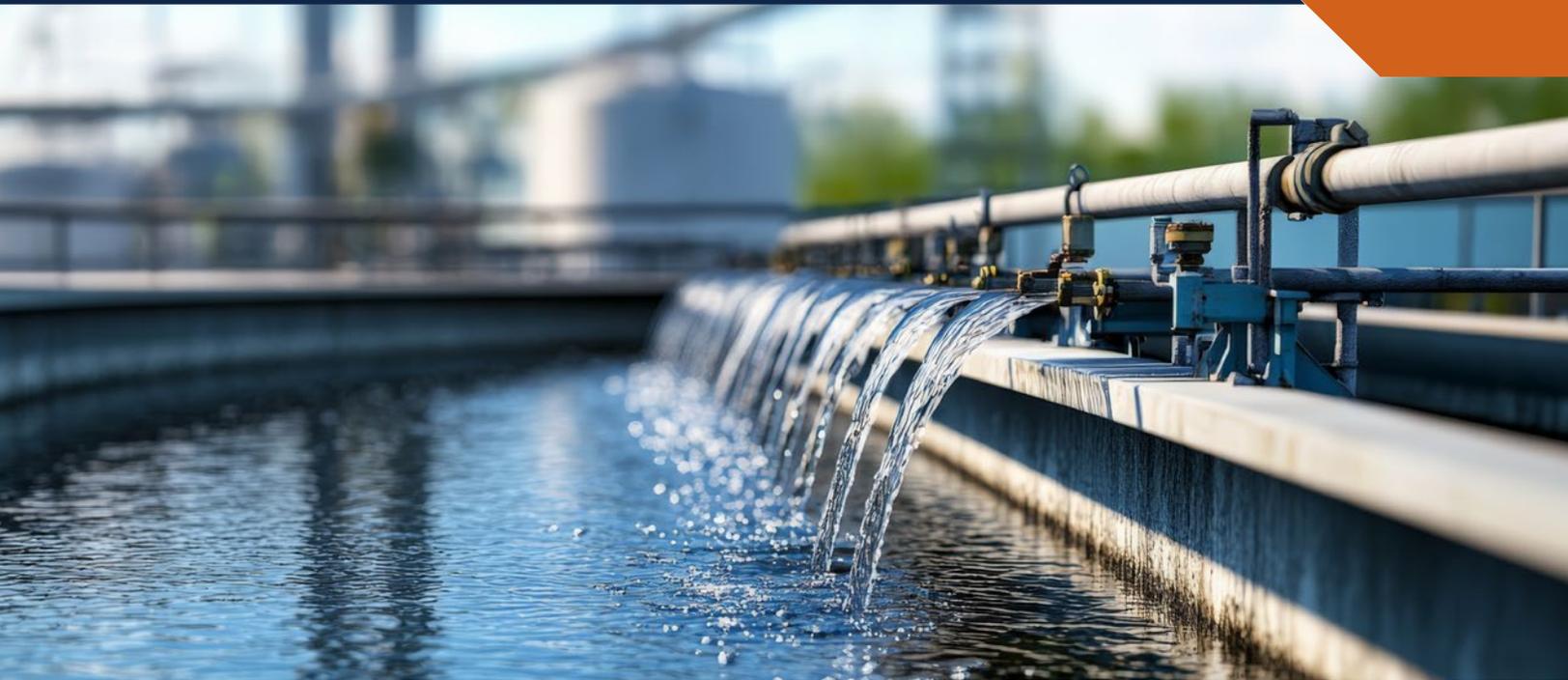


TREATMENT PLANT PRODUCTS AT-A-GLANCE



KENNEDY VALVE



M&H VALVE COMPANY



A STREAMLINED SOLUTION FOR YOUR TREATMENT PLANT NEEDS.

MPI brings the best of our world to you.

Combining decades of expertise from eight key water infrastructure brands in the McWane family of companies, McWane Plant & Industrial (MPI) specializes in products and services for treatment plant projects. With more options, more efficiency and more focus, MPI is improving the way water and wastewater treatment plants get built.

