

ECCENTRIC PLUG VALVE

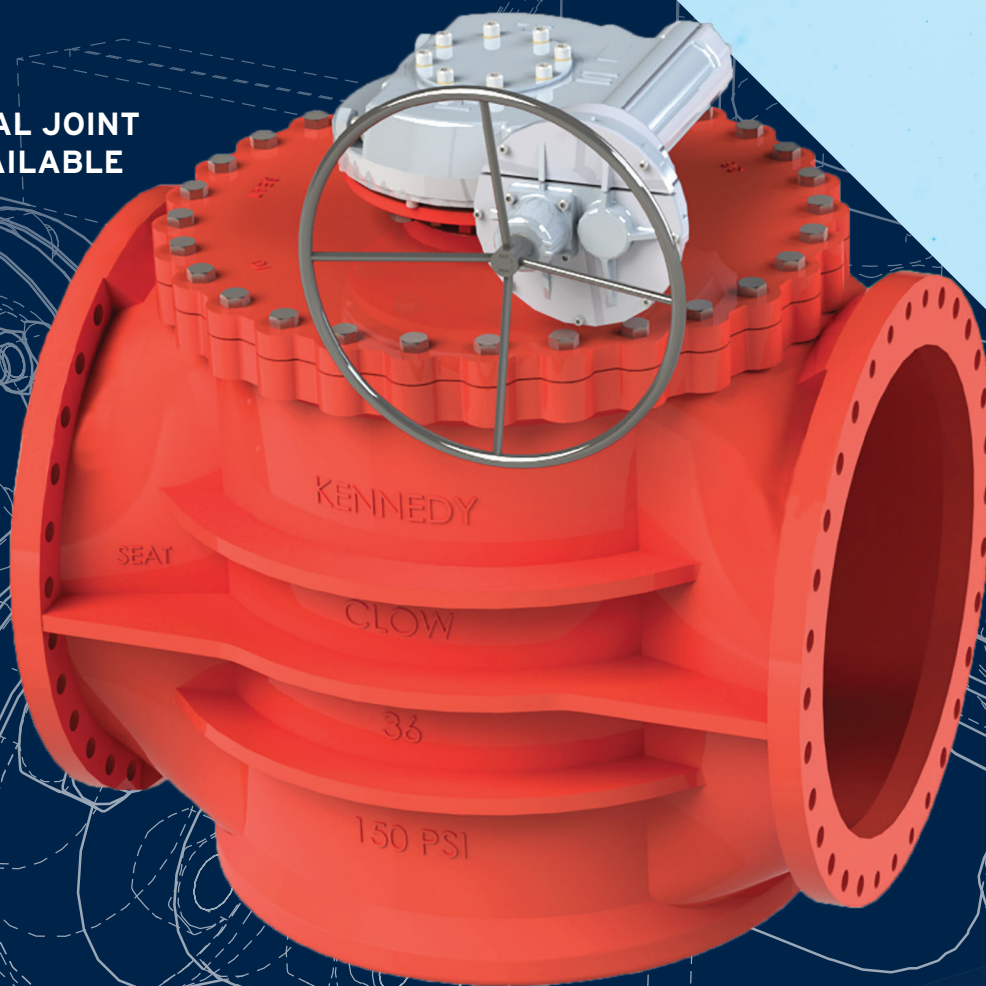
AWWA C517

3"-12" 175 PSI

14"-48" 150 PSI

FLANGED + MECHANICAL JOINT
END CONNECTIONS AVAILABLE

mcwanepi.com



ECCENTRIC PLUG VALVE

PORT 3"-48"



PRODUCT OVERVIEW

MPIs Eccentric Plug Valves are designed for consistent performance, durability and longevity. Built to the AWWA C517 standard, the Eccentric Plug Valves are available in sizes 3"-48" for 100% port with a variety of end connections. A reliable and engineered product capable of bi-directional flow at fully rated pressures. Dependable in a variety of service applications.

APPLICATIONS

- Water and Wastewater services
- Pump Isolation
 - Open / Close, Throttling, Modulating
 - Control Balancing
 - Lift Stations
 - Heavy Solids
 - Slurries / Grit
 - Vertical Piping
 - Horizontal Piping

RECTANGULAR PORT DESIGN

The cylindrical plug and rectangular port provide a rotational alignment by the eccentric motion making a uniform and full contact with the welded in nickel seat. Unlike circular port designs that have a point-to-point seating where engagement and wear can be an issue, the rectangular port makes a uniform and full contact without the need for exact alignment of the plug in the body.

