

# 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

## Product Overview

Kennedy Rotating Disc gate valves have been used successfully since 1908. Rotating Disc gate valves clean themselves with every operation, removing deposits during cycling of the valve, eliminating build up on the seating surfaces that could cause leakage. The rotating action of the discs creates a different seating position each time the valve is closed preventing uneven or excessive wear, so the sealing components remain smooth and operational years longer without maintenance or replacement. These advantages, along with uncompromising quality control, ensure that Kennedy Valve rotating disc gate valves will be ideal for water and wastewater applications.



## Key Advantages

- **Rotating Disc Creates A Different Seating Position Each Time The Valve Is Closed.** Adds years of operation without maintenance or replacement!
- **Self-Cleaning Seat** Deposits are removed in travel, so nothing builds up on the seat surface that could cause leaks. Discs are free of pockets that could collect solids.
- **Independent Wedging Design And Seating Action** for smoother valve opening and closing. Use less force!
- **Discs Are Fully Interchangeable And Reversible.** Ensures simple and inexpensive maintenance.
- **Optional Flushing Ports** help clean out the extra waste that can settle in the bottom of the valve.
- **Rollers, Tracks, & Scraper System** available on size 14” and up.

KEY CHARACTERISTICS	
Size Range	3" - 108"
Materials	Ductile Iron Body 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

### Product Overview

Solid Wedge Gate Valves are available in both NRS and OS&Y bonnet configuration options with flanged or mechanical joint ends. Available with hand wheels, operating nuts and when required, integrally cast mounting pads for gears or electric actuators. Valves are protected externally and internally with coatings conforming with AWWA C500.



KEY CHARACTERISTICS	
<b>Size Range</b>	Flanged ends: 2.5" to 72" Mechanical joint ends 3" to 48"
<b>Materials</b>	Ductile Iron Body, SS Stems, 2 Part Epoxy interior & exterior coating
<b>Pressure Range</b>	CL 150 or CL 250
<b>Temperature Range</b>	33 - 180°F
<b>Body Style</b>	NRS or OS&Y style, FLG or MJ ends
<b>Actuator Types</b>	Manual, Spur or Bevel Gear, Electric Motor Operator

## RESILIENT SEATED GATE VALVES

### Product Overview

During the 1980's, McWane introduced one of the first resilient seated gate valves. Today we offer the latest valve technology for simplicity, durability, and superior performance.



### Key Advantages

- **Low Maintenance Design:** long service life without the need to cycle more than once a year.
- **Ease Of Maintenance:** All internal parts are accessible without removing body from the line.
- **Minimal Flow Loss:** All valves are smooth, unobstructed & free of pockets, cavities, & depressions in the seat area allowing minimal flow loss and lower pumping costs.
- **Roller, Track And Scraper System:** keeps the valve clean for prolonged service life. Standard on size 14" - 54".

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

# ECENTRIC PLUG VALVES, 100% PORT

## Product Overview

Our Eccentric Plug Valves are designed for consistent performance, durability and longevity. Built to exacting standards, 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.



## Key Advantages

- **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.

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

# AWWA C504 BUTTERFLY VALVES

## Product Overview

Our robust and rugged butterfly valve design can be relied upon for years of trouble-free service. It has a 100% bubble tight seal via a 316 stainless steel ring located in the body and the rubber seat located on the vane. The rubber seat provides a 'zero leakage' alternative to the metal-seated valves. Butterfly valves offer flow control advantages and economy vs. gate valves, which become increasingly more significant with larger sizes. This superior design provides ease of adjustment along with ensured dependability expected in any distribution system or plant installation.

## Key Advantages

- **Heavy Duty ASTM A536 Ductile Iron Body** designed and manufactured to meet or exceed AWWA standard C504
- **Offset Vane Design:** Heavy Duty A536 Ductile Iron meets or exceeds AWWA C504.
- EPDM rubber is vulcanized to a 304 stainless steel ring and attached to the vane utilizing self-locking, stainless steel cap screws. The body ring seat is composed of 316 stainless steel, forming an uninterrupted 360-degree seal.
- **Overload Protection:** Up to 450 ft-lbs. of input torque against the stops (open/close) to prevent damage to the valve and actuator.
- **Ease Of Maintenance:** The vane rubber seat ring is easily replaced in the field. Bearings for each size Butterfly Valve require no maintenance. Standard on size 14" - 54".



