Process Automation

IMI PBM

Valve Solutions

- Chemical & Petrochemical
- Cryogenic & LNG
- Food & Beverage
- Marine & Offshore
- Mining
- Oil & Gas
- Paint & Resin
- Personal Care
- Pharmaceutical, Biotech & Life Sciences
- Power
- Pulp & Paper
- Refining
- Steel

Breakthrough engineering for a better world

IMI PBM has IDEAL solutions to your valve application needs

Our valves are designed to meet precise application needs through creative engineering and quality manufacturing. We offer customizable options across our product lines to address unique customer specifications. Many of our valves feature proprietary Adjust-O-Seal® Technology or True- Bore® design, delivering fewer process interruptions, extended service life, and enhanced product yields.

Fewer Process Interruptions

Our valves provide bidirectional upstream sealing. Seats are compressed tightly against the ball in the valve body, bolts can be tightened to compensate for normal seat wear without having to remove the valve or interrupt the process.

Improve Product Yields

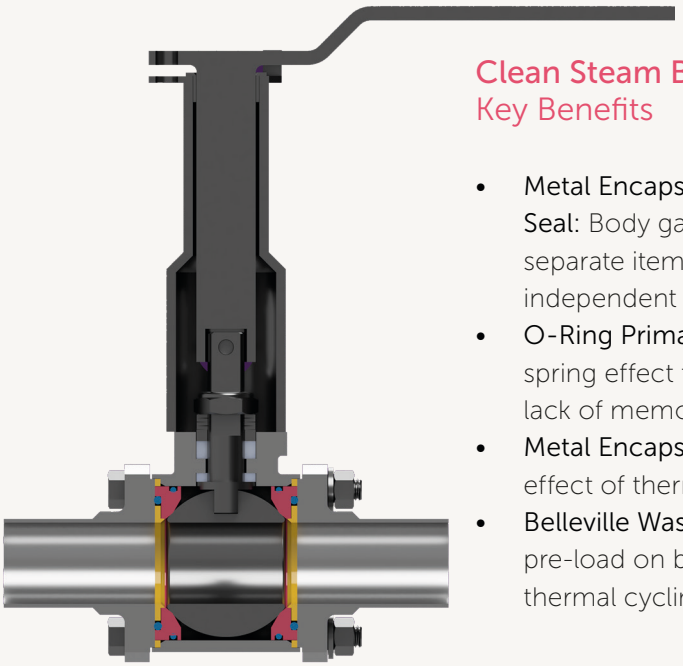
We offer optional True-Bore® for pipe valves with port diameter equal to the pipe schedule ID. This equates to a lot more flow rate compared to traditional port diameters.

Certifications

- ISO 9001
- SIL 3 Capable
- API 622 Low E Testing
- ABS Approval
- CRN Registrations
- PED 2014/68/EU

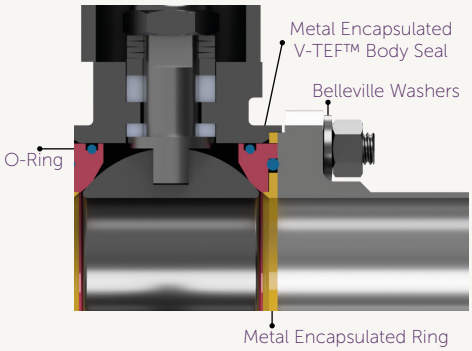
Find out more
pbmvalve.com

Why Choose IMI PBM?



