

75000 Series Tank Drain and Level Control Valve

The **Masoneilan™** 75000 Series is an erosive, flashing-resistant tank level control valve, designed with unique features for use in level control and tank drain applications with corrosive or viscous fluids prevalent in the PTA (Purified Terephthalic Acid) chemical industry.

Unique Sweep Angle Body

A fully ported, sweep angle body with a contoured gallery design to reduce body pressure losses and help mitigate erosion from direct impingement of particles within the flow path.

Heavy Guided, 1-Piece Plug

Equipped with high force actuation, the one-piece plug/stem is designed with a robust surface and guiding fins to break across a solid layer of crystallized fluid that can build up within the tank and throttle the process that include solids within the flow. Heavy top guiding through a stem bearing, along with port guiding with full stroke length plug flutes reduce trim vibration and easy overall fatigue to withstand a longer installed life under severe service.

Corrosion Resistance Materials

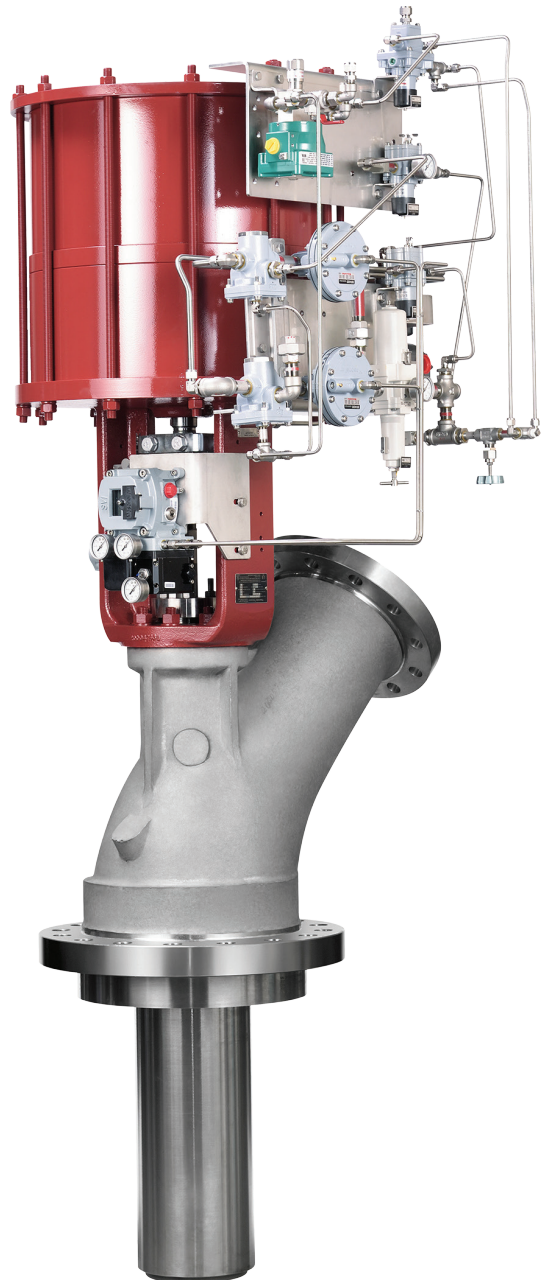
Designed for use in highly corrosive environments, the 75000 Series is available in a complete range of materials to withstand the service and environment, including multiple grades of stainless steel, duplex stainless steel, titanium and Hastelloy C.

Robust and Compact Design for Tight Area Installation

Includes heavy trim guiding and actuator support for heavy side loading found in tank side installations. Available with multiple geometries, including 90°, 120° and 135° sweep angle body configurations for ease of piping hook-up in tight tank mounted spaces.

Tight Shutoff

Class IV leakage is standard. High thrust actuation provided to meet IEC 534-60534-4 and ANSI/FCI 70.2 Class V.



Specifications

Flow Direction	
Contoured:	Flow-to-open/flow-to-close
Body	
Type:	Erosion resistance sweep angle 90°, 120°, 135° sweep angle configurations
Bonnet	
Type:	Split body design, bottom entry trim access (No Separate Bonnet)
Body and Bonnet	
Materials:	316 Stainless Steel 304 Stainless Steel Duplex Stainless Steel Titanium Hastelloy C
Trim	
Plug type:	Heavy Duty, Single Seat Plug 1-piece Plug/Stem Guiding fins for vibration resistance
Seat ring:	Quick Change Single Seating Surface
Guide:	Heavy Top and Bottom Guided for increased stability and side loading
Cv ratio:	50:1
Flow characteristic:	Linear
Packing:	Wiper design for low friction throttling
Actuator	
Type:	Piston Cylinder (51/52/53)
Handwheel:	Optional Handwheel/Hand Jack
Additional Options	
	Flushing and purge ports to remove slurry

Erosion Resistance, Sweep Angle Valve Designs

For enhanced erosion resistance, a large gallery (low velocity) sweep angle design is provided to avoid any direct impingement of particles within the fluid against the valve trim. Heavy guiding and 1 piece plug/stem construction to provide additional resistance against premature wear from vibration and erosion. Packing wipers and optional flushing connections are available to keep particles away from the guiding area to optimize controllability. Available in optional 90°, 120° and 135° sweep angle configurations.

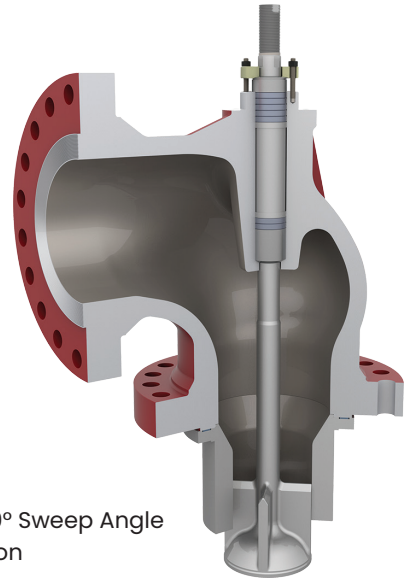


Figure 1 - 90° Sweep Angle Configuration

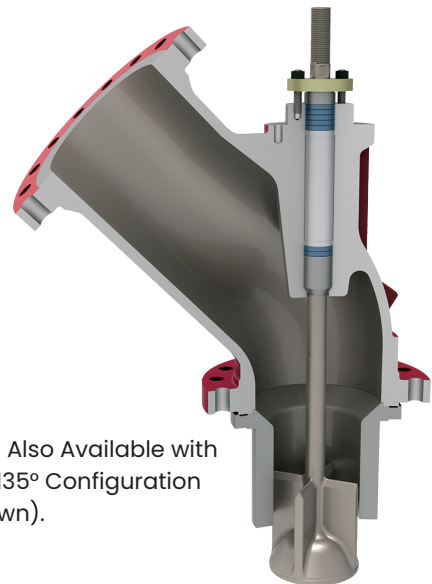


Figure 2 - Also Available with 120° and 135° Configuration (135° Shown).

Baker Hughes 