

TREATMENT PLANT PRODUCTS AT A GLANCE



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.

ROTATING DISC GATE VALVES



KEY SPECIFICATIONS	
Size Range	3"-108"
Materials	Ductile Iron ASTM A536, Iron Body Bronze Mounting (IBBM), 304 SS Stems
Pressure Range	Rated pressure up to 300PSI
Temperature Range	33°F-160°F
Body Style and Connections	NRS or OS&Y FLG, MJ, or FLG x MJ
Actuator Types	Spur or Bevel Gear, Electric Motor Operator
Standards	AWWA C500, NSF/ANSI 61/372 certified

SOLID WEDGE GATE VALVES



KEY SPECIFICATIONS	
Size Range	3"-72"
Materials	Ductile Iron Body, SS Stems, 2 Part Epoxy interior & exterior coating
Pressure Range	CL 150 or CL 250
Temperature Range	33 - 180°F
Body Style	NRS or OS&Y style, FLG or MJ ends
Actuator Types	Manual, Spur or Bevel Gear, Electric Motor Operator

REESILIENT SEATED GATE VALVES



KEY SPECIFICATIONS	
Size Range	2"-54"
Materials	Body/Bonnet/Stuffing Box ATSM A-536 Ductile Iron, ASTM A126 Class B Cast Iron, Fully Encapsulated EPDM wedge
Stem materials	Bronze, 304 SS, 316 SS
Pressure Range	250 PSI Working Pressure
Temperature Range	33°F- 125 °F
Body Style	NRS or OS&Y, FLG, MJ or MJ x FLG and MJ x Tap
Actuator Types	Spur or Bevel Gearing, Electric Motor Operator upon request
Standards	AWWA C509, AWWA C515, ANSI/NSF 61/372 Certified

ECCENTRIC PLUG VALVES, 100% PORT



KEY SPECIFICATIONS	
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	0°F-250°F
Body Style	FLG or MJ
Actuator Types	Direct drive with 2" square operating nut, worm gear, electric, pneumatic or hydraulic actuator
Standards	AWWA C517

AWWA C504 BUTTERFLY VALVES



KEY SPECIFICATIONS	SEAT-ON-DISC
Size Range	3"-72"
Materials	Ductile Iron ASTM A536 body cover and vane, seat ring 316 SS, 304 or 630 SS shafts, EPDM
Shaft Seals	Chevron V-Type 3"-24" and O-ring type 30" and up
Pressure Range	CL 150B or CL 250B
Temperature Range	0°F-250°F
Body Style	FLG, MJ or MJxFLG
Actuator Types	Traveling Nut Operator, Lever, Handwheel, 2" OP nut, Electric Motor Operator, Pneumatic Operator
Standards	AWWA C504, NSF/ANSI 61/372 certified (4" and larger)



KEY SPECIFICATIONS	SEAT-ON-BODY
Size Range	3"-36"
Materials	Ductile Iron ASTM A536 body body and disc (316SS disc for 3" size), edge, 316SS stem and fasteners (630SS stem on CL 250B), EPDM seat and packing.
Shaft Seals	Chevron (V-type)
Pressure Range	CL 150B or CL 250B
Temperature Range	0°F-250°F
Body Style	FLG, MJ
Actuator Types	Traveling Nut Operator, Lever, Handwheel, 2" OP nut, Electric Motor Operator, Pneumatic Operator
Standards	AWWA C504, NSF/ANSI 61/372 certified (4" and larger)

HIGH PERFORMANCE BUTTERFLY VALVES



KEY SPECIFICATIONS	
Size Range	2 1/2" - 36"
Materials	A 351 CF8M Stainless Steel or A 216 WCB Carbon Steel bodies; PTFE, MPTFE, RPTFE, Graphite Seat and Packing; 17-4 or 316 SS shafts (Other material available upon request; CF8M Stainless Steel Discs.
Pressure Range	ANSI Class 150 or ANSI Class 300
Temperature Range	-35°- 450°F
Body Connections	Lug Style or Wafer Style
Actuator Types	10 Position Locking Lever, Gear Operator w/ HW or 2" Op Nut, Electric Motor Operator
Standards	API 609