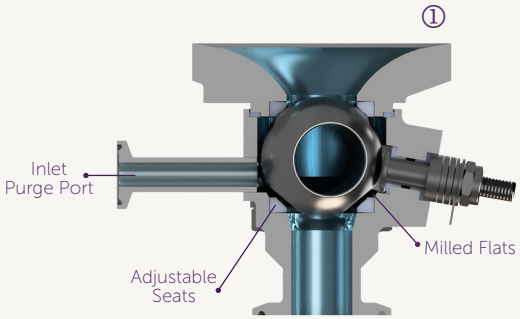
Clean Steam Ball Valves
Key Benefits

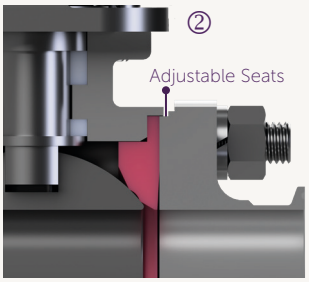
- **Metal Encapsulated V-TEF™ Body Seal:** Body gasket and seat are two separate items; lets the seat move independent of the gasket
- **O-Ring Primary Seal:** Provides spring effect to combat teflon's lack of memory property
- **Metal Encapsulated Ring:** Minimize effect of thermal cycling
- **Belleville Washers:** Help maintain pre-load on body bolts during thermal cycling

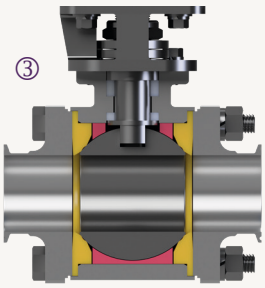


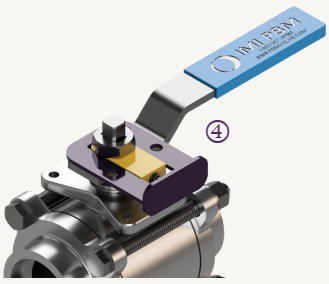
Standard Design Features

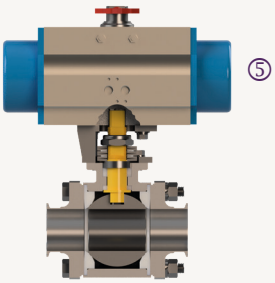
① Clean-In-Place / Steam-In-Place
② Adjust-O-Seal®
③ Cavity Fillers
④ Locking Lever Handle
⑤ Direct Mount Actuation
⑥ True-Bore®
⑦ Cylindrical Radius Pad

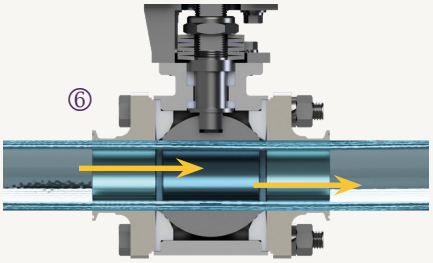












Industrial Valves

Built on Trust. Driven by Service.

Whether the application is in a chemical plant, paper mill, food plant, manufacturing environment, or other industrial setting, IMI PBM's line of Industrial Valves can handle all types of rigorous and general purpose applications. We also offer custom configurations.

Materials

- 316/316L Stainless Steel
- Carbon Steel
- Bronze
- Hastelloy®
- AL6XN®
- Others

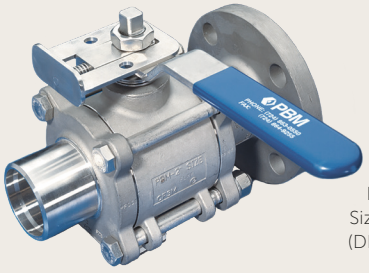
End Connections

- Threaded
- Extended Butt Weld
- Socket Weld
- Flanged
- Compression
- Others

Options

- Actuation
- Fire Rated
- CIP/SIP
- Cavity Fillers
- Locking Handle
- Steam Seats
- Polishing & Electropolishing
- Special Pads (Flush Tank)
- Multiple Flow Patterns (Diverter & Multi-Port)
- V-Ball for Flow Control
- Variety of Soft and Metal Seats

Diverter Port
Ball Valves
Sizes ½" to 6"
(DN15 - DN150)



2-Way
Ball Valves
Sizes ¼" to 10"
(DN8 - DN250)

