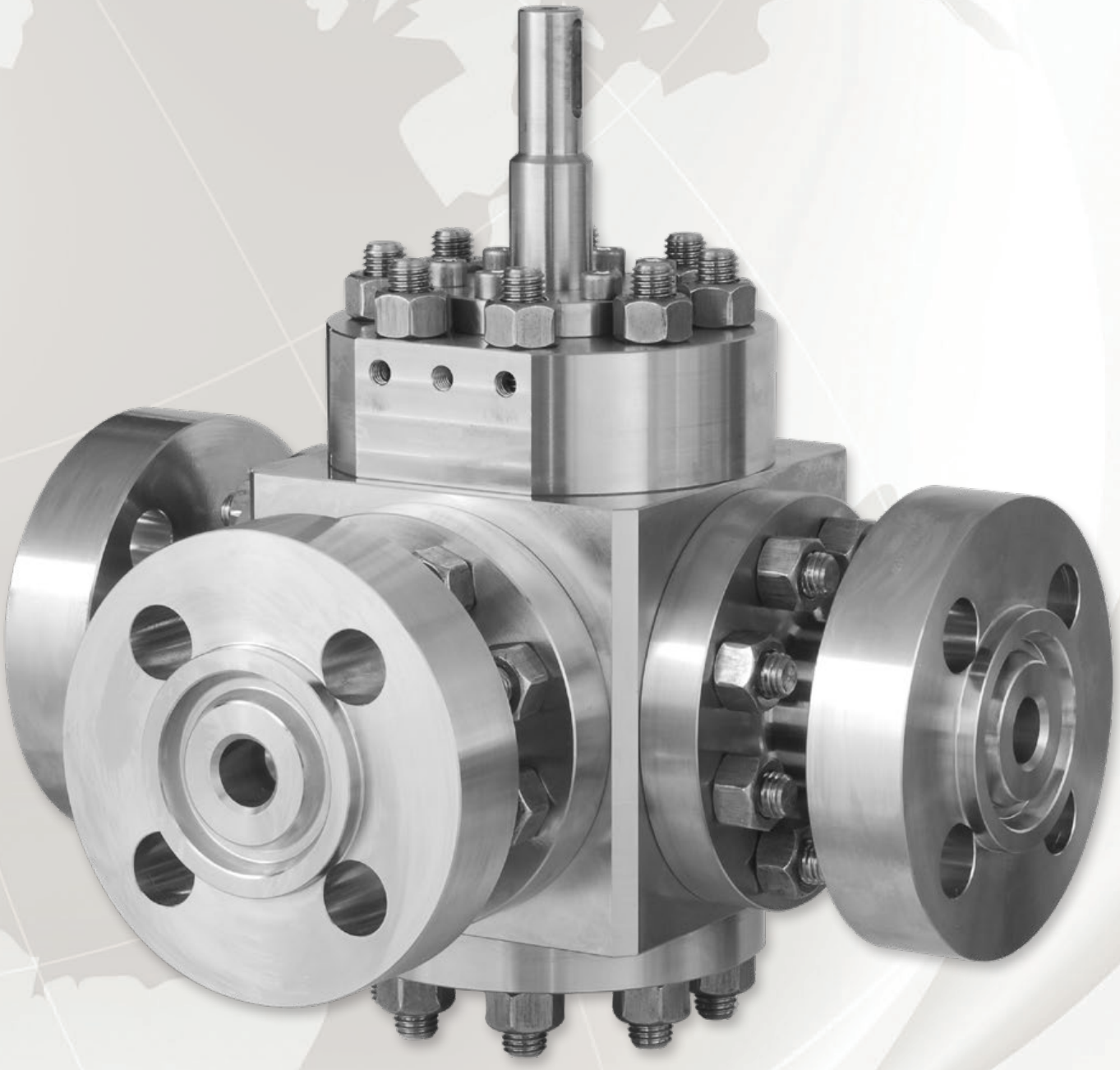
SESTO VALVES
Premium Italian Valves

Italian Manufactured, Italian Quality

Trunnion Multiport

PED CE NACE ISO SIL2 Safety Integrity Level

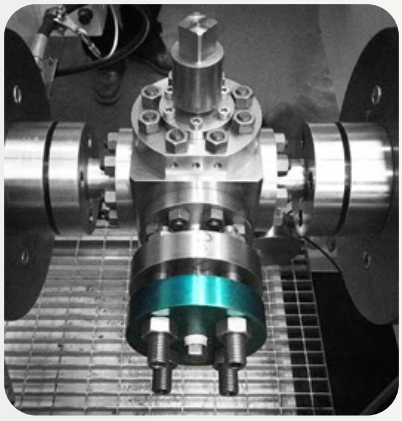


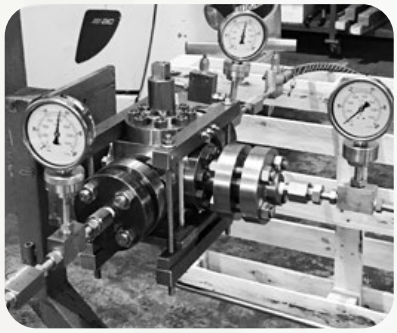
Worldwide Headquarters | Tel: +39.039.902.0888 - Fax: +39.039.902.0889
North American Headquarters | Tel: +1.636.856.8576 Fax: +1.636.856.8930
www.sestovalves.com | sales@sestovalves.com

Introduction

Sesto Valves specializes in custom designed ball valve solutions for the chemical, petrochemical and energy industries. Applications include cryogenics, extreme high temperatures, metal seated applications, as well as specialty double block and bleed emergency shutdown valve solutions. Headquartered in Agrate Brianza (MB) Italy, we are a premium ball valve manufacturer with over 30+ years of engineering experience. Our valves are 100% designed, manufactured, and tested in Italy with complete control of product quality and material traceability. We source only the best materials from local and global partners to ensure quality and competitive pricing.

Our philosophy is to make valves that fit your application, not the other way around. We match materials and trims to maximize performance and reliability, with ready access to special coatings and exotic or super alloys. Our engineers design valves to optimize fit and function, including special face-to-face, multiport or combination valves for cost and space savings. Our quality team inspects