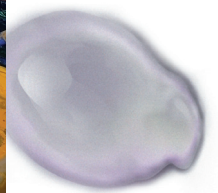
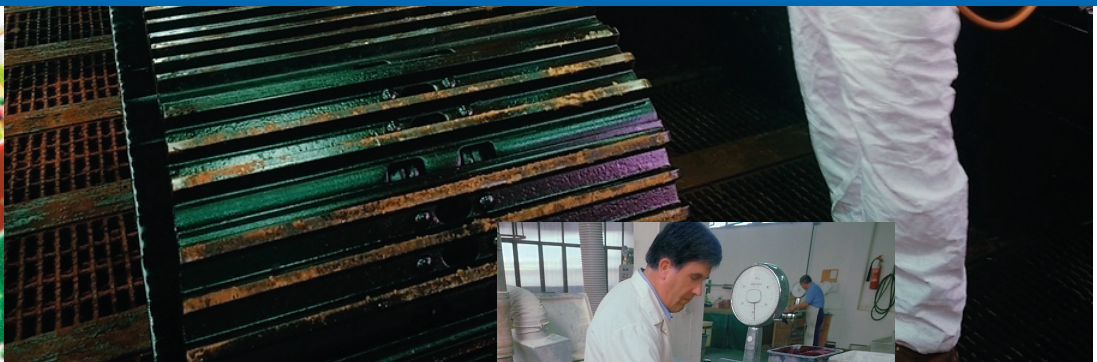




PBM VALVES HANDLE



PAINTS, COATINGS, RESINS AND ADHESIVES



PBM Valves Can Handle It



Extra gooey resin? Super-duper adhesive?
Really expensive paint? Anything similar?

A valve engineering and manufacturing company, PBM provides the valve products and services required to eliminate product contamination, facilitate clean sampling, solve clogging problems, improve pigging, cleaning, and draining, reduce downtime, and produce high quality paints, coatings, resins, and adhesives.

PBM is more than a valve manufacturer. PBM is a solution provider.

PBM recognizes that many valve applications are unique and often have special problems. To achieve the ideal solution to these problems, PBM combines the specific application requirements with creative engineering and quality manufacturing practices. Add PBM's commitment to quality service, and the result is satisfaction.

PBM valves offer the convenience of standard features with the option of customizing for a specific application. Most PBM valves incorporate PBM's Adjust-O-Seal™ design, and **only** PBM has the ability to provide Clean-In-Place/Steam-In-Place capability without process interruption.

If you have a special valve requirement, call us. We may already have the solution. If not, our engineering and manufacturing team will work with you to design the best solution.

PBM handles challenging valve application problems... just like yours.



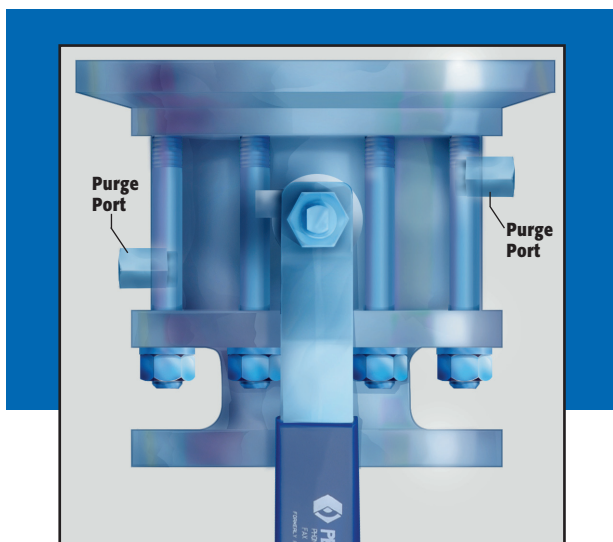
Creative Solutions for Handling Paints, Coatings, Resins and Adhesives



Multi-Port Ball Valves Increase Capacity and Minimize Caking

Paints and coatings use pigments as primary ingredients. These pigments are often powders that can settle and cake inside a valve causing increased torque and reducing the amount of material that can flow through the valve.

