Chemical & Petrochemical
Food & Beverage
LNG & Cryogenic
Marine & Offshore
Mining
NQA-Qualified
Oil & Gas
Paint & Resins
Personal Care
Pharmaceutical & Biotech
Power
Pulp & Paper
Refining
Steel
PBM (PITTSBURGH BRASS MANUFACTURING) is a company that began as a non-ferrous foundry in 1899 along the Monongahela River in Pittsburgh. The first ball valve was shipped in 1960. In 1968 PBM moved to its present site in Irwin, 20 miles southeast of Pittsburgh, PA. PBM Valves combine specific application requirements with creative engineering and quality manufacturing practices. PBM valves offer the convenience of standard features with the option of customizing for a specific process. Most PBM valves incorporate PBM’s Adjust-O-Seal® design and many include the True-Bore® design. PBM has the ability to provide clean-in-place/steam-in-place capability without process interruption. These are just a few of the innovations that help reduce processing costs and improve efficiency for our customers.

INDUSTRIAL VALVES
• 2-Way Ball Valves
• ANSI Ball Valves
• Angle Stem Flush Tank
• Flush Tank ball valves
• Diverter port ball valve
• Multi-Port Ball Valves
• Control Valves

SANITARY VALVES
BPE COMPLIANT
• Clean Steam Valves
• Control valves
• 2-Way Ball Valves
• Angle Stem Flush Tank
• Diverter Port Ball Valve
• Multi-Port Ball Valves
• Pinch Valves
• Spray Ball Valves

SPECIALTY VALVES
• Marine valves
• Check Valves
• Cryogenic Valves
• Instrument Valves
• Manifold Assemblies
• NQA-1 COMPLIANT
• Rising Stem Sampling
• Sanitary Block/Bleed

AUTOMATION
• Electric & Pneumatic
• Direct Mount
• Torque outputs of 25,000 in-lbs.
• Bi-Directional Travel Adjustments
• Pneumatic and Electro-Pneumatic positioners
• Position monitors with mechanical or proximity switches

PBM has solutions to your valve application needs.

ISO 9001:2008                      SIL 3 CAPABLE                       API 622                           ABS Approval                CRN Registrations
Low e Testing
**Features**

1. Metal Encapsulated Ring
2. O-ring primary seal
3. Metal encapsulated TFM
4. Belleville Washers

**Benefits**

1. Minimize effects of thermal cycling
2. Provides spring effect to combat teflon’s lack of memory property
3. Body gasket and seat are two body seal separate items that lets the seat move independent of gasket.
4. Help maintain pre-load on body bolts during thermal cycling

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**Cavity Fillers**

**Locking Lever Handle**

**Direct Mount Actuation**

**True-Bore® port diameter same as pipe or tube diameter**

**Cylindrical Radius Pad**
Whether the application is in a chemical plant, paper mill, food plant, manufacturing environment, or other industrial setting, PBM’s line of industrial valves can handle all types of rigorous and general purpose applications.

Materials:
- 316/316L S/S
- Carbon Steel
- Bronze
- Hastelloy®
- AL6XN®
- 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

End Connections:
- Threaded
- Extended Butt Weld
- Socket Weld
- Flanged
- Compression
- Others

Sizes:
- 1/4" - 12"

V-balls for control valves in throttling or shearing applications accurately control the flow of liquids or thick media. These valves feature characterized balls with various port shapes, including “V”.

2-Way ball valves
Sizes: • 1/4" - 12"

Flush Tank ball valves
Sizes: • 1/2" - 6"

Angle Stem Flush Tank ball valves
Sizes: • 1/2" - 6"

Diverter Port ball valves
Sizes: • 1/2" - 6"

Control valves
ANSI ball valve, ASME B16.10 Full Port, 150#
Flanged valves is used for heavy duty industrial
applications. Adjustable sealing standard.

Sizes:
• 1/2” - 12”
Class 150 & 300

Metal Seats
Sizes:
• 1/2” - 4”

Metal Encapsulated
Seat Rings facilitate
performance in high
velocity applications
and contain seats
in high temperature
applications.

ANSI ball valves

Encapsulated Seats

ANSI Class 150/300 Flanged,
3-piece Flush Tank and
Diverter Port. Temperatures
up to 1000˚F.

Multi-ported
ball valves
Sizes:
• 1/2” - 8”

Cryogenic valves
Cryogenic valves have
a unique design that
accommodate leak-free
operation through cooling
and heating cycles.

Sizes:
• 1/2” - 4”

Materials:
• 316/316L S/S
• Others

Features:
• Fire Safe to API 607
Rev.6.
• Temperatures from
400˚F, 205˚C down
to -320˚F, -200˚C
• ANSI 300# Class
**Instrument valves** are used for isolation for pressure gauges, orifice plates, flush rings and various measurement instruments.

**Sizes:**
- 1/4" - 10" Full Port
- 1/4" - 12" Reduced Port

**Pressure Class:**
- 1/4" - 3/4" ANSI Class 1500 Standard, Optional Class 2500
- 1" ANSI Class 1500
- 1-1/2" - 2" ANSI Class 900
- 3", 4" ANSI Class 600
- 6" - 12 ANSI Class 300

**Low E packing to API 622**

**Materials:**
- 316 L S/S
- Hastelloy®
- Carbon Steels
- Duplex
- Inconel
- Others

Obtain accurate transmitter readings and replace leaky knife gate valves with **PBM's 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 standard.