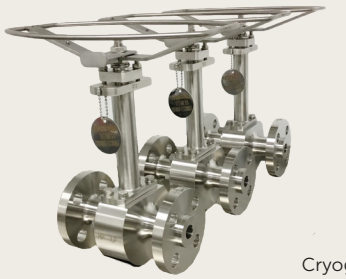
Angle Stem Flush
Tank Ball Valves
Sizes 1" to 6"
(DN25 - DN150)

Multi-Port
Ball Valves
Sizes 1" to 6"
(DN25 - DN150)

ANSI Ball Valves
Class 150 & 300
Sizes ½" to 10"
(DN15 - DN250)

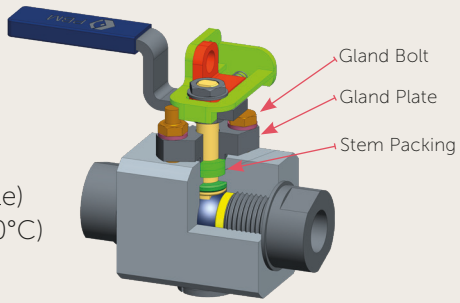
PSV
Switching Valves
Sizes ½" to 6"
(DN15 - DN150)

Tank Bottom
Ball Valves
Sizes 1" to 6"
(DN25 - DN150)



Cryogenic
Valves
Sizes ½" to 4"
(DN15 - DN100)

Industrial Valve Solutions



Low-E Packing Offers Solutions to Emission Reduction

- Average stem packing leakage ≤ 10 ppmv or duration off the test (100 ppm allowable)
- Stem packing is suitable for service at temperatures off -400° to 850°F (-240° to 450°C)
- API 607 Fire Test Qualified
- ASME Class 1500 Weld Design Standard

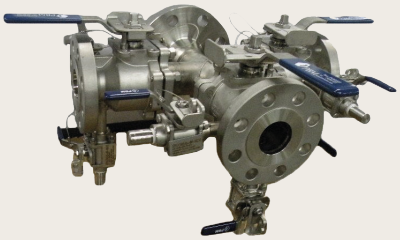
Double Block & Bleed Valves

IMI PBM Double Block & Bleed Valves are custom engineered from standard components in a variety of alloys and pressure classifications to meet customer specifications. IMI PBM valves are trusted by major oil refineries where safety and reliability are critical. Valves are designed to ASME B16.34. Optional Low E to API 622.

Sizes ¼" to 10"
(DN8 - DN250)

Fabflex® Manifold Assemblies

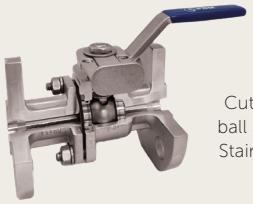
Fabflex Manifolds are space-saving pipe and valve configurations designed to accommodate special applications. These valves can be shipped in lengths up to 18 ft (5.49 m) with multiple manual and automated valves pre-installed. 100% tested before shipment ensures proper performance.



Sizes ¼" to 6"
(DN8 - DN150)

Metal Seated Valve Applications

Metal Seated Valve Applications include steam service, high temperature/ pressure service, abrasion resistance and modulating service. The seal (shown below) is coated and lapped to match ball, creating a positive seal.



Cutaway view of metal ball and seats in an ANSI Stainless Steel Ball Valve

Instrument Valves

Instrument Valves are used for isolation for pressure gauges, orifice plates, flush rings and various measurement instruments. Features include quarter turn operation; optional extended handle; bleed/gauge ports; Low-E Packing to API 622; and SIL-3 capable per IEC 61508.

Sizes ½" to ¾"
(DN15 - DN20)
with 0.41 bore

Pressure Class
Sizes: ¼" to ¾"
(DN8 - DN20)
Up to ANSI Class 2500
(Class 1500 Standard)

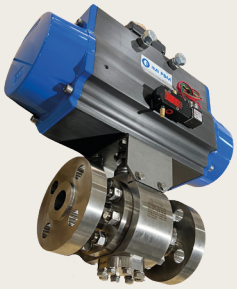
Transmitter Isolation Valves

Obtain accurate transmitter readings and replace leaky knife gate valves with our Transmitter Isolation Valve. Ideal for Pulp & Paper and Chemical applications, these 2-Way Ball Valves feature minimal dead space and positive shut-off. Calibration Port, CIP Port, 150# Flange, and Locking Handle.