KEY CHARACTERISTICS	
Size Range	3" - 72"
Materials	Ductile Iron ASTM A536 body cover and vane, EPDM vane seat ring, 304 or 630 SS shafts, Buna-N
O-Ring Seals	Chevron Type 3" - 24" and O-Ring type 30" and up
Pressure Range	CL 150 or CL 250
Temperature Range	33°F - 125°F
Body Style	FLG, MJ, or MJ x FLG
Actuator Types	Traveling Nut Operator, Lever, Handwheel, 2" Op nut, Electric Motor Operator, Pneumatic Operator.
Standards	AWWA C504, NSF/ANSI 61/372 certified

## HIGH PERFORMANCE BUTTERFLY VALVES



### Product Overview

Tri-Seal Quarter-Flex Butterfly Valves contain improvements and refinements not found in any other high-performance butterfly valves. These features serve to insure a long and trouble-free life as well as providing simple and less expensive maintenance when required. The valves are manufactured to meet or exceed API 609 standard. Tri-Seal valve applications included air, water, steam, oxygen, and NACE service. Tri-Seal ANSI CL 150 valves are rated up to 285PSI while ANSI CL 300 valves are rated up to 740PSI.

### Key Advantages

- **Solid Seating Material:** Quarter-Flex valves utilize solid polymeric material, not O-ring encapsulated. This solid seating assures service media compatibility even if seat is scratched or damaged.
- **Integrally Cast Travel Stop:** The internal travel stop is designed to provide proper disc positioning and prevent seat damage due to the disc rotating beyond the closed position.
- **Double Offset Shaft:** The double offset shaft design reduces seat wear and enhances sealing by providing a camming action that lifts the disc off the seat. This minimizes seat contact in both directions, resulting in lower operating torques, longer seat life, and prevents the possibility of seat deformation from excessive pressure on the seat.
- **One Piece Shaft:** Heavy duty one-piece shaft (size 2 ½" - 16") constructed of high strength 17-4PH or 316 Stainless Steel, is internally retained by a snap ring located above the packing area (non-wetted area) providing a safe tamper-proof retention that doesn't interfere with packing adjustments.
- **Corrosion Resistance:** 316 Stainless Steel bearings maximize corrosion resistance and minimize shaft deflection for longer service life.

KEY CHARACTERISTICS	
Size Range	2½" - 36"
Materials	A 351 CF8M Stainless Steel or A 216 WCB Carbon Steel bodies; PTFE, 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

# KEN-FLEX RESILIENT HINGED CHECK VALVES

## Product Overview

The Ken-Flex valve is a swing check type utilizing an angled seat and fully encapsulated, EPDM resilient disc and is capable of handling a variety of fluids including flows containing suspended solids. Backflow actuators can be added for manual back flush operation commonly used for priming pumps, flushing lines and system testing. Mechanical disc position indicators are available for instant visual verification of the disc position allowing for limit switches and other monitoring devices to be installed.

## Key Advantages

- **Bubble Tight Seal:** O-ring design on seating surfaces ensure a bubble tight seating. Tested to one million cycles per AWWA C508.
- **Increased Flow Path:** 100% flow area is equal or greater than the attaching pipe size, contributing to low head loss.
- **Angled Flow Way:** Reduces the opportunity for water hammer!
- **Non-Slam Design:** Quiet operation.
- **Spring Loaded:** Valves available with buckling springs to offer a superior solution to water hammer.



KEY CHARACTERISTICS	
Size Range	3" - 12"
Materials	Ductile Iron Body, EPDM Flapper, Stainless Steel hardware, Buna-N O-Rings
Pressure Range	250 PSI
Temperature Range	Up to 125°F
Body Style	Flanged Connection
Standards	AWWA C508, NSF/ANSI 61/372 certified



## SWING CHECK VALVES AWWA C508



### Product Overview

Manufactured with a self contained free swinging disc, our swing check valves provide the ideal answer. Available as Plain, Lever & Weight, Lever & Spring, Air cushioned, or Oil cushioned. Options include limit switches, tapped bosses for drainage, and double lever arms.

### Key Advantages

- **Full Flow:** The waterway flow through the valve is equal to nominal diameter of the pipe.
- **Ease of Maintenance:** All working parts are removable through the top of the valve.
- **Field Adjustable:** Yes, valves are field adjustable to best adapt to operating conditions.
- **Seats:** Bronze to Bronze or Resilient to Bronze seats available to fit your needs.
- **Double Lever Arms:** Extreme rapid flow reversal demands more from your check valve.