We have two simple goals:

- To provide a primary source for best-in-class products from time-tested brands, with rapid, on-time delivery. We make it easy to select, size and specify treatment plant components with comprehensive digital design resources.
- To offer veteran specialists as resources for any plant project of any scale, increasing the ease and efficiency of the planning and completion of your projects.

Our dedicated team is comprised of dozens of treatment plant specialists with decades of experience. We work cooperatively with industry partners to give each project the attention it deserves, providing unprecedented levels of communication, access and collaboration.

Our support teams work within dedicated service regions allowing our experts to apply regionally specific knowledge, including state regulations, codes and environmental specifications. Our nationally certified Associate Design-Build Professionals® are a valuable asset to Design-Build projects.

Our extended manufacturing capabilities mean your precise requirements are closer in reach and delivered faster, with less legwork from you. We offer products that conform to rigorous industry standards and can work with your team to customize and fulfill unique requests. As part of our commitment to American workers and industries, we're proud of our ability to provide products from domestic facilities and to meet all domestic funding requirements.



AWWA C504 BUTTERFLY VALVES

KEY CHARACTERISTICS	SEAT-ON-DISC
Size Range	3"-72"
Materials	Ductile iron ASTM A536 body and disc, 316SS seat ring, EPDM seat, SS hardware
Pressure Rating	AWWA CL 150B (150psi) or 250B (250psi)
Temperature Range	0°F-250°F
Body Style	FLG, MJ or MJxFLG
Actuator Types	Lever, traveling nut, worm gear, electric motor, pneumatic, hydraulic
Standards	AWWA C504, NSF/ANSI 61/372 certified (4"-48")



KEY CHARACTERISTICS	SEAT-ON-BODY
Size Range	3"-36"
Materials	Ductile iron ASTM A536 body and disc (316SS disc for 3" size), 316SS disc edge, 316SS stem and fasteners (630SS stem on CL 250B), EPDM seat and packing
Pressure Class	AWWA CL 150B (150psi) or 250B (250psi)
Temperature Range	0°F-250°F
Body Style	FLG, MJ
Actuator Types	Lever, traveling nut, worm gear, electric motor, pneumatic, hydraulic
Standards	AWWA C504, NSF/ANSI 61/372 certified



ECCENTRIC PLUG VALVES

KEY CHARACTERISTICS	
Size Range	3"-48"
Materials	Ductile iron ASTM A536, 95% pure nickel welded seat, NBR encapsulated plug
Pressure Rating	3"-12" to 175psi; 14"-48" to 150psi
Temperature Range	0°F-250°F
Body Style	FLG or MJ
Actuator Types	Direct nut (8" & smaller), worm gear, electric motor, pneumatic, hydraulic
Standard	AWWA C517



ROTATING DISC GATE VALVES

KEY CHARACTERISTICS	
Size Range	3"-108"
Materials	Ductile iron ASTM A536, iron body bronze mounting (IBBM), Stem: 304SS (3"-24"), 316SS (30"-54"), 630SS (60" and larger)
Pressure Rating	Rated pressure up to 300psi (250psi standard)
Temperature Range	33°F-160°F
Body Style	Non-rising stem: FLG, MJ, FLG x MJ, Outside stem & yoke: FLG
Actuator Types	Direct-drive hand wheel or 2" operating nut, spur or bevel gear, electric motor operator
Standards	AWWA C500, NSF/ANSI 61/372 certified



SOLID WEDGE GATE VALVES

KEY CHARACTERISTICS	
Size Range	Flanged ends and mechanical joint ends 3" to 48"
Materials	Ductile iron body, SS stems, 2-part epoxy interior & exterior coating
Pressure Rating	CL 150 or CL 250
Temperature Range	33°F-180°F
Body Style	NRS or OS&Y style, FLG or MJ ends
Actuator Types	Manual, spur or bevel gear, electric motor operator
Standard	AWWA C500