ACTUATION

Our engineers have extensive experience with electric, pneumatic, and hydraulic actuators on our plug valves and regularly work with most major actuator supplies.

KEY CHARACTERISTICS	
Size Range	3"-48"
Materials	Ductile Iron ASTM A536, 95% pure nickel welded seat, Buna-N Plug
Pressure Range	175PSI 3"-12", 150PSI 14" - 48"
Temperature Range	33°F - 125°F
Body Style	FLG or MJ
Actuator Types	Direct drive with 2" square operating nut; electric pneumatic or hydraulic actuator
Standards	AWWA C517

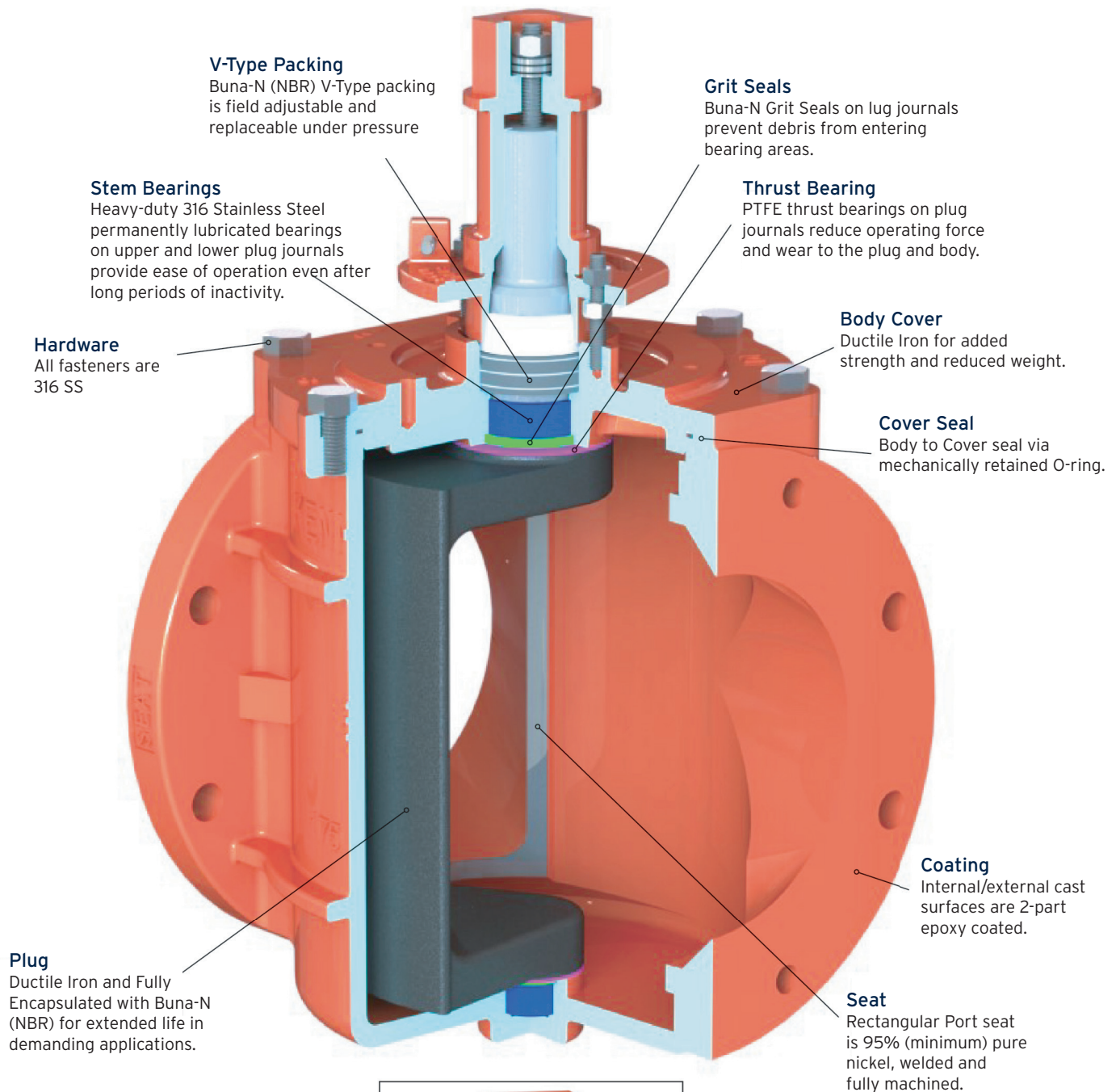
ECCENTRIC PLUG VALVE FEATURES & BENEFITS

