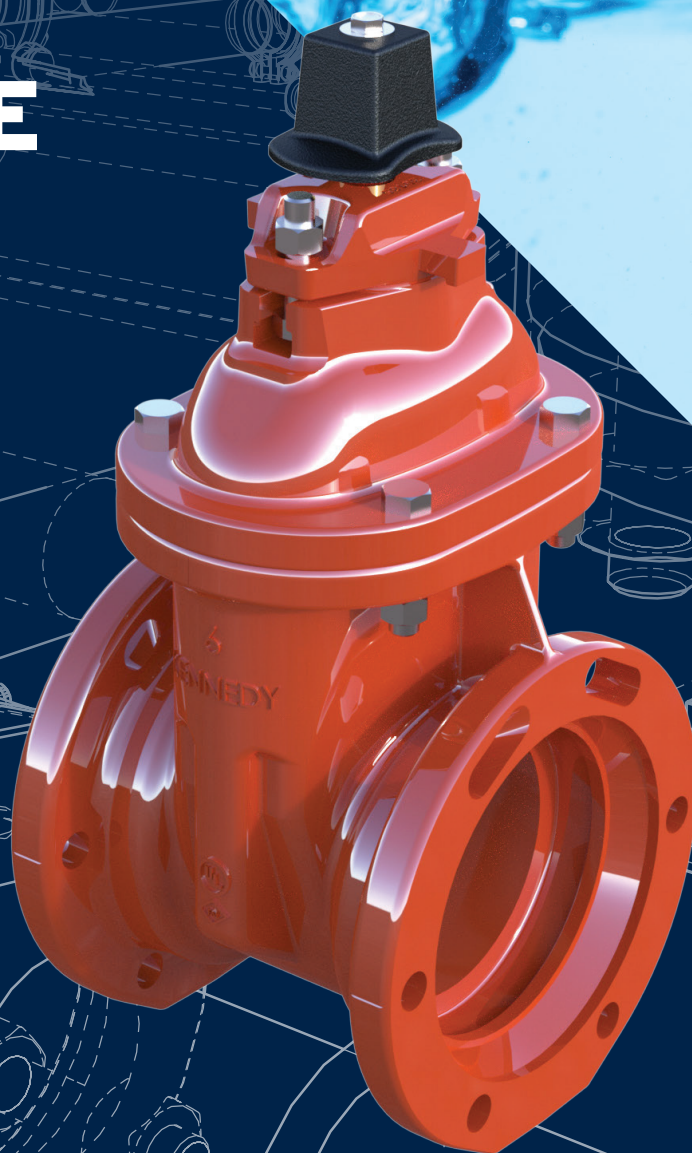


# RESILIENT SEATED GATE VALVE

AWWA C515  
SIZES 2"-54"

[mcwanepi.com](http://mcwanepi.com)



A detailed technical line drawing of a mechanical assembly, likely a pump or motor component, rendered in white lines on a dark blue background. The drawing shows various parts including a central shaft, a large circular flange with multiple bolt holes, and various mounting brackets and bolts. The perspective is from a slightly elevated side angle, showing the internal and external structure of the assembly.

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# THE INTEGRATED SOLUTION FOR TREATMENT PLANT NEEDS

Combining expertise from eight key water infrastructure brands in the McWane family of companies, McWane Plant & Industrial (MPI) provides a singular access point for the essential products and service required for any water or wastewater plant project.

## WHY MPI?

We're a new kind of company formed on the basis of three simple goals:

- To provide a primary source for best-in-class products from time-tested brands
- Offer veteran specialists as resources for any plant project of any scale
- Increase the ease and efficiency of the planning and completion of our clients' 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.

The extended manufacturing capabilities of MPI 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.

MPI – best in-class

# RESILIENT SEATED GATE VALVE

## C515 2"-54"



### PRODUCT OVERVIEW

Resilient seated gate valves were introduced to the waterworks industry in the 1980s and became a dominant preference for use in distribution systems. Valves comply with AWWA C515 reduced wall standard. The valve contains a wedge fully encapsulated with EPDM rubber that is permanently bonded to the wedge and meets ASTM D429. The valve body, bonnet, and stuffing plate are

coated with fusion bonded epoxy (FBE) and applied in accordance with AWWA C550 and is ANSI/NSF 61/372 certified. Optional configurations also include non-rising stem (NRS) or outside screw and yoke (OS&Y) and can be ordered with a spur or bevel gear.