every component and runs extensive performance tests for design verification and production phases, and can also include your own customer specified testing. In order to provide a more complete solution, we partner directly with key valve automation industry leaders to provide actuation and automation controls in a comprehensive valve package. Contact Sesto Valves today with your most difficult valve application and we'll give you our best resources and expertise to help you reach your goals.





Europe

World Headquarters

Sesto SG, Italy

Via Socrate, 10
20864 Agrate Brianza (MB)
Italy
Tel: +39.039.902.0888
Fax: +39.039.902.0889

North America

Wentzville, Missouri

114 Resource Drive
Wentzville, MO 63385
United States
Tel: +1.636.856.8576
Fax: +1.636.856.8930

SESTO VALVES
Premium Italian Valves

Features and Benefits

Class 150 to Class 2500
Size Range ½" thru 12" (Class Dependent)
3-Way and 4-Way Configurations (T, L, Double L)
4-Seat Guided Design, Universal Inlet/Outlet
Full and Reduced Bore
Single Body Construction
Fire-Safe Design API 607
Blowout Proof, Low Torque Guided Stem Design
Anti-Static Device and Live-Loaded Packing
Fugitive Emissions ISO 15848
Wide Range of Soft Seat and Metal Seat Options
A105N, LF2, LF3, Forged Body Options
Special Materials Available Upon Request
Custom End Connections and Face-to-Face Lengths Available

Certifications and Compliance

Sesto Valves are designed and manufactured to internationally recognized standards including but not limited to the following:

Fire Testing: API 607, API 6FA, BS 6755 Part II

Testing: API 6A, API 598, API 17D, ISO 5208, BS 6755 Part I

Marking: API 6A, MSS-SP-25, PED

Certifications: API607, SIL, NACE, MR0175, PED, Fugitive Emissions, ISO 15848

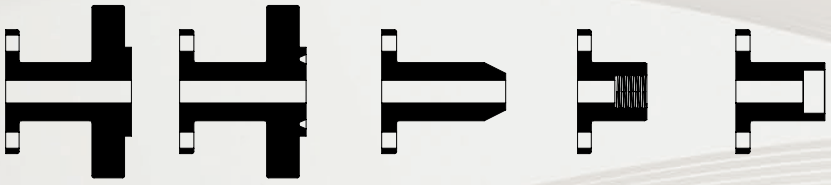
Partial List of Applications

Lease Automatic Custody Transfer units
Aerospace Industry
Gas Production Facilities
Food & Bevarage
Regasification
Chemical Injection Skids
Industrial Chemical Processes
Cargo and Bunkering Systems
Petrochemical Plants

Versatility & Reliability

The Sesto design allows for the use of all types and materials of construction and may be installed in any flow configuration and orientation. Our customizable spring configurations and guided seat design gives the option for a carbon steel body and end enclosures with a duplex or stainless seat module. We have many different metal seated options for a variety of high temperature, corrosive, or abrasive applications. Our experienced team of engineers can design and build the right valve for your exact requirements. Our precision machined innovative design has been tested to the highest standards and may be used in virtually any application with confidence. The Sesto Trunnion Multiport Valve is Sil 2 certified, fire tested, FE tested, and built to last. Reliable repeat performance is our responsibility to you. It is truly a Premium Italian Valve.

End Connections



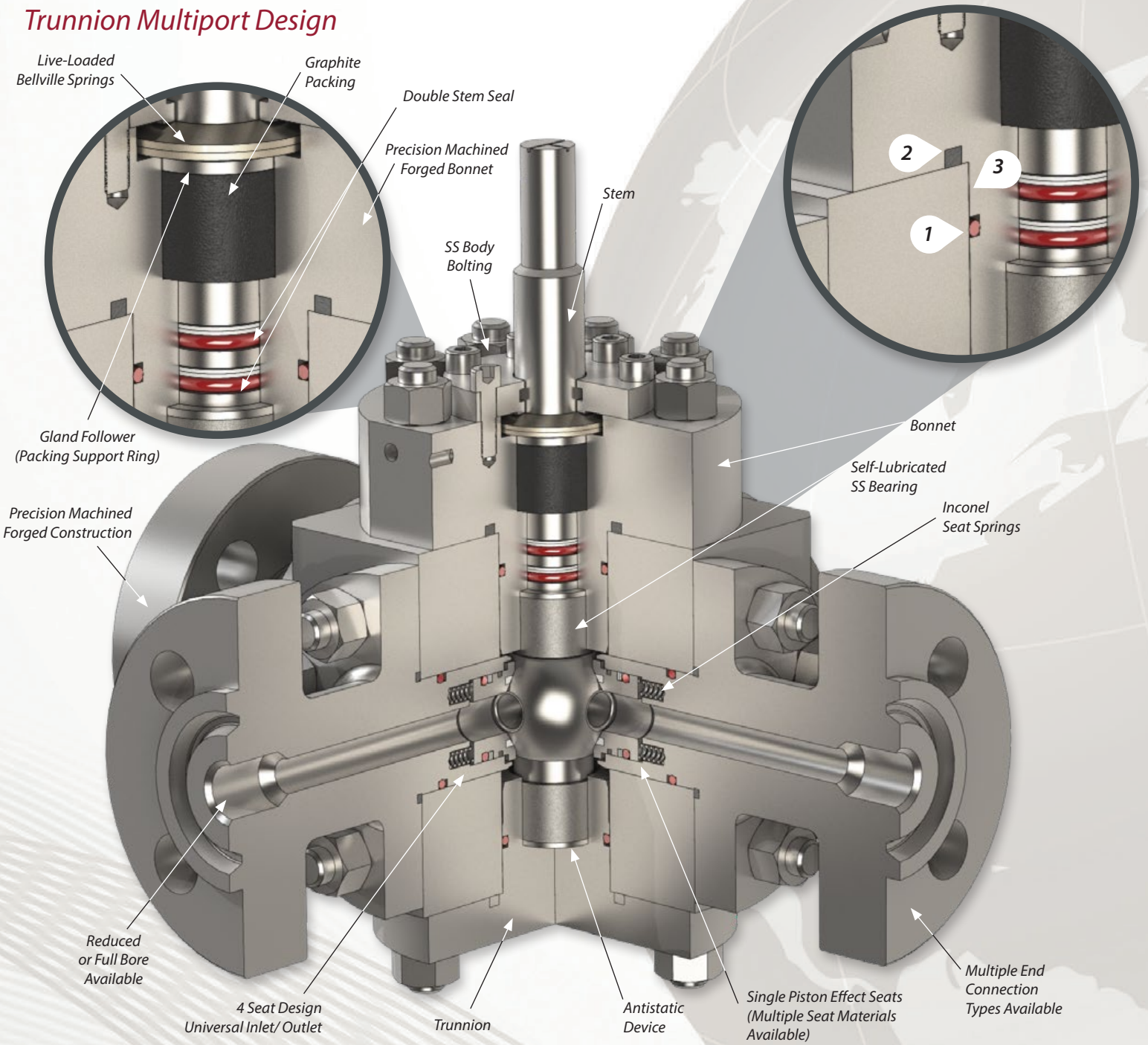
Flanged (RF) | *Ring Type Joint (RTJ)* | *Butt Weld (BW)* | *Threaded (NPT)* | *Socket Weld (SW)*