STANDARD FEATURES

- **Rectangular Port Design:** The cylindrical plug and rectangular port provide a rotation alignment by the eccentric motion making uniform and full contact with the welded nickel seat.
- **Adaptable Actuation:** EPVs can be ordered with electric, pneumatic, or hydraulic actuators to fit the needs of your system.
- **Full Flow Design:** Allows laminar (smooth or regular) flow in the body resulting in low head loss and passage of larger solids preventing clogging or build up.
- **Extended Life Plug:** Ductile iron and fully encapsulated with Buna-N (NBR) for extended life in demanding applications.
- **Ease of Operation:** Stem bearings are made of heavy duty 316 stainless steel permanently lubricated on upper and lower plug journals to provide ease of operation after long periods of inactivity.
- **Built to Endure:** PTFE thrust bearings reduce operating force and wear to the plug and body. All fasteners are 316 stainless steel.
- A full line of accessories and options are available that include extension stems, extended bonnets, floor stands, valve boxes, operating nuts, hand wheels, levers, positioners, fully bi-directional at rated pressure, switches, and solenoid valves as well as speed control valves.
- EPVs are designed and built to AWWA C517 standards.



ENGINEERING FEATURES

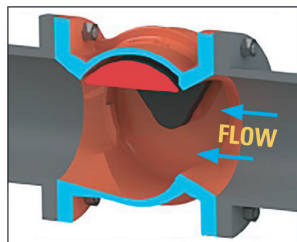


Open Limit
Adjustable stop

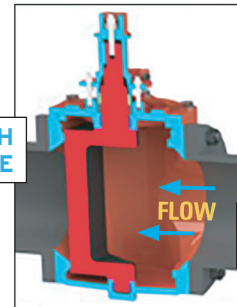
Close Limit
Adjustable stop

Position Indicator
Quarter-turn valves re equipped with a position indicator marked at 10° increments.