RESILIENT SEATED GATE VALVES

KEY CHARACTERISTICS	
Size Range	2"-54"
Materials	ASTM A536 ductile iron body & bonnet, fully encapsulated EPDM wedge per ASTM D429, stainless steel hardware
Stem Materials	Bronze, 304SS, 316SS
Pressure Rating	250psi
Temperature Range	33°F-125°F
Body Style	Non-rising stem: FLG, MJ, FLG x MJ, MJ x tap Outside stem & yoke: FLG
Actuator Types	Direct-drive handwheel or 2" operating nut, spur or bevel gear, electric motor operator
Standards	AWWA C515, AWWA C509 (up to 12"), NSF/ANSI 61/372 certified



HIGH PERFORMANCE BUTTERFLY VALVES

KEY CHARACTERISTICS	
Size Range	2"-36"
Materials	WCB or CF8M body, CF8M disc, T630SS shaft
Pressure Rating	ASME B16.5 Class 150 (285psi (WCB), 275psi (CF8M))
Temperature Rating	-20°F-400°F
Body Style	Lugged, wafer
Actuator Type	Lever, worm gear, electric motor, pneumatic, hydraulic
Standards	API 609 Category B, NSF 61/372, API 607 Fire Safe, API 598 Seat Leakage



RESILIENT-SEATED BUTTERFLY VALVES

KEY CHARACTERISTICS	
Size Range	2"-36"
Materials	Ductile iron body, CF8M disc, T630SS shaft
Pressure Rating	ASME B16.5 Class 150 (230psi)
Temperature Rating	-20°F-400°F
Body Style	Lugged, wafer
Actuator Type	Lever, worm gear, electric motor, pneumatic, hydraulic
Standards	API 609 Category B, NSF 61/372, API 598 Seat Leakage



KEN-FLEX™ CHECK VALVES

KEY CHARACTERISTICS	
Size Range	3"-36"
Materials	Ductile iron body, EPDM or NBR flapper, 316SS hardware, EPDM or NBR O-rings
Pressure Rating	250psi
Temperature Range	0°F-250°F
Body Style	FLG
Standards	AWWA C508, NSF/ANSI 61/372 certified



AWWA C508 SWING CHECK VALVES

KEY CHARACTERISTICS	
Size Range	2"-36"
Materials	Cast or ductile iron body construction, bronze or resilient disc seat options, bronze body seat ring
Pressure Range	2"-12" to 250psi (globally sourced), 2"-12" to 200psi (domestic), 14"-36" to 150psi
Temperature Range	0°F-250°F
Body Style	FLG, Increasing FLG
Standards	AWWA C508, NSF/ANSI 61/372 certified



DOUBLE DISC SWING CHECK VALVES

KEY CHARACTERISTICS	
Size Range	2"-24"
Materials	Ductile iron body, CF8M discs, EPDM seat, 316SS springs and pins
Pressure Rating	250psi
Temperature Range	0°F-250°F
Body Style	Wafer
Standards	AWWA C518, NSF/ANSI 61/372 certified



MUD VALVES

KEY CHARACTERISTICS	
Size Range	3"-12"
Materials	Ductile iron or stainless steel body, plug and stem cap; NBR gasket and stainless steel hardware
Temperature Range	0°F-250°F
Body Style	ANSI CL 125-lb. flange



HEAVY-DUTY CAST IRON SLIDE (SLUICE) GATES

KEY CHARACTERISTICS	
Size Range	6"x6" - 120"x120"
Materials	ASTM A-126 Cl. B, Class C, ductile iron
Mounting	Direct wall mounted, wall thimble mounted, pipe flange mounted
Actuator Types	Manual operator, electric actuator
Standard	AWWA C560
Head Pressures	Medium and high head pressure applications



FABRICATED STEEL SLIDE GATES

KEY CHARACTERISTICS	
Size Range	Standard dimensions up to 120"x120" and custom sizes available
Materials	Stainless steel type 304, 316 and aluminum type 6061
Mounting	Direct wall mounted, wall thimble mounted, channel mounted (side wall anchored and side wall embedded)
Actuator Types	Manual operator, electric actuator
Standards	AWWA C561, AWWA C562, NSF 61 and NSF 372 certified
Head Pressures	Stainless steel: Low, medium, and high head pressure applications Aluminum: Low head pressure applications