KEY CHARACTERISTICS	
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

# RESILIENT SEATED GATE VALVE FEATURES & BENEFITS

## STANDARD FEATURES

- Body/Bonnet/Stuffing Box: ASTA A-536 Grade 70-50-5 Ductile Iron
- ASTM A126 Class B cast iron available in 2"-12"
- Wedge: Fully encapsulated with EPDM meets ASTM D249
- 250 PSI working pressure
- Valves available in NRS and OS&Y
- Manganese bronze stem (NRS 2"-12" and 14"-24" OS&Y)
- 2"-12" OS&Y 304 SS stem
- 304 SS Fasteners
- 18" and above require gearing
- 30" and above come standard with CleanTrack™ Technology; a roller, track and scraper system

## ADDITIONAL FEATURES

- Low Ease of Maintenance: Provides long service life without the need to cycle more than once a year. All internal parts are accessible without removing the valve 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.
- Corrosion Resistant: Fusion bonded epoxy coating-protects both the interior and exterior of the valve. Exterior is suitable for overcoating for matching color coordination in plant settings or buried service applications.
- ANSI/NSF 61/372 certified
- Suitable for potable water or wastewater service applications
- Tamper/Supervisory Switch available on 2.5" - 12" OS&Y
- Post Plates available 3" - 24"



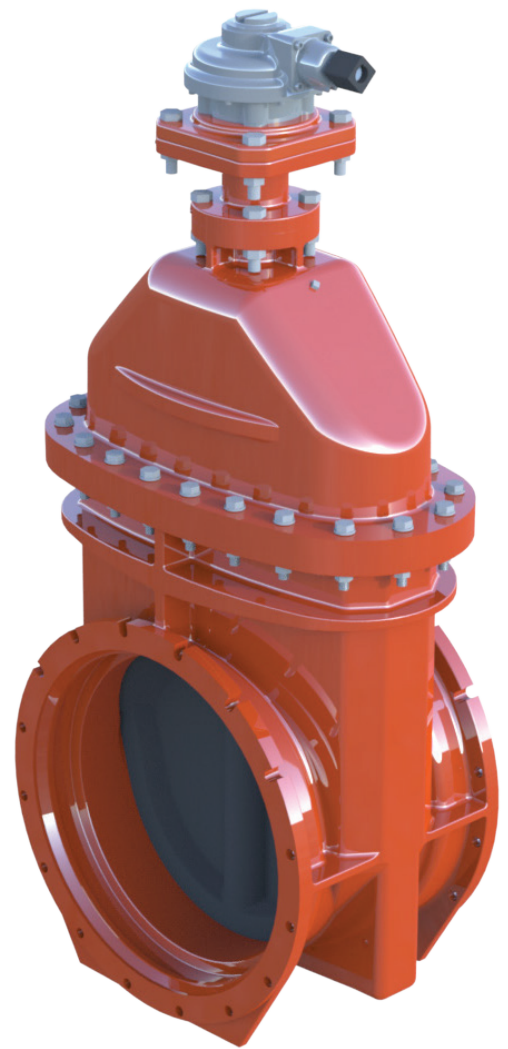
# RESILIENT SEATED GATE VALVE FEATURES & BENEFITS

## RESILIENT WEDGE GATE VALVE WITH CLEANTRACK™ TECHNOLOGY

In America today, systems are increasing their demand for larger-sized water lines. With these growing demands, Kennedy has made the commitment to meet and surpass previous large resilient seated gate valve requirements with a new concept- CleanTrack™ Technology.

