VALVTECHNOLOGIES®

Engineered Products for the Upstream Oil & Gas Industry

Critical Service Solutions

ValvTechnologies' mission is to provide zero-leakage isolation valves and process solutions for severe service applications.

Solutions.

As a global leader in the design and manufacturing of severe service valves, ValvTechnologies has established a worldwide reputation for superior quality and dependability with customers in every industry.

From standard applications to the most sophisticated, ValvTechnologies is committed to providing solutions for customers to manage their processes safely and efficiently. Our approach at ValvTechnologies is based on customer satisfaction, safety, people, process and performance. By equipping highly trained people with the latest technology, ValvTechnologies has created an atmosphere where quality and reliability are built into its products from start to finish. All of ValvTechnologies' valves are designed with customers' requirements in mind and offer proven reliability, superior engineered performance and unique safety features. By focusing on these principles, ValvTechnologies has become an integral part of its customers' asset management strategy.

We work directly with customers to develop solutions that meet their unique process requirements and specialty applications.

Applications.

ValvTechnologies' valves are built to withstand the most severe applications. High-temperature, high-pressure, high-cycling, abrasive, corrosive and caustic media have all been considered in the design of our product line.

Facilities

- Oil and gas production
- Gathering systems, manifolds and pipelines
- Produced water processing
- Oil processing
- Gas processing
- Molecular sieve dehydration
- Scraper launchers and receivers
- Compressor stations
- Underground oil and gas storage
- Steam generation
- Steam injection
- SAGD

LNG

- Turbine steam systems
- Molecular sieve switching
- Vents and drains
- Terminal inlet HIPPS

Subsea

- Flow lines
- Emergency shutdown
- Subsea isolation

ValvTechnologies' trunnion valves for subsea applications are designed for MOV coupling. A complete panel option is available. The trunnion valve is suitable for depths of 12,000' in subsea applications, available in sizes 2 – 36", API pressures 5000,10000, 15000 and in a variety of material options, including metal and PEEK™ seats. The ValvTechnologies' trunnion design is an effective solution for subsea applications. The one-piece body design handles solids and requires minimum maintenance. Additionally, an option for hyperbaric testing by an independent lab offering a 12,000' certificate is available.

Enhanced oil recovery

- Molecular sieve switching
- Steam injection well isolation
- Steam electronic relief
- Boiler isolation
- Produced water isolation
- Sand filter isolation

Primary oil and gas production

- Well shut-in
- Emergency shut down
- Switching valves on test and production header
- Flow line isolation
- Blowdown and venting
- Scraper trap isolation

HIPPS protection

- Flow lines
- Receiving terminal
- LNG re-gasification outlet
- Subsea pipelines

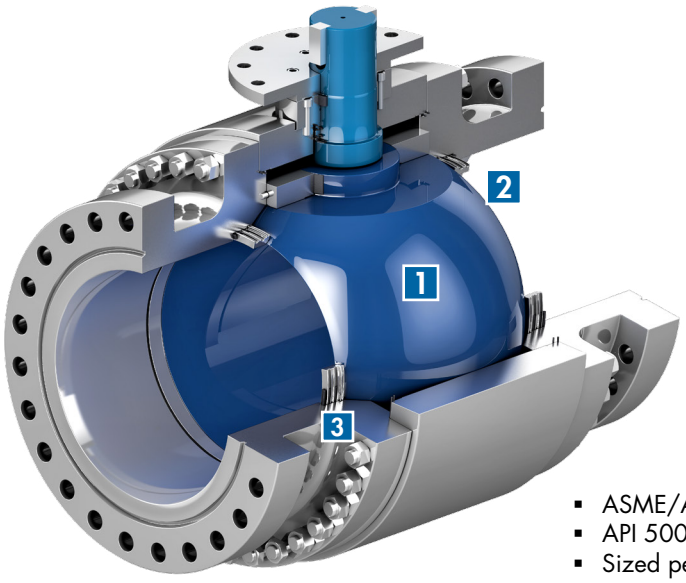
ValvTechnologies provides field proven solutions for severe service applications.

TrunTech®Trunnion Metal Seated Ball Valves.

The next generation in trunnion technology™

The advantages of the trunnion-mounted ball valve include: low operating torque, very high flow rates (Cv), protected sealing surfaces when in the open and closed position, and the ability to operate in the presence of solids and other contamination. The TrunTech® design from ValvTechnologies withstands severe thermal swings, meets stringent emission requirements and provide long life in abrasive and erosive conditions.

The TrunTech® trunnion design provides a severe service solution for tough, high cycling applications.