IRON FLAP GATES

KEY CHARACTERISTICS	
Size Range	Light duty: 4"-72", Medium duty: 4"-24", Heavy duty: 8"-108"
Materials	ASTM A-126 Cl. B, Class C, cast iron and ductile iron
Pressure Range	Light duty seating head: Up to 10ft Medium duty seating head: Up to 25ft Heavy duty seating head: Up to 55ft
Mounting	Wall or pipe flange mounted
Key Applications	Gravity and pump discharge



FABRICATED FLAP GATES

KEY CHARACTERISTICS	
Size Range	Round & rectangular standard dimensions and custom-sizes available
Materials	Stainless steel type 304, 316 and aluminum 6066
Mounting	Wall or pipe flange mounted



HYDROSTATIC PRESSURE RELIEF VALVES

KEY CHARACTERISTICS	
Size Range	4"-6"
Materials	Ductile iron, brass
Body Style or Connections	Floor type, wall type



TELESCOPING VALVES

KEY CHARACTERISTICS	
Size Range	4"-36"
Materials	Stainless steel
Actuator Types	Manual operators and electric motor operators



ACTUATION & ACCESSORIES

MPI offers a complete range of lifting and actuating devices - both manual and automated - to control our gates and valves. Our engineers can recommend the correct actuator to meet or exceed the standards set by AWWA.

Geared Operators are customized to the thrust/input and torque requirements of the specific installation.

Electric Motor Operators can be furnished by MPI from all major manufacturers, including EIM, Limitorque, Auma, Rotork, and others. We can help you choose the best operator for your specific application.

Portable Battery-Powered Actuators offer temporary power operation of gates.



DUCTILE IRON PIPE

Since 1955, Ductile iron pipe has been the choice for modern water and wastewater systems. It has excelled in strength, durability, and reliability for transporting raw and potable water, sewage, slurries, and process chemicals.

Tyton Joint Pipe

- Available in 3" - 36" diameters
- Available in Special "Thickness Class" and standard "Pressure Class"

TR Flex Restrained Joint Pipe

- Available in 4" - 36" diameters
- Available in Special "Thickness Class" and standard "Pressure Class"

Mechanical Joint Pipe

- Available in 4" - 24" diameters
- Available in Special "Thickness Class"

Ball and Socket Joint Pipe - River Crossing

- 15 degrees of deflection per joint
- Available 6" - 36" diameters

Options

- Sure Stop 350 Gaskets - Available 3" - 24"
- V-Bio Enhanced Polyethylene Encasement



STANDARDS APPLICABLE TO DUCTILE IRON PIPE

Thickness Design of Ductile Iron Pipe	ANSI/AWWA C150/A21.50
Ductile Iron Pipe for Water and Other Liquids	ANSI/AWWA C151/A21.51, FEDERAL WWP421D, GRADE C
Ductile Iron Pipe for Gravity Flow Services	ANSI/ASTM A746
Ductile Iron Pipe with Threaded Flanges	ANSI/AWWA C115/21.15

COATINGS AND LININGS

Asphaltic	ANSI/AWWA C151/A21.51, ANSI/AWWA C110/A.21.10, ANSI/AWWA C153/A21.53
Cement Lining	ANSI/AWWA C104/A21.4
Various Epoxy Linings and Coatings	Manufacturer's Standard
Exterior Polyethylene Encasement	ANSI/AWWA C105/A21.5

JOINTS PIPE AND FITTINGS

Push-on and Mechanical Rubber Gasket Joints	ANSI/AWWA C111/A21.11, FEDERAL WWP421D
Flanged	ANSI/AWWA C115/A21.12, ANSI B16/1
Grooved and Shouldered	ANSI/AWWA C606
Pipe Threads	AANSI B2.1
Installation	ANSI/AWWA C600

DUCTILE IRON FITTINGS

Ductile Iron fittings are available in C153 Compact and C110 Full Body Mechanical Joint fittings, C110 Flange fittings offered in standard Class 125 and Class 250, as well as Union-Tite, push-on joint fittings. Fittings are available with a wide array of linings (cement, Protecto 401, fusion bonded epoxy, unlined) and coatings (standard asphaltic paint, fusion bonded epoxy, bare), and can be provided as import or domestically manufactured.