150# to 2500#
½" thru 12"

Why Sesto?

Sesto Multiport Design	*The Sesto Difference*
Precision Machined Forged Body	The forged body eliminates the possibility of leakage due to casting defects. Precision finish machining keeps tight tolerances to ensure secure assembly for high pressure, critical applications.
4-Seat Design Standard	The 4-Seat design effectively isolates the main body cavity from process pressure, minimizing internal leakage and ensuring proper sealing regardless of flow direction.
Ball/Seat Lapping	Lapping the seats to the ball ensures tight tolerances, improving shut-off sealing capability while lowering torque requirements.
Application Specific Testing Protocol	We build upon proven API 598 testing standards and customize our testing protocols to simulate actual service pressure conditions, guaranteeing valve performance before field installation.
Guided Seat Design	The guided seat design allows for flexibility in materials of construction (end closures vs. seats vs. body), customizable spring configurations for specific pressure relief set points, and ease of maintenance. This design also ensures better concentricity between sealing components to improve sealing performance.

Trunnion Multiport Design



Application Specific Testing Protocol

To test the efficacy of multiport ball valve design and performance, Sesto Valves has developed detailed testing protocols that go above and beyond current industry practice. Standard production tests do not always accurately simulate the conditions for the varying scenarios of real world multiport valve applications. Additionally, there currently are no industry standards that govern the construction and testing of multiport valves. As such, portions of other standards need to be appropriately applied to these valves to assure valve integrity and performance in actual conditions. With the API 598 standard as the foundation, Sesto Valves builds upon this to customize multiport testing protocol according to an understanding of specific application requirements. Sesto Valves believes that using proven testing standards and applying them in the context of actual service conditions is the best way to accurately test multiport valves.