Sizes
2" with 1" Port
3" with 2½" Port
3" with 1" Port
Others

Bolted Instrument Valve

Our Bolted Instrument Valve design allows end connection design and fabrication flexibility. It is available in a wide range of materials for a variety of temperature and pressure classes to meet your most stringent process applications. Features include full/reduced port; braided graphite packing; API 607 Fire Test Qualified; API 622 Low E-Stem Packing Standard; bleed or guage ports; and gear operator recommended for 1½" and above.

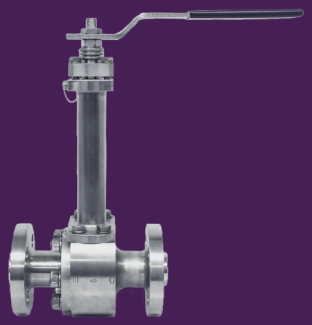


Sizes ½" to 2"
(DN15 - DN50)
Class 600# - 900# - 1500#

Cryogenic Valves

IMI PBM Cryogenic Valves have a unique design that provides superior performance through cooling and heating cycles. Our valves have been shown to meet leakage criteria per MSS SP-134.

Cryogenic Valves are optimally oriented with the stem 90° from the horizontal plane. Our Cryogenic Valves are capable of operating with the stem oriented as low as 45° above the horizontal plane.

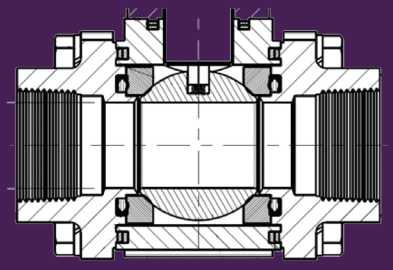


Key Benefits

- 2-Way/3-Way Manual & Automated Valves
- Sizes ½" to 6" (DN15 - DN150)
- Fire Test Qualified to API 607 (ISO 10497:2010)
- Temperatures from 400°F (205°C) down to -423°F (-253°C)

What Makes It Work?

An extended bonnet with an upper set of live loaded stem packings. As metal shrinks it keeps pressure on seals as temperature goes through cooling and heating cycles. A vented ball allows explosive gas expansion to vent upstream.



Sanitary Valves

Clean. Simple. Reliable. Versatile.

Our Igenix® line of Sanitary Valves are ideally suited for pure process applications where dead space within the valve needs to be minimized. Our valves exhibit high performance in Pharma and Biotech, Life Sciences, Food and Beverage, Consumer and many other sanitary and clean stem applications and validation systems.

Materials

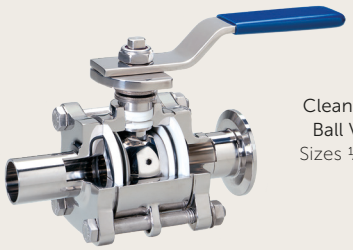
- 316L Stainless Steel Forged and Low Ferrite Castings
- Hastelloy®
- AL6XN®
- Others

End Connections

- Hygienic Clamp
- Extended Butt Weld Tube
- Socket Weld
- Compression
- Others

Options

- Actuation
- Fire Rated
- Compression Ends
- CIP/SIP
- Cavity Fillers
- Locking Handle
- Polishing & Electropolishing
- Special Pads (Flush Tank)
- Multiple Flow Patterns (Diverter & Multi-Port)

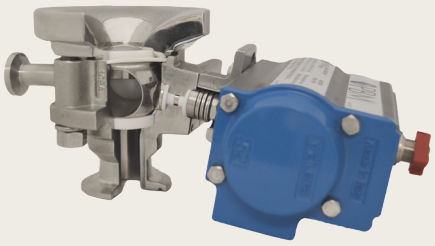


Clean Steam Ball Valves
Sizes ¼" to 6"