C153 Mechanical Joint Fittings - Compact

- Available in 2"-64" diameter

Mechanical Joint Fittings - Full Body

- Available in 2"-48" diameter

Class 125 Flange Fittings

- Available in 2"-64" diameter

Class 250 Flange Fittings

- Available in 2"-30" diameter

Union-Tite Fittings - Push-On

- Utilizes Tyton Joint Gasket

- Available in 4"-24" diameter

Restraints

- Available in 3"-48" diameter

Valve Boxes

- Available for 3"-20" valves



STANDARDS APPLICABLE TO DUCTILE IRON PIPE AND FITTINGS

Ductile Iron Fittings for Water and Other Liquids (3"-36")	ANSI/AWWA C110/A21.10
Ductile Iron Compact Fittings (3"-24")	ANSI/AWWA C153/A21.53
Flange Fittings	ANSI/AWWA C110/A21.10, ANSI B16.1

COATINGS AND LININGS

Asphaltic	ANSI/AWWA C151/A21.51, ANSI/AWWA C110/A.21.10 ANSI/AWWA C153/A21.53
Cement Lining	ANSI/AWWA C104/A21.4
Various Epoxy Linings and Coatings	Manufacturer's Standard
Exterior Polyethylene Encasement	ANSI/AWWA C105/A21.5

FITTING JOINTS

Push-on and Mechanical Rubber Gasket Joints	ANSI/AWWA C111/A21.11, FEDERAL WWP421D
Flanged	ANSI/AWWA C115/A21.12, ANSI B16/1
Installation	ANSI/AWWA C600

FABRICATED DUCTILE IRON PIPE

Fabricated Ductile Iron Pipe is a proven long-lasting process piping solution in the treatment plant world. MPI has six strategic locations to service projects across the United States. Fabricated pipe is made to custom lengths to meet specific project needs, and can be manufactured to meet all USA domestic requirements. Many different joint configurations, lining and coating options are available.

Sizes

- 3"-54" fabricated ductile iron pipe
- 3"-36" grooved ductile iron pipe
- 3"-30" swivel anchor pipe couplings
- 3"-48" ductile iron wall pipes and sleeves

Joints

- Alass 125 & 250 Flange, Grooved, Mechanical Joint, TR Flex Restrained Joint and Tapping Studs

Linings

- Cement, Protecto 401, Glass, others as required

Coatings

- Tnemec Primers & Epoxies, Standard Asphaltic Paint, others as required

Appurtenances

- Taps, Welded Bossed Outlets, Thread-O-Lets



STANDARDS APPLICABLE TO DUCTILE IRON PIPE

Thickness Design of Ductile Iron Pipe	ANSI/AWWA C150/A21.50
Ductile Iron Pipe for Water and Other Liquids	ANSI/AWWA C151/A21.51, FEDERAL WWP421D, GRADE C
Ductile Iron Pipe for Gravity Flow Services	ANSI/ASTM A746
Ductile Iron Pipe with Threaded Flanges	ANSI/AWWA C115/21.15

COATINGS AND LININGS

Asphaltic	ANSI/AWWA C151/A21.51, ANSI/AWWA C110/A.21.10, ANSI/AWWA C153/A21.53
Cement Lining	ANSI/AWWA C104/A21.4
Various Epoxy Linings and Coatings	Manufacturer's Standard

PIPE JOINTS

Push-on and Mechanical Rubber Gasket Joints	ANSI/AWWA C111/A21.11, FEDERAL WWP421D
Flanged	ANSI/AWWA C115/A21.12, ANSI B16/1
Grooved and Shouldered	ANSI/AWWA C606
Pipe Threads	AANSI B2.1
Installation	ANSI/AWWA C600



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