SESTO VALVES
Premium Italian Valves

Triple Body Seal

(Providing Three Levels of Defense)

1. Primary Body Seal (RPTFE)

Soft seal for reliable sealing at all pressures

2. Secondary Body Seal (Graphite)

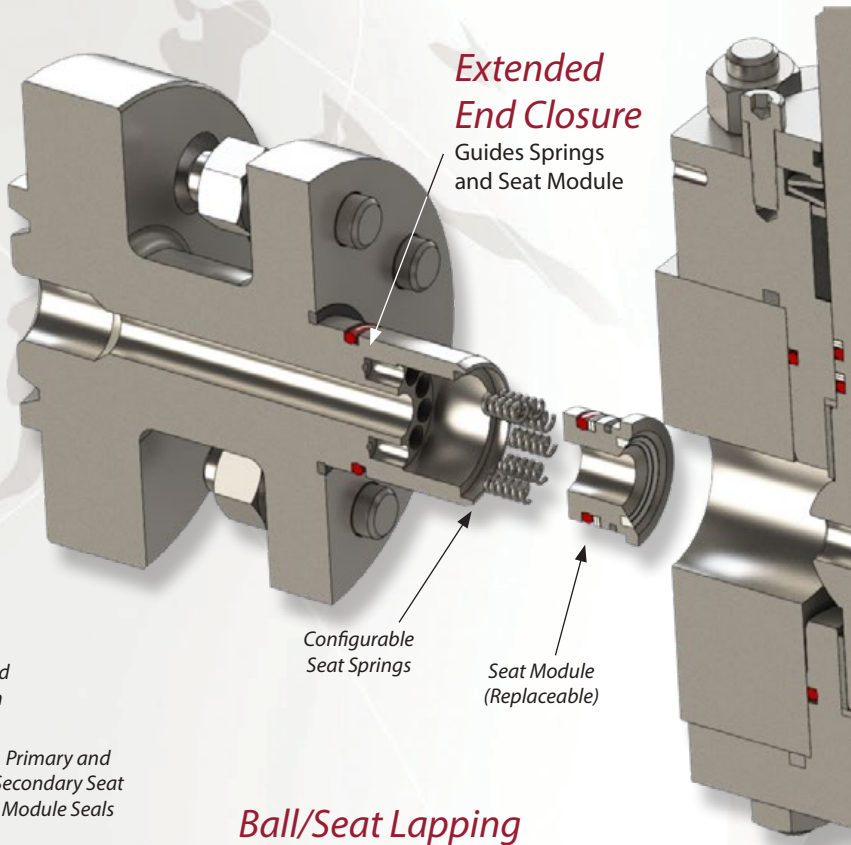
Provides a fire safe secondary seal.

3. Backup Metal-to-Metal Interface

Forms a labyrinth seal with a torturous flow path.