- ASME/ANSI Class 150 - 2500
- API 5000 - 15000
- Sized per API 6A and 6D

1 Carbide Sealing Surfaces

The sealing surfaces are overlaid with tungsten or chromium carbide using the ValvTechnologies' exclusive HVOF RiTech® coating process. These surfaces have a hardness of 68 - 72 Rc to allow long periods of operation in the most severe conditions.

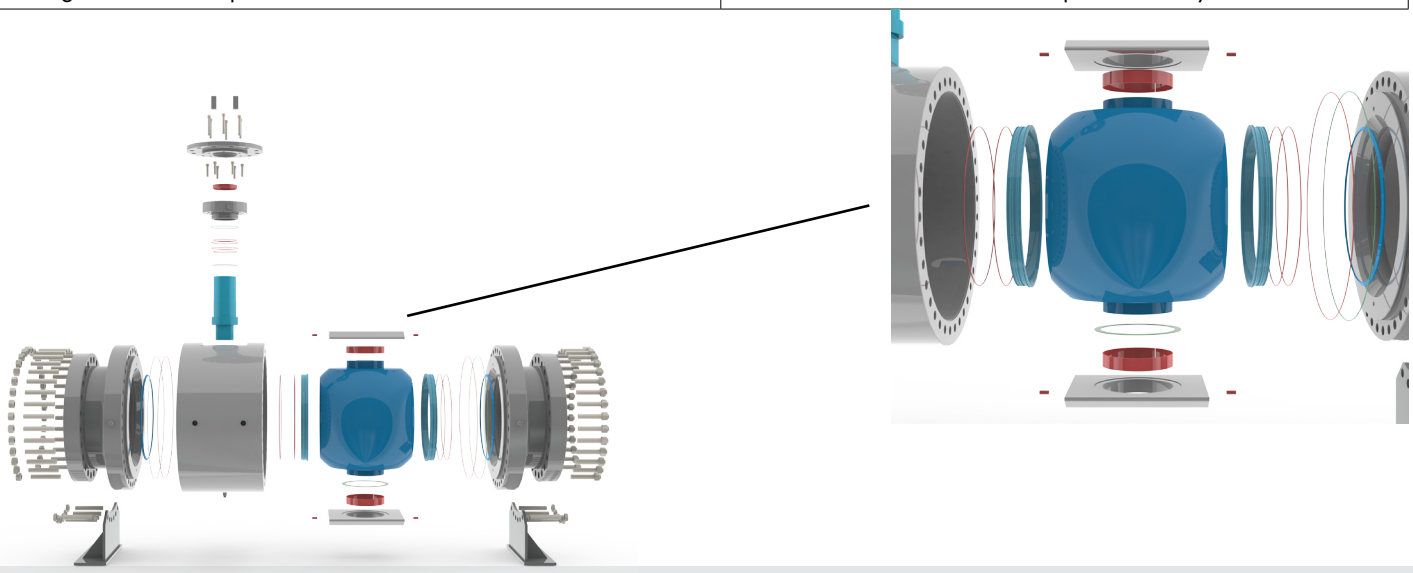
2 High Integrity Seat Surfaces

To prevent leaks around the seats, ValvTechnologies has developed an innovative double seal design for high temperature operation and/or high cycling applications. In low temperature, high cycling service, a secondary elastomer seal is installed on the seat perimeter.

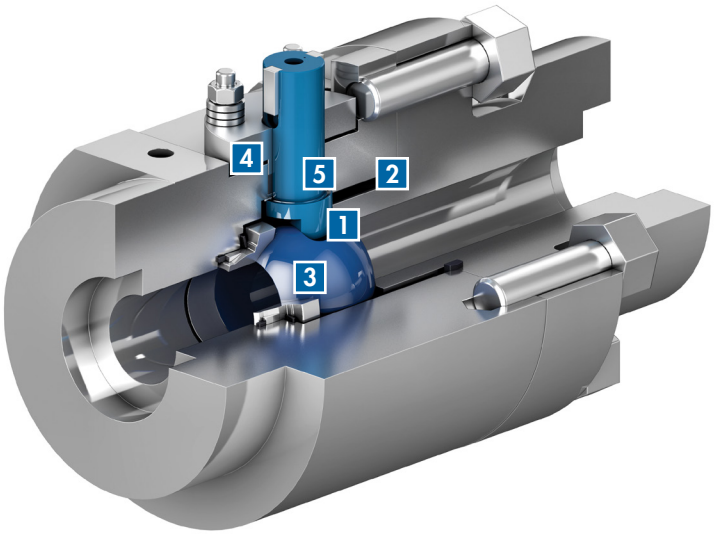
3 Solids Resistance

In addition to the HVOF RiTech® carbide coatings which will allow the valve to function in highly abrasive applications, the individual valve parts have additional seals to prevent interference from solids in the system. This provides for outstanding service in severe-service isolation applications with high particle content from sand, elemental sulfur, hydrate, perforation shrapnel, molecular sieve catalyst and pipe corrosion products.