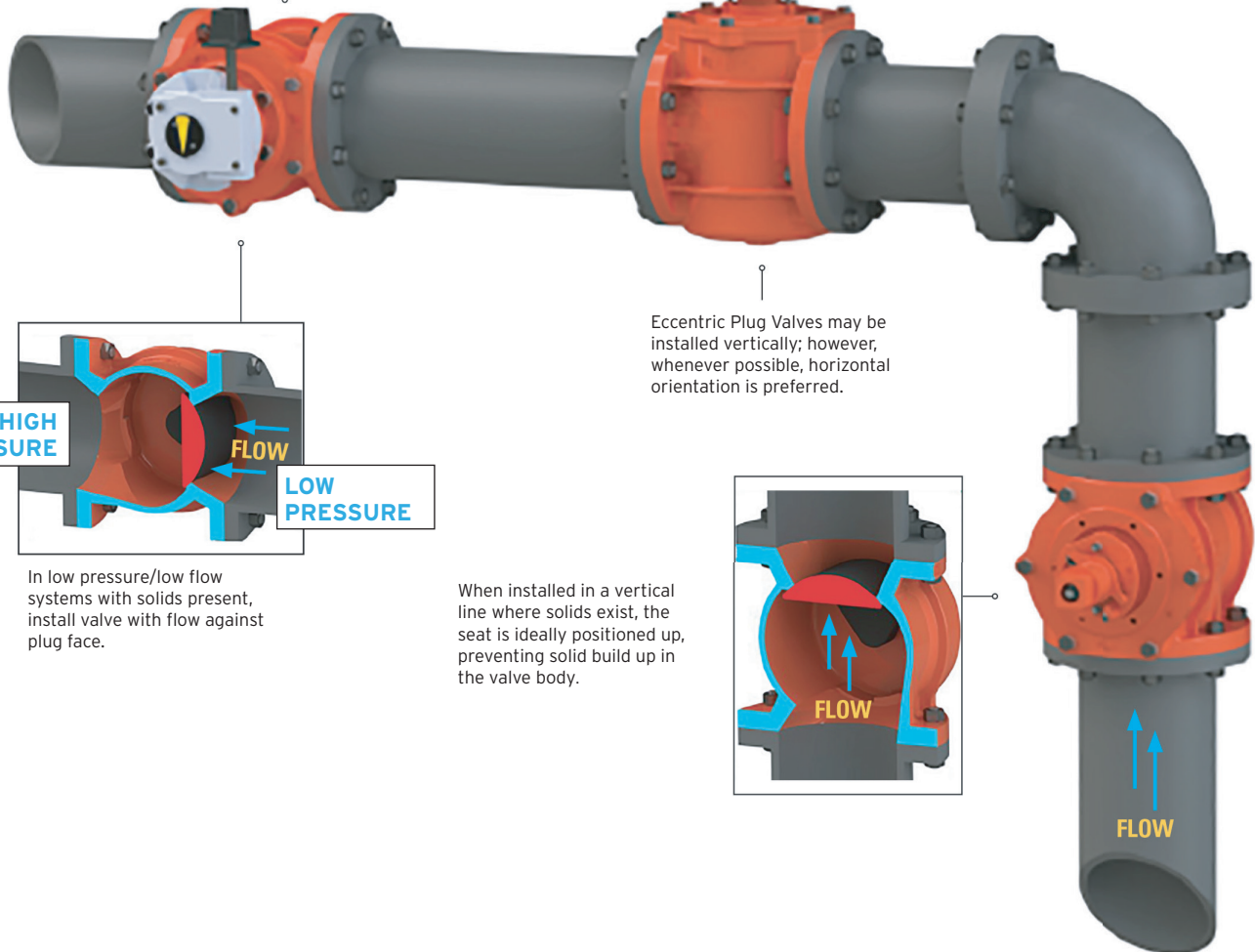
SUGGESTED INSTALLATION



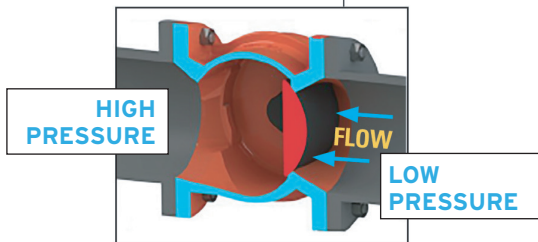
When Eccentric Plug is installed in a horizontal line, the preferred installation is with the plug rotating 90° upward to open. Utilizing this orientation can lessen the effect of solids preventing plug operation.



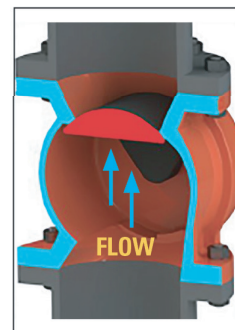
When installed in high pressure systems, it is recommended to have the plug seat on the outlet side of the valve.



Eccentric Plug Valves may be installed vertically; however, whenever possible, horizontal orientation is preferred.



In low pressure/low flow systems with solids present, install valve with flow against plug face.



When installed in a vertical line where solids exist, the seat is ideally positioned up, preventing solid build up in the valve body.

ADDITIONAL PARTS OPTIONS & ACCESSORIES

A full line of accessories and options are available that include extension stems, extended bonnets, floor stands, valve boxes, operating nuts, hand wheels, levers, positioners, fully bi-directional at rated pressure, switches, and solenoid valves as well as speed control valves.



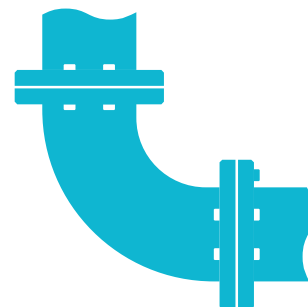
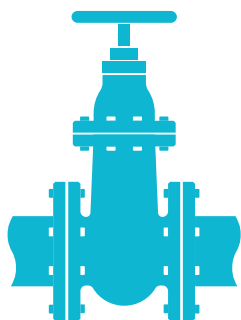
Manual valves available with
2" square operating nut



Valves commonly supplied with gearing

MPI PRODUCT LINE

VALVES • GATES • PIPE & FITTINGS



VALVES

SOLUTIONS:

- Rotating Disc Gate Valves (AWWA C500)
- Eccentric Plug Valves (AWWA C517)
- Butterfly Valves (AWWA C504)
- High Performance Butterfly Valves (API 609)
- Swing Check Valve (AWWA C508)
- Ken-Flex Resilient Hinged Check Valve
- Telescoping Valve
- Resilient Seat Gate Valve (AWWA C509/C515)
- Pressure Relief Valves (Floor & Wall)
- Mud Valves
- Shear Gate Valves
- Solid Wedge Gate Valve