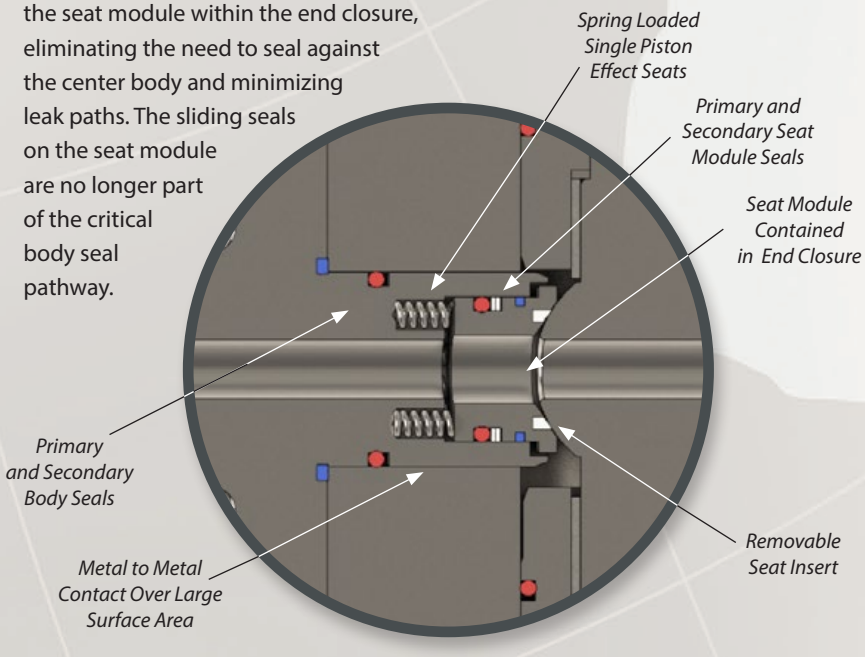
Extended End Closure

Guides Springs and Seat Module



Guided Seat Design

Sesto Valves Guided Seat Design surrounds the seat module within the end closure, eliminating the need to seal against the center body and minimizing leak paths. The sliding seals on the seat module are no longer part of the critical body seal pathway.

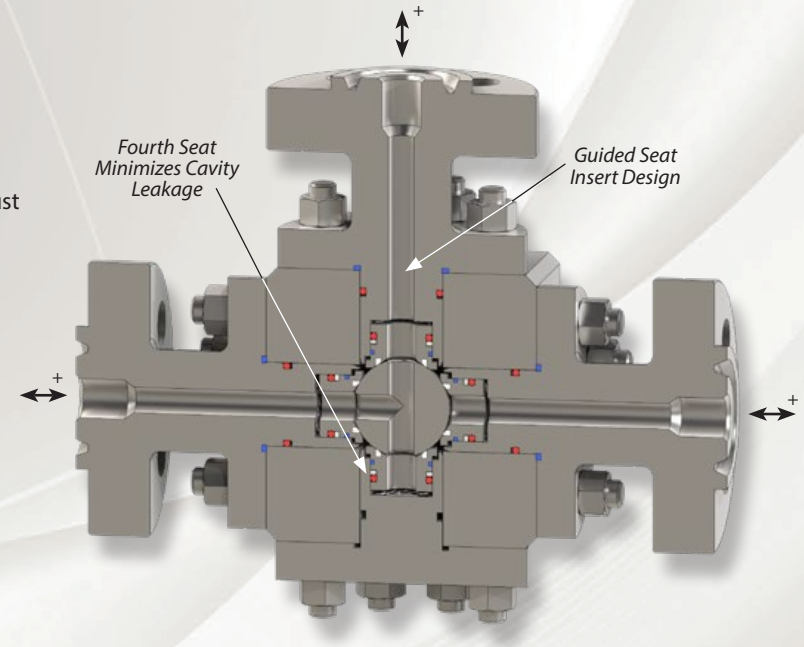


Ball/Seat Lapping

Lapped ball and seat sets are utilized when materials and sealing requirements dictate. This precise manufacturing process ensures the lowest operating torque and the tightest possible sealing capability of the ball and seats, while at the same time providing for an exceptionally long service life for the intended application. Lapping is a surface finishing process where extremely fine polishing compounds are used as the lapping agent to achieve remarkably close mating surfaces.

4-Seat Design

Multiport ball valve applications can present unique challenges for reliable valve sealing. With three or more ports, the valve must be able to seal in at least two different positions. To successfully achieve this requires either a designated flow direction or a seat design that allows for sealing from multiple directions, eve in trunnion designs with self-relieving seats. This can be difficult - particularly for T-ported balls or floating balls – because any port could potentially be an inlet and the high-pressure source could be on either side of the ball. To realize this design, Sesto Valves has engineered seat solutions with floating, spring-energized and pressure-energized characteristics customized to each application. Valve sealing mechanics and materials are optimized to allow for reliable positive shutoff in varying conditions, regardless of flow direction.



SESTO VALVES

Premium Italian Valves

Worldwide Headquarters
Via Socrate, 10, 20864 Agrate Brianza (MB) Italy
Tel: +39.039.902.0888 | Fax: +39.039.902.0889

North American Headquarters
114 Resource Drive Wentzville, MO 63385 USA
Tel: +1.636.856.8576 Fax: +1.636.856.8930

Web: www.sestovalves.com | Email: sales@sestovalves.com

Rev: Jan. 26, 2022