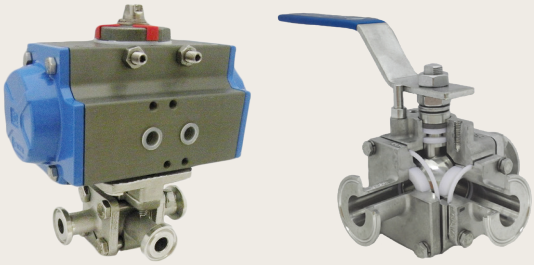
Igenix® 2-Way Ball Valves
Sizes ¼" to 6"

Process Break Valve
Sizes ½" to 2"
(DN15 - DN50)

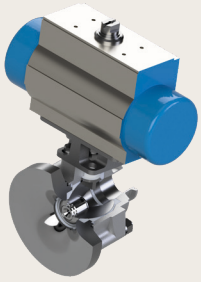
IMI PBM
Igenix®
CLEAN
Valve Solutions
IMI



Angle Stem Flush Tank Ball Valves
Sizes ½" to 6"
(DN15 - DN150)

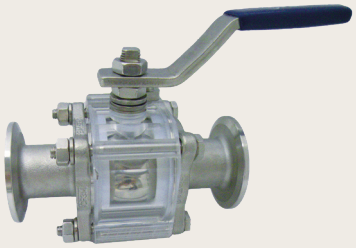


Diverter Port & Multi-Port Ball Valves
Sizes ½" to 8"
(DN15 - DN200)

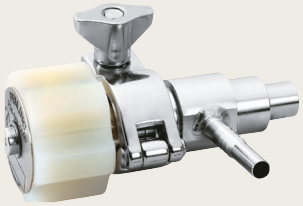


Spray Ball Valves
Sizes ½" to 6"
(DN15 - DN150)

2-Way Compression
End Valves
Sizes ¼" to 1"
(DN15 - DN25)



Self-Cleaning
Ball Valves
Sizes ½" to 6"
(DN15 - DN150)



Rising Stem
Sampling Valves
Size ¼"
Bore Diameter

Cryogenic
Valves
Sizes ½" to 6"
(DN15 - DN150)

Igenix® Radial Diaphragm Tank Outlet Valves

Our seperate and unique weld pad is designed and machined for complete proven pad drainability. Detached from the body by a standard hygenic clamp, these weld pads can ship early for faster/easier installation. Our sloped internal body and "fold under" diaphragm faciliates complete drainage. The outlet can be orientated in any position, versus a fixed outlet only option.

Our valves have mulitple engineered configurations and are built with our tested and proven design - offering customers clean, relaible, simple and versatile solutions.

Sizes ½" to 4"
(DN15 - DN100)

Igenix® Pinch Valves

Unlike traditional valves, pinch valves feature a straight-through flow, very little pressure drop over the valve, and full shutoff off media in the tube, making it the most practical and efficient solution for various ON/OFF flow control applications. The IMI PBM Pinch Valve Series offers a compact, lightweight design; easy cleaning; elimination of media contamination; fast and simple tube replacement; reliability; maximum productivity and low maintenance.

Z-Ball Zero Dead Leg Valve Design

These valves replace traditional diaphragm valves coupled with a ball valve design used as a sterile barrier for purified water system loops and clean gas utilities. For clean steam header sterilization, this valve is opened to introduce clean steam into the process loop In a closed position, to prevent condensate from accumulating, the purge port in the valve body removes condensate through trap to drain. This allows us to offer the ability to provide an ultra-sanitary process isolation valve, which seals on both upstream and downstream seats resulting in significant savings compared to traditional methods of using a combination diaphragm valve coupled with a ball valve.