GATES

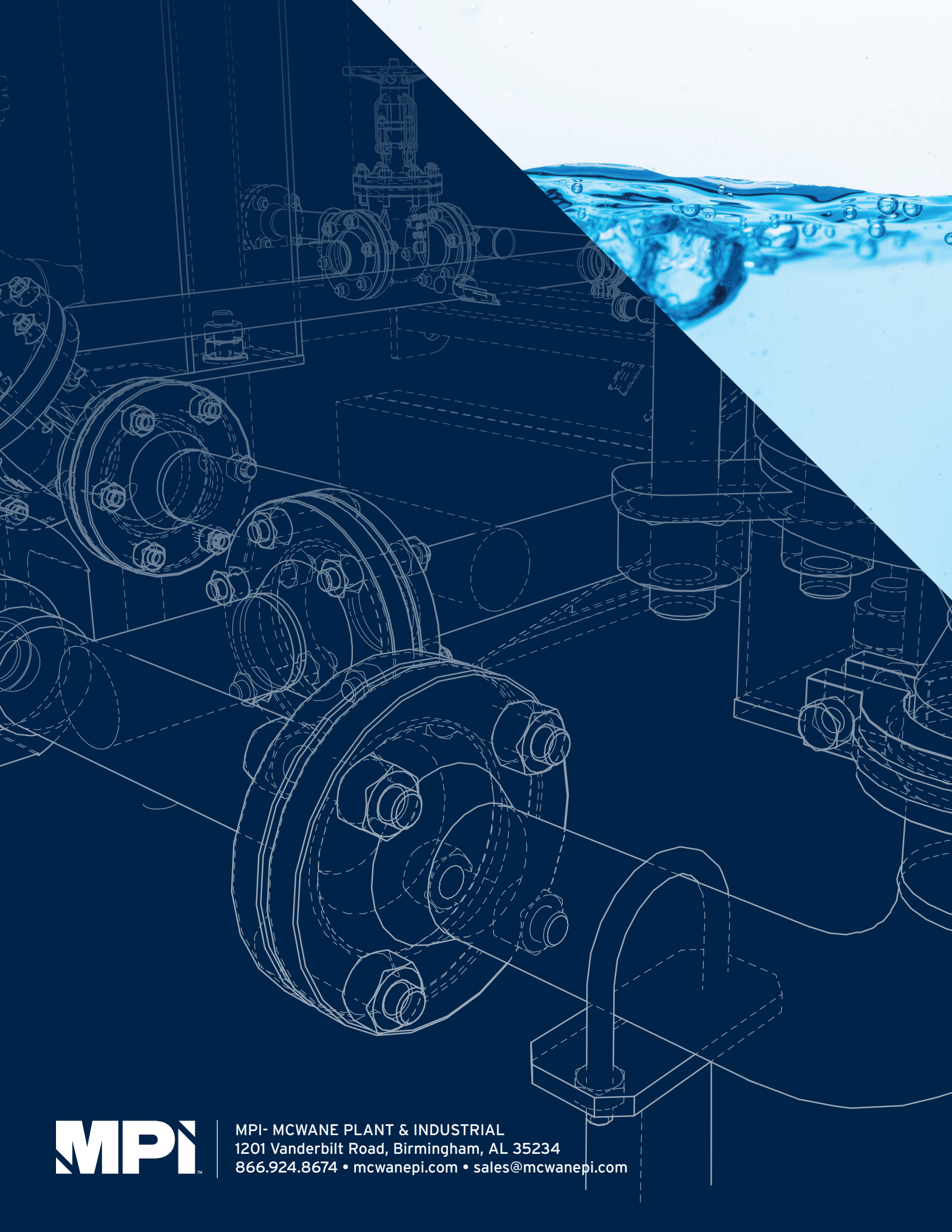
SOLUTIONS:

- Fabricated Stainless Steel Gates
- Fabricated Aluminum Gates
- Stop Logs & Stop Gates
- Cast Iron Sluice (Slide) Gates
- Rectangular Butterfly Gates
- Automatic Level Control Gates
- Flap Gates

PIPE & FITTINGS

SOLUTIONS:

- Fabricated Flange and Wall Pipe
- Ductile Iron Pipe
- Grooved Pipe & Fittings
- Pipe Linings: cement, glass, Protecto 401™
- Welded Outlets, Thread-O-Lets, Welded Boss
- Restrained Joint Fittings
- Seismic Solutions



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