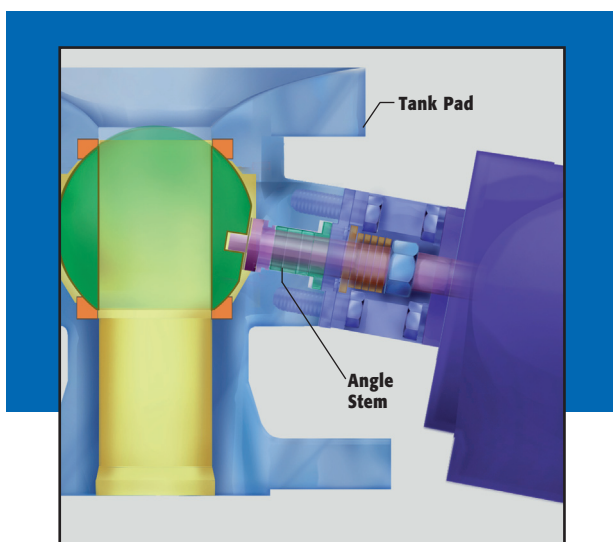
PBM Multi-Port valves are available in larger sizes than the plug valves traditionally used for this process and provide a much greater flow capacity. In addition, these PBM valves can be equipped with body cavity fillers that minimize voids where solids can build up and contaminate the process or prevent smooth valve operation.



Clean-in-Place Flush Tank Valve Eliminates Adhesive Buildup

Manufacturing solid and paste adhesives is a sticky business. Often these materials are created by mixing together more than one epoxy. If a valve body is not designed properly, residue from one epoxy can build up in the valve body, mix with another epoxy, and actually glue the ball to the internal components of the valve, rendering it inoperable.

This PBM valve includes Clean-In-Place capability specially designed to keep the adhesive process moving smoothly. Multiple Clean-In-Place purge ports make it easy to run cleaning solutions through the valve to ensure that residue does not build up inside the valve or mix with other materials.



Angle Stem Fire-Test Flush Tank Ball Valve Minimizes Dead Space

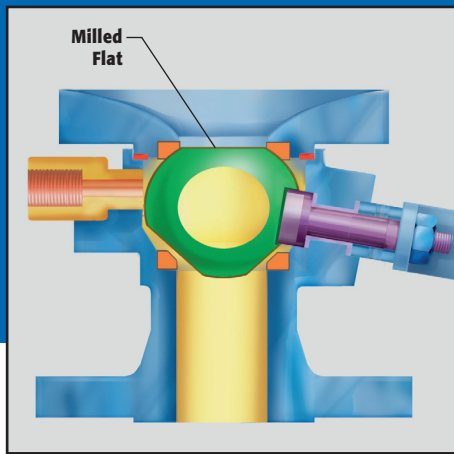
During paint mixing and processing, dead space between the bottom of the tank and the shutoff point of the valve can cause paint to build up. This can clog the valve or cause contamination of the process. These problems can be costly and sometimes dangerous, especially when dealing with specialty, highly flammable, or explosive paints and coatings.

This valve includes a standard PBM flush tank pad that is designed to weld flush with the inside surface of the tank. This enables the ball to be positioned in a way that virtually eliminates dead space.

The angle stem design positions the actuator to clear jacketed or insulated tanks and allow easy access. This valve also meets or exceeds the API-607, Fire-Test Design Standard, making it ideal for use with highly volatile paints and solvents.

Matching the valve to the application ensures optimum performance.

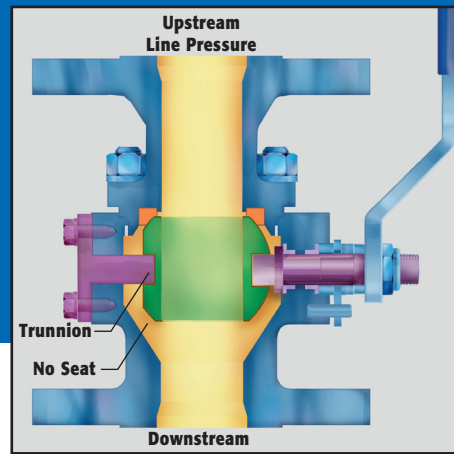




Flat Top Ball Valve Eliminates Damage from Crusty Materials

Highly viscous materials such as adhesives, liquid chrome, and resins often have a sticky, gummy quality when heated, but become crusty when cool. When these materials settle on top of a round-faced ball in a standard flush tank valve, they form a crust. After repeated opening and closings, the crust scores the ball and crusty particles become embedded in the seats, causing the valve to leak.