RESILIENT-SEATED BUTTERFLY VALVES



KEY SPECIFICATIONS	
Size Range	2" - 36"
Materials	ASTM A536 65-45-12 Ductile Iron body; EPDM (Standard), BUNA-N, or FKM seat; T431SS shaft; ASTM A351 gr. CF8M disc
Operating Pressure	230 PSI
Temperature Range	-20°- 400°F
Body Connections	Lug Style or Wafer Style
Actuator Types	Hand Lever, Gear w/Hand Wheel, IP68 Gear (Buried Service)
Standards	API 609 Category A, API 598

KEN-FLEX™ RESILIENT HINGED CHECK VALVES



KEY SPECIFICATIONS	
Size Range	3"-24"
Materials	Ductile Iron Body, EPDM Flapper, Stainless Steel Hardware, Buna-N O-Rings
Pressure Range	250 PSI
Temperature Range	0°F-250°F
Body Style	Flanged Connection
Standards	AWWA C508, NSF/ANSI 61/372 certified

AWWA C508 SWING CHECK VALVES



KEY SPECIFICATIONS	
Size Range	2"-36"
Materials	Bronze or Resilient disc seat, Cast Iron A126B or Ductile Iron A536 body, Bronze or SS body seat ring, Limit Switch, Double Lever Arms, air and oil cushions
Pressure Range	2"-12" 200 PSI, 14"-36" 150 PSI
Temperature Range	0°F-250°F
Body Style	Flanged Connection
Standards	AWWA C508, NSF/ANSI 61/372 certified

HEAVY-DUTY CAST IRON SLIDE (SLUICE) GATES



KEY SPECIFICATIONS	
Size Range	6"x 6" thru 120"x 120"
Materials	ASTM A-126 Cl. B, Class C, Ductile Iron
Mounting	Wall Mounted, Thimble Mounted, Flange Mounted
Actuator Types	Manual Operator, Electric Actuator
Standards	AWWA C-560 Cast Iron Slide (Sluice) Gates

FABRICATED STEEL SLIDE GATES



KEY SPECIFICATIONS	
Size Range	Standard dimensions and custom-sizes available
Materials	Stainless Steel Type 304, 316, 2205 & Aluminum Type 6061
Mounting	Wall Mounted, Thimble Mounted, Embedded, Channel Mounted
Actuator Types	Manual Operator, Electric Actuator
Standards	AWWA C-561, AWWA C-562, NSF 61, NSF 372, AWWA C-562

DUCTILE IRON FLAP GATES



* Heavy Duty Coming Soon

KEY SPECIFICATIONS	
Size Range	Medium Duty: 4"-24", *Heavy Duty: 8"-108"
Materials	ASTM A-126 Cl. B, Class C, Ductile Iron
Pressure Range	Medium Duty Seating Head: Up to 25ft & Heavy Duty Seating Head: Up to 55ft
Mounting	Wall or Pipe Flange Mounted
Key Applications	Gravity & Pump Discharge

FABRICATED FLAP GATES



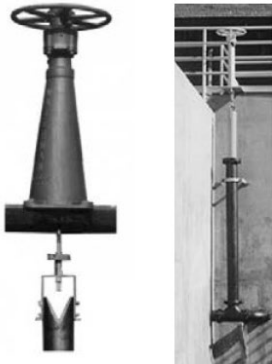
KEY SPECIFICATIONS	
Size Range	Round & Rectangular Standard dimensions and custom-sizes available
Materials	Stainless Steel Type 304, 316, 2205 & Aluminum 6066
Mounting	Wall or Pipe Flange Mounted

HYDROSTATIC PRESSURE RELIEF VALVES



KEY SPECIFICATIONS	
Size Range	4" - 6"
Materials	Ductile Iron, Brass
Body Style or Connections	Floor Type, Wall Type

TELESCOPING VALVES



KEY SPECIFICATIONS	
Size Range	4" thru 36"
Materials	Stainless Steel
Actuator Types	Manual Operators and Electric Motor Operators

MUD VALVES



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

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. These incorporate different gear ratios and handcrank lengths appropriate to the installation.

Electric Motor Operators MPI furnishes electric motor actuators produced by all major manufacturers. These include, but are not limited to, EIM, Limitorque, Auma, and Rotork. All electric actuators contain the following standard accessories: a handwheel for manual operation, open and close position limit switches to assure motor shutoff at the ends of travel, open and close torque limit switches to protect the valve from excessive actuator torque a separate drive nut or coupling. The motors have been designed for high starting torque and long service life. Quarter turn actuators are furnished with adjustable end of position mechanical stops. Remote stations can be furnished as required.

