#### VALVE SOLUTIONS

#### PAINT & CHEMICAL

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.

## 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

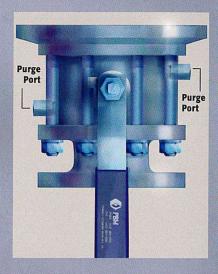


equipped with body cavity fillers that minimize voids where solids can build up and contaminate the process or prevent smooth valve operation.

#### 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.

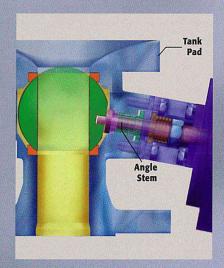


Multiple purge ports make it easy to run cleaning solutions through the valve to ensure that residue does not build up inside the valve or mix with other materials.

## 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.

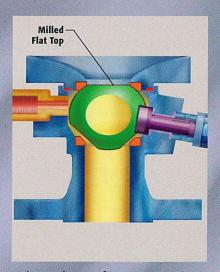
This valve includes a standard PBM flush tank pad that is designed to weld flush with the inside surface of the tank. This enables the ball to be positioned in a way that virtually eliminates dead space.



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, Edition 4, Fire-Test Design Standard, making it ideal for use with highly volatile paints and solvents.

### 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

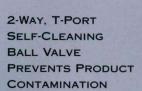


and move it away from the seats during valve operation before damage occurs. Optional downstream milled flats allow material to leave the body cavity as needed.

## 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



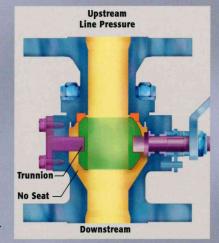
Whether used to process a volatile paint, an expensive coating, or a specialty adhesive, a well-cleaned valve can prevent costly maintenance, downtime, and contaminated products.

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.

# SELF-CLEANING SPHERICAL SAMPLING CUP BALL VALVE MAKES SAMPLING EASY

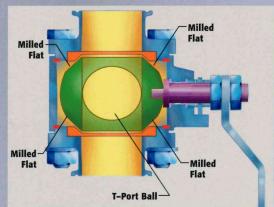
Thick, paste-like materials mixed in chemical reactors can often cake inside a valve and make sampling difficult. However, PBM's Self-Cleaning, Spherical Cup Flush Tank ball valve can ensure quality samples each time with ease.

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



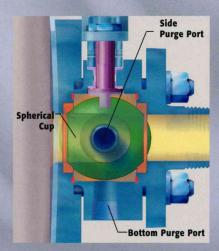


upstream seat. This design also permits selfdraining so that material trapped inside the closed valve can drain downstream.



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.



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.

PBM HAS SOLUTIONS FOR YOUR VALVE APPLICATIONS.

PBM RECOGNIZES THAT MANY VALVE
APPLICATIONS ARE UNIQUE AND OFTEN
HAVE SPECIAL PROBLEMS. TO PROVIDE
THE IDEAL SOLUTION TO THESE
PROBLEMS, PBM COMBINES SPECIFIC
APPLICATION REQUIREMENTS WITH
CREATIVE ENGINEERING AND QUALITY
MANUFACTURING PRACTICES. ADD PBM'S
COMMITMENT TO QUALITY SERVICE, AND
THE RESULT IS SATISFACTION FOR YOU...
OUR CUSTOMER.

PBM VALVES OFFER THE CONVENIENCE
OF STANDARD FEATURES WITH THE
OPTION TO CUSTOMIZE 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.

PBM HANDLES CHALLENGING VALVE
APPLICATION PROBLEMS...
JUST LIKE YOURS.



PBM, Inc. 1070 Sandy Hill Road Irwin, PA 15642 800-967-4PBM 724-863-0550 Fax: 724-864-9255 www.pbmvalve.com Email: info@pbmvalve.com