KEY CHARACTERISTICS	
Size Range	2" - 30"
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	Resilient Seat Max Temp 125°F, Bronze Seat Max Temp 150°F
Body Style	Flanged Connection
Standards	AWWA C508, NSF/ANSI 61/372 certified

## FLAP VALVES

### Product Overview

Flap Valves are free-opening, tight-closing valves. These valves feature a positive 7.5 degree seating angle, and neoprene to metal seat. The body is constructed of sturdy cast iron, with stainless steel hinge bars, bearing washers, and cotter pins. Positive stops prevent jamming.

### Key Advantages

- Automatic operation
- Rated for pump discharge
- Cast iron frame and cover
- Iron cover with neoprene seat provide tight closure



KEY CHARACTERISTICS	
Size Range	4" thru 24"
Materials	Cast Iron
Pressure Range	Seating Head Only 25 feet
Mounting	Wall or Pipe Flange Mounted

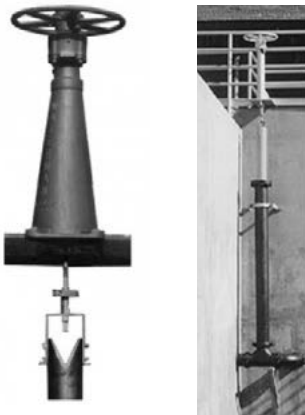
## HYDROSTATIC PRESSURE RELIEF VALVES



Hydrostatic pressure relief valves are used in treatment plant tanks to keep them from floating due to excess ground water beneath them. When this condition occurs, the pressure will open the cover of the valve allowing water to enter, thereby equalizing pressure inside and outside the tank. Pressure relief valves can be placed in the bottom or sidewall of concrete tanks.

KEY CHARACTERISTICS	
<b>Size Range</b>	4" - 6"
<b>Materials</b>	Ductile Iron, Brass
<b>Body Style or Connections</b>	Floor Type, Wall Type

## TELESCOPING VALVES



Telescoping Valves are used in tanks, lagoons, and treatment plants for drawing surface water from one holding area to another or for regulating fluid levels between tanks. Their unique design uses a siphon to move the water. Unlike opening a gate, they will not disturb sediments on the bottom of the tank.

KEY CHARACTERISTICS	
<b>Size Range</b>	4" thru 36"
<b>Materials</b>	Stainless Steel
<b>Actuator Types</b>	Manual Operators and Electric Motor Operators

## SHEAR GATES



Shear gates are designed for filling or draining tanks in treatment plants, for low pressure low sludge drainage lines and other similar applications. They are ideal for tanks where sludge is likely to stick as the shearing action on closure scrapes this material free. These gates are used in low seating pressure applications only. Actuation is manual with a lifting rod.

KEY CHARACTERISTICS	
<b>Size Range</b>	4" thru 6"
<b>Materials</b>	Cast Iron Class B
<b>Pressure Range</b>	Seating Head Only (not suitable for unseating head pressure)
<b>Mounting</b>	Designed to mount to an ANSI 125# Flange or Wall Mounted



## MUD VALVES

### Product Overview

Mud Valves feature rugged cast iron frame construction designed for long life in tough conditions. They are commonly applied in settling basin lines, waterworks and sewage treatment plants, settling basins and similar industrial applications where sedimentateous material must be flushed from the system. Because valves of this type are installed in hard-to-access locations, reliability and longevity are very important.

KEY CHARACTERISTICS	
<b>Size Range</b>	4" thru 12" (Other sizes available upon request)
<b>Materials</b>	Cast iron, stainless steel
<b>Body Style</b>	Designed to mount to an ANSI 125# Flange
<b>Actuator Types</b>	Standard 2" square operating nut

## 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 hand-wheel 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 electric, gasoline engine or gas-engine-driven hydraulic actuators.

## HEAVY-DUTY CAST IRON SLIDE (SLUICE) GATES



### Product Overview

Heavy duty cast iron slide gates are used in applications where safety and reliable performance are essential (dams, tidal environments, water treatment plants) and where outstanding product longevity is desired. They are preferred for high-head (up to 200') and high debris environments as well as for critical gateways in treatment plants.