**Sizes:**
- 2" with 1" Port
- 3" with 2-1/2" Port
- 3" with 1" Port
- Others

**Materials:**
- 316 & 317L S/S
- Hastelloy®
- Titanium
- Others

**Double Block & Bleed valves**

**PBM double block and bleed valves** are custom engineered from standard components in a variety of alloys and pressure classifications to meet customer specifications. 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:**
- 1/4" - 10"

**Fabflex® Manifold Assemblies**

**Fabflex Manifolds** are space-saving pipe and valve configurations designed to accommodate special applications. Can be shipped in lengths up to 18’, with multiple manual and automated valves pre-installed. 100% tested before shipment ensures proper performance.

**Sizes:**
- 1/4" - 6"

**Materials:**
- 316/316L S/S
- Carbon Steel
- Hastelloy®
- Others
PBM valves with Low E packing offer solutions to emission reduction.

Design features:
- **Average stem packing leakage ≤ 10 ppmv for the duration of the test (100 ppm allowable)**
- **Stem packing is suitable for service at temperatures of -400˚F to 850˚F (-240˚C to 450˚C)**
- **API 607 Rev. 4 fire tested**
- **ASME Class 1500 Weld Design standard**

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NQA-1 RATED VALVES are manufactured, tested, and certified in strict accordance with ASME NQA-1. PBM’s quality assurance program is in accordance with 10 CFR 50 Appendix B, ASME NQA-1.0

Relevant PBM products meet the code requirements of ANSI B16.34, NACE, and API 6D.
PBM’s Igenix® line of sanitary valves is ideally suited for pure process applications where dead space within the valve need to be minimized. PBM valves exhibit high performance in pharmaceutical, biotechnological, food, beverage, cosmetic, and other sanitary and clean steam applications and validation systems.

Sizes:
- 1/4" - 6"

Materials:
- 316L S/S
- Cast <2% Ferrite
- Forged <1%
- Hastelloy®
- AL6XN®
- Others

End Connections:
- Hygienic Clamp
- Extended Butt Weld Tube
- Compression
- Others

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

2-WAY SANITARY STEAM TRAP VALVE uses body purge port and ball purge holes to direct flow to the trap while shutting off flow downstream. Permits sampling of steam for purity and safely isolates trap for ease of maintenance. Low Ferrite Cast or Forged, True-Bore® standard. Vertical or horizontal installation available.

Sizes:
- 1/2" - 4"

Trap Position: 180°
Open Position: 90°
Service Position:

Condensate draining through trap
Clean steam to point of use
Trap can be removed for service
Spray Ball valves

Sizes:
- 1/2" - 6"

Thorougly clean the insides of tanks, mixers, and other vessels with PBM’s Spray Ball valve. Design minimizes nozzle exposure and potential for clogging, and accommodates many standard spray nozzles.

Divertor Port ball valve

Sizes:
- 1/2" - 8"

Spring-less Sanitary Check valves

Sizes:
- 1/2" - 4"

Materials:
- 316L S/S
- Hastelloy®
- Others

Optional drain port or drain holes for vertical installations

Valve Sizes:
- 1/4" - 6"

Materials:
- 316L S/S
- Carbon Steel
- Hastelloy®

Options:
- Actuation
- Fire-Rated
- CIP/SIP
- Cavity Fillers
- Steam Seats
- Polishing & Electropolishing

Fabflex® Manifold Assemblies are space-saving pipe and valve configurations designed to accommodate special industrial and sanitary applications. Can be shipped in lengths up to 18', 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:
- 1/2" - 8"
Self-Cleaning ball valves

Sizes:
- 1/4” bore diameter

Materials:
- 316L S/S
- Others

Options:
- Actuation
- Polishing
- Butt Weld
- Swickle (1/4” only)
- Hose Barb
- Clamp Outlet

Rising Stem Sampling valves

Sizes:
- 1/4” bore diameter

Z-ball® Zero Dead Leg design

This design offers PBM the ability to provide an ultra-sanitary process isolation valve which seals on both upstream and downstream seats.

Sizes:
- 1/2” - 4”

Pinch valves

- True “Fail Closed”
- Fits over existing silicone clear & braided tubing
- No contact with any process media
- Actuator pressure as low as 60 PSIG with a variety of limit switches
- Modular safety cover
- Optional manual override and position indicators
- Manual or automated

This design offers an ultra-sanitary process isolation valve which seals on both upstream and downstream seats.

Sizes:
- 1/2” - 6”
PBM AUTOMATION COMPLETES THE SOLUTION.

PBM offers a selection of pneumatic and electric actuation packages. Most PBM valves are designed to accept Direct Mount Actuation that utilizes the valve stem as an integral part of the actuator drive. This design provides improved cycling life and performance, while reducing the total package profile. Direct Mount Actuation also eliminates the need for additional brackets or extensions. PBM Direct Mount Actuation includes a stainless steel bracket and insert as standard. PBM can easily mount a PBM valve to any actuator with a female drive and an ISO bolt pattern.

- **Electric and Pneumatic**
- **Direct Mount**
- **Torque outputs of 25,000 in.-lb.**
- **Bi-directional Travel Adjustments**
- **Electric actuators can perform an almost limitless range of functions when equipped with optional features and related control equipment**
- **Pneumatic styles:**
  - Rack & Pinion Double Acting
  - Rack & Pinion Spring Return
- **Solenoid valves (NEMA 4, explosion proof, IS)**
- **Position monitors with mechanical or proximity switches**
- **Pneumatic and Electro-Pneumatic Positioners**
WORLDWIDE REPRESENTATION

- United States
- Canada
- Australia
- Mexico
- Brazil
- Argentina
- Chile
- UAE
- United Kingdom
- Central Europe
- Germany
- Sweden
- Spain
- Belgium
- France
- Ireland
- Switzerland
- Austria
- The Netherlands
- South Africa
- India
- Taiwan
- China
- Thailand
- Singapore
- Saudi Arabia
- Malaysia
- South Korea
- Vietnam

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