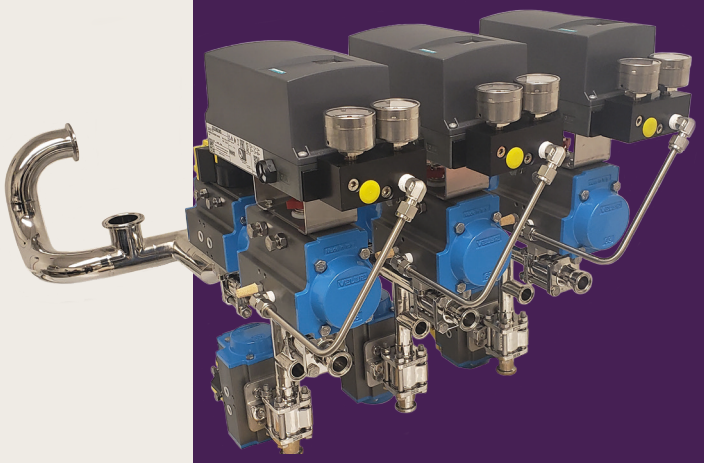
Sizes ½" to 4"
(DN15 - DN100)

Sanitary Valve Solutions

Springless Check Valves

Our valves are patented. Available in horizontal or vertical these valves come with a hygienic clamp or extended butt weld for tube.

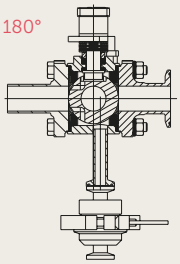
Sizes ½" to 4"
(DN15 - DN100)



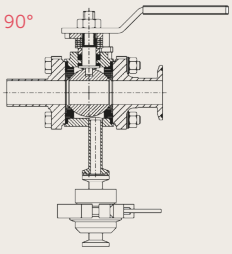
2-Way Steam Trap Valves

These valves use body purge ports and ball purge holes to direct flow to the trap while shutting off flow downstream. These valves permit sampling of steam for purity and safely isolate trap for ease of maintenance. Low Ferrite Cast or Forged options. True-Bore® standard. Vertical or horizontal installation available.

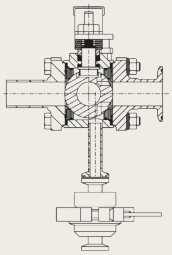
Sizes ½" to 6"
(DN15 - DN150)



Trap Position
Condensate draining through trap



Open Position
Clean Steam to Point of Use



Service Position
Trap can be removed for service

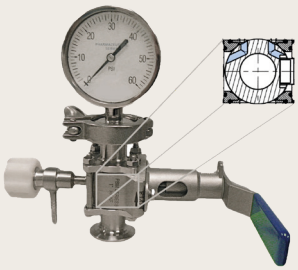
Fabflex® Manifold Assemblies

These assemblies are space-saving pipe and valve configurations designed to accommodate special sanitary applications. Shipped in lengths up to 18ft (5.49m) with multiple manual and automated valves pre-installed. 100% tested before shipment ensures proper performance. Minimal dead space reduces areas where media could become trapped. Blank valve pads can be provided to accommodate future process expansion.

Sizes ¼" to 6"
(DN8 - DN150)

Sanitary Block & Bleed

Our Adjust-O-Seal® design safely allows for process isolation and instrument bleed. These valves have the ability to isolate bleed off pressure and safely remove instruments which are in service (i.e. clean steam lines). They also allow instruments to be removed for calibration or replacement without shutting down main process lines.



IMI PBM Automation Completes the Solution

- Pneumatic and electric (multiple voltages and area classifications)
- Direct mount pneumatic actuator eliminates tube bracket and couplings
- Direct mount adapts to ISO bolt patterns
- Torque outputs to accommodate full range of valve sizes
- Bidirectional travel stop adjustments
- Full range of solenoid valves, direct mount, tube mount, or mounted in switchbox
- Position monitors with visual indication in multiple area classifications
- Pneumatic and electro-pneumatic positioners for flow control

IMI operates four global centres of technical excellence and a sales and service network in 50 countries, as well as manufacturing capability in Brazil, China, the Czech Republic, Germany, India, Mexico, the UK and the USA.

Supported by distributors worldwide.

For further information, scan this QR code or visit pbmvalve.com or imiplc.com/process-automation

Process Automation

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