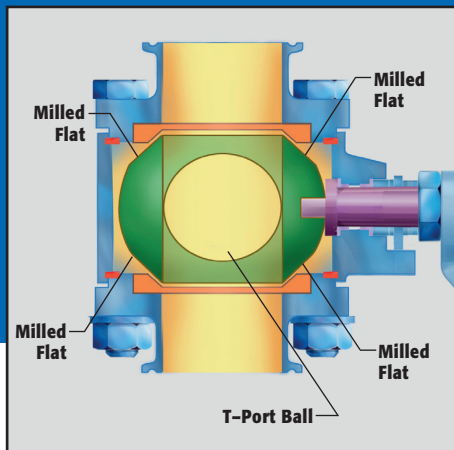
PBM's Flat Top Flush Tank ball valve uses a milled flat on the top of the ball to collect the crust and move it away from the seats before damage occurs. Optional downstream milled flats allow material to leave the body cavity.



Thick Media Flows Smoothly with ANSI Trunnion Ball

Thick materials like plastics and low-density polyethylene can clog ordinary floating ball valves that rely on upstream pressure to seal.

PBM's ANSI Trunnion 2-Way ball valve uses a single-seat construction that allows the stem and trunnion to work together to hold the ball in position while PBM's exclusive Adjust-O-Seal™ feature seals the ball against the upstream seat. This design also permits self-draining so that material trapped inside the closed valve can drain downstream.

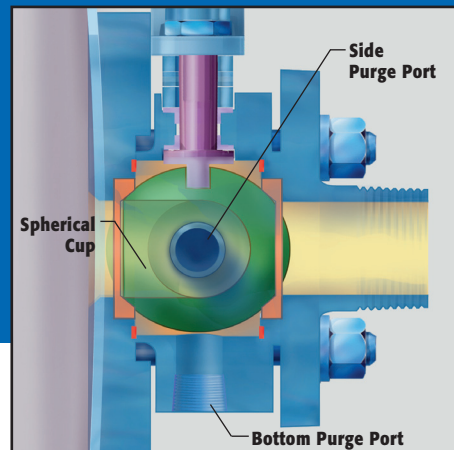


2-Way, T-Port Self-Cleaning Ball Valve Prevents Product Contamination

Whether used to process a volatile paint, an expensive coating, or a specialty adhesive, a well-cleaned valve can prevent costly maintenance, downtime, and contaminated products.

PBM's 2-Way T-Port ball valve design includes two milled flats on each side of the ball in the open position to allow maximum flow to the open area of the body cavity.

When the valve is in the open position, the T-Port ball provides optimum access to the body cavity and allows cleaning and rinsing solutions to flow past the seats and through the body cavity. The valve is then cleaned effectively without being removed.



Self-Cleaning Spherical Sampling Cup Ball Valve Makes Sampling Easy

Thick, paste-like materials mixed in chemical reactors can often cake inside a valve and make sampling difficult. However, PBM's Self-Cleaning, Spherical Cup Flush Tank Ball Valve can ensure quality samples each time with ease.

Unlike most ball valves, this specially designed valve features a hole three-quarters of the way through the ball, which forms a small sampling cup. During the mixing process, the cup faces the inside of the tank and collects the paste-like material. When the ball is rotated 180°, a sample can be extracted from the cup. When rotated 90° to face one of two purge ports, the valve can be cleaned-in-place. PBM's Adjust-O-Seal™ feature also ensures that no cleaning solution or paste from the sample cup drains through the end fitting while the cup is being purged and drained.