TrunTech® Series Key Performance Features and Benefits	
Features	**Benefits**
Guaranteed tight shut-off	Enhanced process safety, repeatable sealing
True metal-to-metal sealing without using secondary elastomeric seals	Inherent fire safety
Guaranteed tight shut-off	Enhanced process safety and repeatable sealing allows operation under process excursions
True metal-to-metal sealing without using secondary elastomeric seals	Inherent fire safety
Solid-proofed by design	Process reliability
Exclusive HVOF RiTech® coating technology	Extended life
Grafoil® fire-safe seals	Reduced maintenance costs
Double block and bleed capability	Enhanced process safety
High cycling capability	Process reliability
Bi-directional sealing by design	Enhanced process safety, lower maintenance, less downtime
Single-piece anti blow-out stem design	Enhanced process safety
Impervious to high thermal cycling	Enhanced process safety
Certified to use in SIL-3 loop in single-valve and SIL-4 loop in two-valve with minimum MTBF 1,280 years	Enhanced process safety
Fire safe certification: API-607 / API 6FA	Enhanced process safety
Stem fugitive emissions per ISO 15848-1 Class B	Lower emissions and enhanced process safety



V Series Metal Seated Ball Valves.
The flagship of the ValvTechnologies' product line



The critical service needs drive the design features of ValvTechnologies' valves.

1 Integral metal seat.

With our patented HVOF RiTech® coating technology, the integral seat in ValvTechnologies' valves is resistant to the attack of abrasive magnetite and ferrous oxides that may be seen in the steam flow.

2 Body seal ring.

ValvTechnologies employs a field proven seal ring technology to ensure sealing under all operating conditions, up to 1400°F. The body seal ring is loaded at a pressure higher than 20,000 psi. In addition, valves sized 3" and above contain a secondary Grafoil® seal to further guarantee reliability.

3 Patented coating process.

The sealing surfaces are overlaid with tungsten or chromium carbide using our HVOF RiTech® coating process. These surfaces have a hardness of 68 - 72 Rc to provide uninterrupted operation in the most severe conditions.

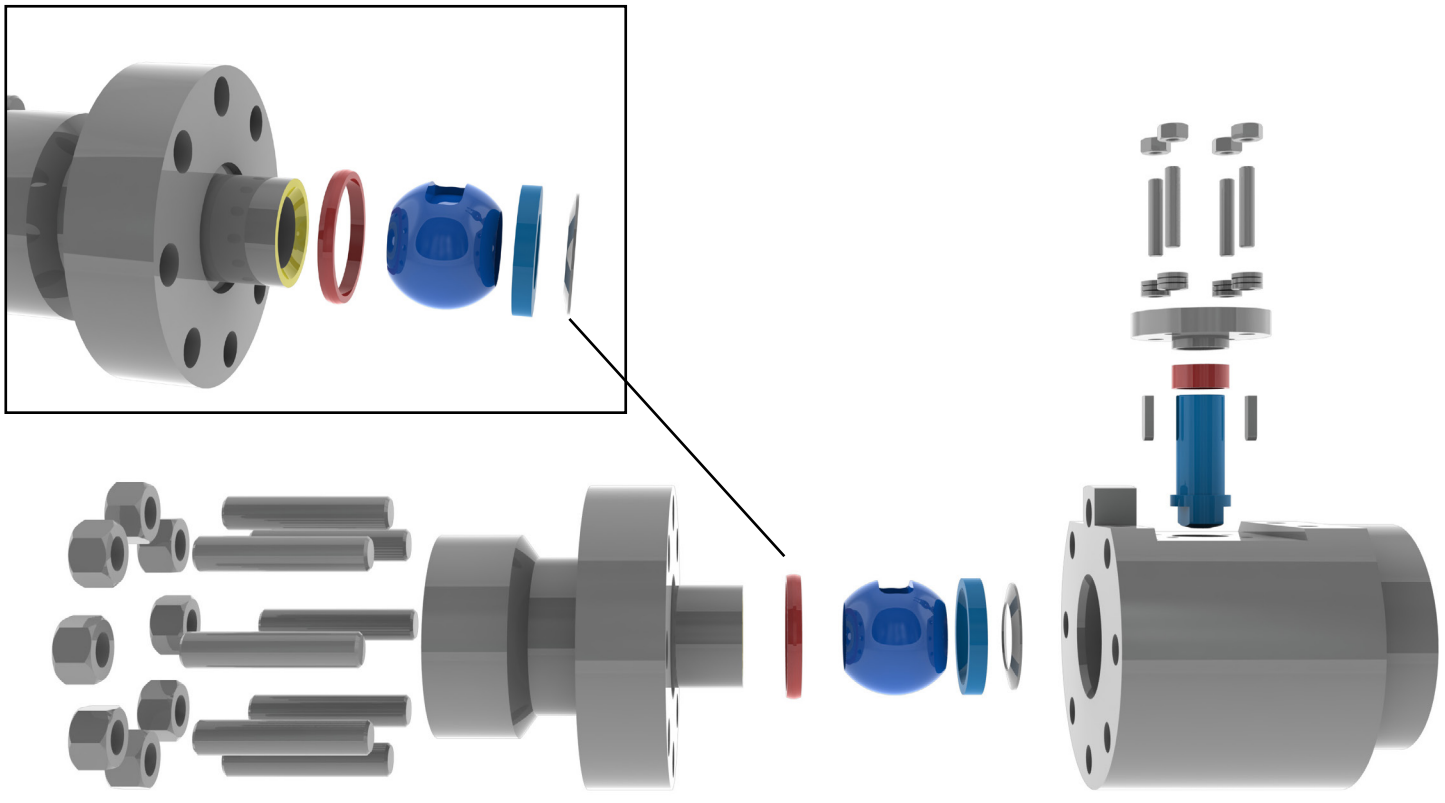
4 Live-loaded gland area.