### Key Advantages

- Bronze-to-bronze seating surfaces lock into a dovetailed groove in the gate frame and disc, creating a tight seal for low leakage.
- Optional Q-Seal bottom seal provides continuous flushing for high-debris environments, increased flow and where complete drainage of the chamber is required.
- High strength dual-bolt adjustable bronze wedge system located above the packing area (non-wetted area) providing a safe tamper-proof retention that doesn't interfere with packing adjustments.

KEY CHARACTERISTICS	
Size Range	6"x 6" thru 120"x 120"
Materials	ASTM A-126 Cl. B, Class C, Ductile Iron, Ni & Ni-Resist
Mounting	Wall Mounted, Thimble Mounted, Flange Mounted
Actuator Types	Manual Operator, Electric Actuator
Standards	AWWA C-561 Cast Iron Slide (Sluice) Gates

## STAINLESS STEEL SLIDE GATES



### Product Overview

Stainless steel slide gates are engineered for excellent sealing while providing maximum resistance to corrosion. The gates feature Ultra High Molecular Weight Polyethylene (UHMW) sliding and seating surfaces, dissimilar from the gate slide material, resulting in low coefficient of friction while maintaining superior corrosion resistance.

### Key Advantages

- Designed to maintain leakage at 1/2 that allowed by AWWA standard.
- Available in normal aperture configurations, channel (embedded or bolted), or as weirs (downward opening)

KEY CHARACTERISTICS	
Size Range	Standard dimensions and custom-sizes available
Materials	Stainless Steel Type 304 & 316
Mounting	Wall Mounted, Thimble Mounted, Embedded, Channel Mounted
Actuator Types	Manual Operator, Electric Actuator
Standards	AWWA C-561, AWWA C-513, NSF 61, NSF 372



## 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 3" - 24" diameters
- Available in Special "Thickness Class"

### MJ Lock Joint Pipe – Restrained Mechanical Joint

- Available 3" - 30" diameters

### Ball and Socket Joint Pipe - River Crossing

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

### Long-Span Pipe

- Utilizes unique O-ring rubber gasket
- Achieves lengths of 27-foot up to 45-foot or longer
- Available 6" - 36" diameters

### 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	ANSI 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 lining and coating options and can be provided as import or domestically manufactured.



### C153 Mechanical Joint Fittings – Compact

- Available in 2" – 64" diameter
- Linings – Cement lining, Protecto 401, Fusion Bonded Epoxy, Unlined
- Coatings – Standard Asphaltic Paint, Fusion Bonded Epoxy, Bare

### C110 Mechanical Joint Fittings – Full Body

- Available in 2" – 48" diameter
- Linings – Cement lining, Protecto 401, Fusion Bonded Epoxy, Unlined
- Coatings – Standard Asphaltic Paint, Fusion Bonded Epoxy, Bare

### C110 Class 125 Flange Fittings

- Available in 2" – 64" diameter
- Linings – Cement lining, Protecto 401, Fusion Bonded Epoxy, Unlined
- Coatings – Prime Coated, Fusion Bonded Epoxy, Bare

### C110 Class 250 Flange Fittings

- Available in 2" – 30" diameter
- Linings – Cement lining, Protecto 401, Fusion Bonded Epoxy, Unlined
- Coatings – Prime Coated, Fusion Bonded Epoxy, Bare

### C153 Union-Tite Fittings – Push-On

- Utilizes Tyton Joint Gasket
- Available in 4" – 24" diameter
- Linings – Cement lining, Protecto 401, Fusion Bonded Epoxy, Unlined
- Coatings – Prime Coated, Fusion Bonded Epoxy, Bare

### 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. McWane Plant & Industrial has six strategic locations to service projects across the United States. Fabricated pipe is made to custom lengths to meet specific project needs. Many different joint configurations, lining and coating options are available. Our fabricated products can be manufactured to meet all USA domestic requirements.

- Available in 3" - 54"
- Joints – Class 125 & 250 Flange, Grooved, Mechanical Joint, TR Flex Restrained Joint
- 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

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

### COATINGS AND LININGS

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

### PIPE JOINTS

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



**MPI – MCWANE PLANT & INDUSTRIAL**

1201 Vanderbilt Road Birmingham, AL 35234 866.924.8674 [www.mcwanepi.com](http://www.mcwanepi.com) [sales@mcwanepi.com](mailto:sales@mcwanepi.com)

**Kennedy Valve | Tyler Union | McWane Ductile | Waterman**