Portable Power Actuators

For temporary portable power operation of gates, we can furnish battery powered actuators.

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" - 48" 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

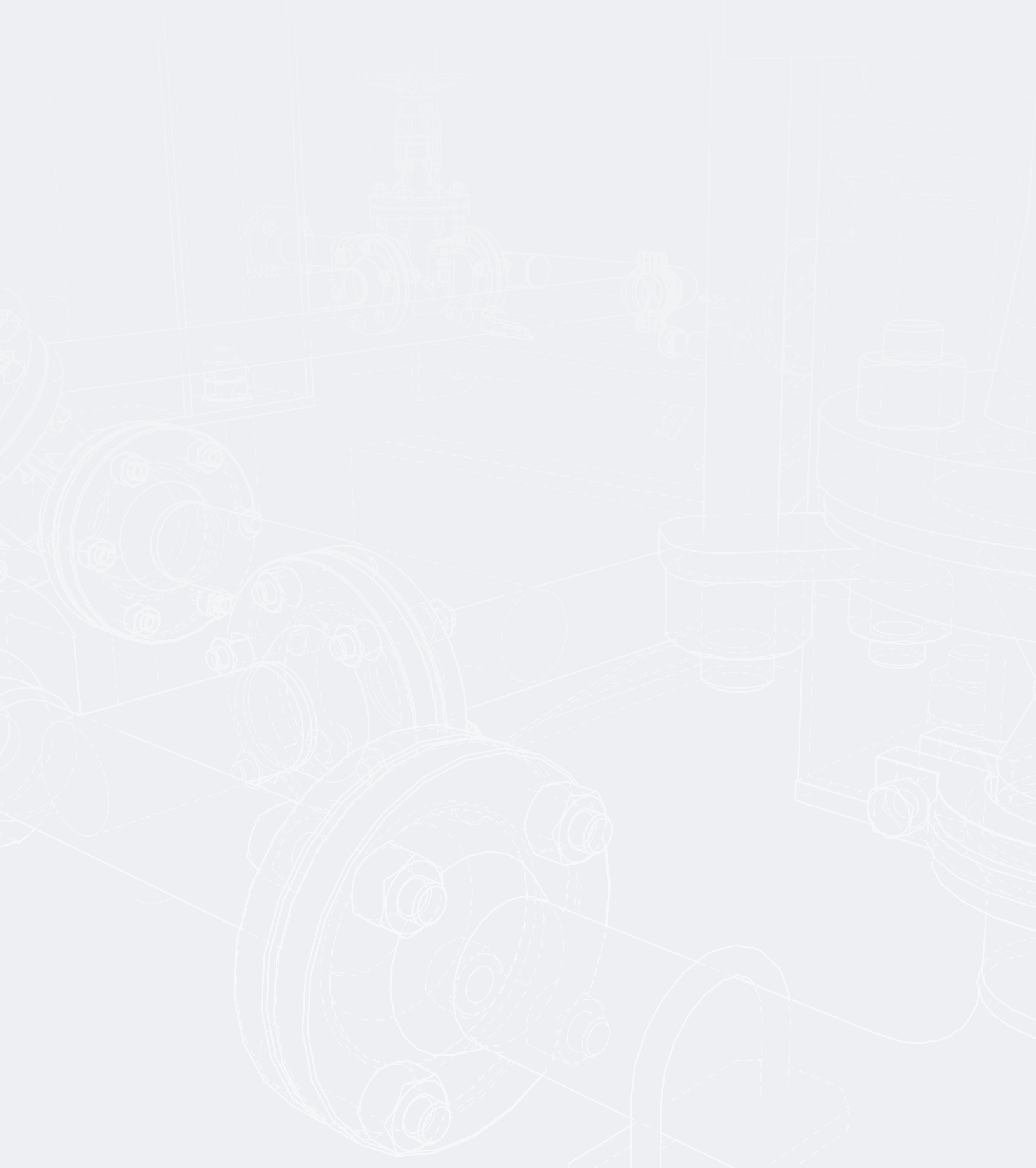
Appurtenances

- 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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