The V Series' sealing design features a four stud, live-loaded assembly designed for heavy industrial applications. The sealing material is high purity Grafoil® surrounded by stainless steel wire mesh anti-extrusion rings. The six Belleville® springs (per stud) provide constant load pressure through extreme thermal shocks and prevent wear leaks in high-cycle service.

5 Blow-out proof stem.

ValvTechnologies' design utilizes a one-piece, hard-coated, blow-out proof stem that is inserted through the inside of the body cavity eliminating the possibility of blow-out through the gland area. There are no pins, collars or other devices used to retain the stem in the valve body.

V Series Key Performance Features and Benefits	
Features	**Benefits**
Guaranteed tight shut-off	Enhanced process safety
Quarter turn operation - readily automated	Increased safety, ease of operation, reduced space requirements
Low pressure drop - high Cv	Process efficiency
Custom engineered	Process optimization
Dimensions to ANSI B16.10	Interchangeable with equivalent valves
Low emission packing and seals	Reduced emissions
Single piece anti-blow-out stem design	Enhanced process safety
Resistant to solids	Reduced maintenance costs, minimum downtime
Certified to use in SIL-3 and SIL-4 loops	Enhanced process safety
Live-loaded gland system (four stud design)	Reduced emissions
Stem fugitive emissions per ISO 15848-1 Class B	Reduced emissions, enhanced process safety
Fire safe certification: API-607	Enhanced process safety



Valves for Upstream Oil and Gas.

ValvTechnologies, Inc. is a global leader in the design and manufacturing of flow control devices. Founded in 1987 and headquartered in Houston, Texas, ValvTechnologies remains focused on helping customers meet their daily production and process challenges safely and efficiently.

Having built a global reputation for superior quality and dependability across multiple industries, ValvTechnologies' products are designed to exceed both the standard and most sophisticated, severe-service processes application requirements. ValvTechnologies meets the demands for total flow control solutions, whether one valve at a time, or system-wide.

Bringing together the best people and the latest in technological design and manufacturing processes, ValvTechnologies has created an atmosphere where quality and dependability are built into every product, start to finish.

Worldwide Office Locations

Headquarters & Manufacturing
ValvTechnologies, Inc.
5904 Bingle Road
Houston, Texas 77092 U.S.A.
Telephone +1 713 860 0400
Fax +1 713 860 0499
info@valv.com.

To locate a distributor or satellite office near you, visit us online at: **www.valv.com.**

To contact sales anywhere in the world, email **sales@valv.com**.

Australia
australia@valv.com

Brazil
brazil@valv.com

Canada
canada@valv.com

China
china@valv.com

Colombia
colombia@valv.com

Eastern Europe
poland@valv.com

India
india@valv.com

Japan
japan@valv.com

Korea
korea@valv.com

Malaysia
malaysia@valv.com

Middle East
middle.east@valv.com

Peru
peru@valv.com

Singapore
singapore@valv.com

Spain
spain@valv.com

United Kingdom
europe@valv.com