Custom Features Make PBM Valves Perform

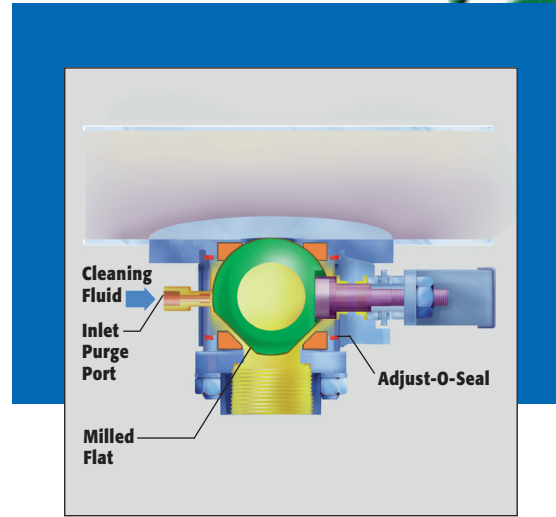


Adjust-O-Seal™

The exclusive PBM Adjust-O-Seal design allows inline adjustment to compensate for normal wear on seats. This reduces downtime, maintenance and repair costs by increasing the time between seat replacements.

The valve seats are always compressed against the ball. This keeps process media out of the body chamber surrounding the ball. This seal also creates a double chamber or "Dual Chamber™", which allows process flow through the ball while CIP media flows around the ball.

The Adjust-O-Seal design is a standard feature on most PBM ball valves.

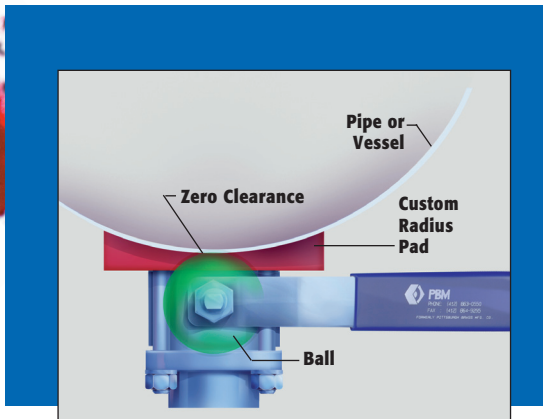


Clean-In-Place Capability

Certain PBM valves provide CIP capability in applications where material can become trapped in the body cavity or where it may be necessary to sanitize the valve with steam or a cleaning agent. These valves have a combination of purge ports and milled flats designed to suit specific application needs.

The Adjust-O-Seal feature maintains compression of the seats against the ball and provides simultaneous upstream and downstream sealing – permitting CIP without process interruption.

CIP is an option on select PBM valves.



Cylindrical Radius Pads

Cylindrical radius pads are designed to conform to the pipe, tube or tank radius of a specific application. PBM's pad can be welded in such a manner that the I.D. is continuous – with minimal dead space.

For certain applications, a special design further minimizes dead space between the pipe I.D. and the closed ball, preventing plug formation. Depending upon valve size and pipe radius, zero dead space can be achieved.



Body Cavity Fillers

Body cavity fillers are designed to fill the cavity of the valve between the body and the ball. Cavity fillers minimize problems with trapped fluid in the valve body that can contaminate the process or prevent smooth operation of the valve.

Body Cavity fillers are an option on most PBM valves.

Piggable 3-Way valves for use in a robotic paint spraying system

A major automotive manufacturer required 1/2 inch 3-Way piggable valves for use in a robotic paint spraying system. PBM custom designed and fabricated True-Bore® 3-Way Cavity-Free valves with 120° turning radius that easily allowed the pig (for cleaning the line) to pass through the valve. These valves, powered by an electric motor operator, increased productivity and reliability by allowing the manufacturer's robotic paint sprayer to clean and switch colors at a faster rate. Innovation - it's what PBM is all about!



PBM Actuators Complete 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. PBM can easily mount a PBM valve to any actuator with a female drive and an ISO bolt pattern.



It is our policy to
listen to our customers and focus on their needs,
to **produce** and market high quality products at competitive prices,
to **meet** our customers' delivery requirements
to concentrate on **solving** fluid control and application problems,
and to provide **uncompromising** service.



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