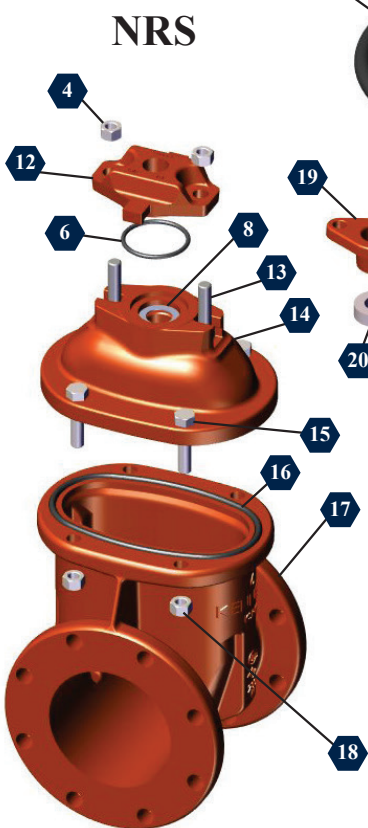
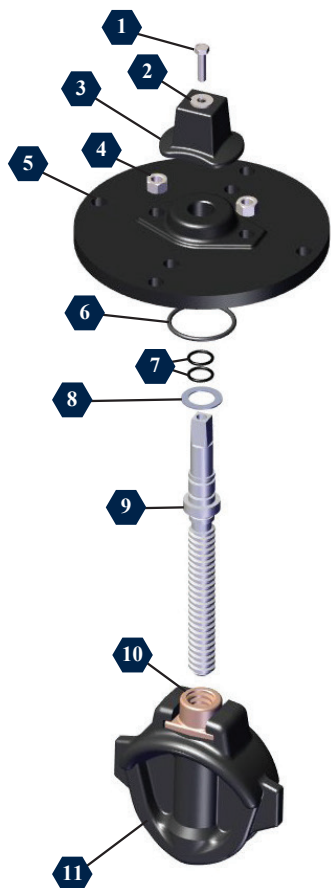
Sediment buildup in valves has been a costly problem since the first water valves were created. In years past, systems with sediment-laden valves faced time consuming and costly valve removal or repair. Advanced large double disc technologies of decades past used various methods to clear the line of debris prior to closing.

MPIs 24"-54" gate valves have taken the best of the century-old double disc design and integrated it with the best of the latest resilient seated gate valve design and technology, to create valves with CleanTrack™ technology. CleanTrack™ uses a unique roller-scraper system that automatically cleans the track in the valve body when the valve is closing. Less sediment buildup makes for improved performance which means reduced maintenance and lower potential replacement costs.



# RESILIENT SEATED GATE VALVE COMPONENTS

## NRS with POST PLATE



## OS&Y



NO.	DESCRIPTION	MATERIAL	NO.	DESCRIPTION	MATERIAL
1	Op-Nut Bolt	Stainless Steel	17	Body	Ductile Iron
2	Op-Nut Washer	Stainless Steel	18	Cover / Body Nut	Stainless Steel
3	Op-Nut	Ductile Iron	19	Packing Gland	Ductile Iron
4	Post Plate / Stuffing Box Nut	Stainless Steel	20	Packing	Garlock Style 18
5	Post Plate	Cast Iron	21	OS&Y Wheel Nut	Bronze
6	Post Plate / Stuffing Box O-Ring	Rubber	22	Hand Wheel	Cast Iron
7	Stem O-Rings	Rubber	23	OS&Y Cover	Ductile Iron
8	Thrust Teflon Washer	Plastic	24	OS&Y Yoke Washer	Plastic
9	NRS Stem	Stainless Steel	25	OS&Y Yoke Nut	Bronze
10	NRS Stem Nut	Bronze	26	Packing Stud	Stainless Steel
11	Resilient Wedge	EPDM Encapsulated Ductile Iron	27	OS&Y Stem	Stainless Steel
12	Stuffing Box	Ductile Iron	28	OS&Y Stem O-Ring	Rubber
13	Post Plate / Stuffing Box Plate Bolt	Stainless Steel	29	OS&Y Stem Pin	Stainless Steel
14	NRS Cover	Ductile Iron	30	OS&Y Stem Head	Stainless Steel
15	Cover / Body Bolt	Stainless Steel	31	Handwheel Yoke Washer	Brass
16	Cover / Body O-Ring	Rubber			



## **ADDITIONAL PARTS OPTIONS & ACCESSORIES**

### **Bypass Valves**

The main purpose of a Bypass Valve is to help with direct pressure on the wedge seat, preventing damaging the main valves seat when opening the Bypass Valve prior to the main valve. A Bypass Valve is available on size 30" and up.

### **Gearing**

Bevel or Spur gears optional on 14" & 16" valves and required 18" & up for proper operation.

### **Indicator Posts**

Indicator Posts provide the reliable way of operating a buried or inaccessible gate valve for opening or closing purposes. Indicator Posts come with a handwheel. As an option an "L" shaped handle is available which can be fitted with a secure lock. Several models are available.

### **T-Handles**

Light weight and portable t-wrench available in steel or stainless steel.

### **Stem Guides**

Stem guides are installed as wall brackets to support extension arms. They are available in three sizes. They are fully adjustable and are made of high strength ductile iron or stainless steel. They should be installed at a height which does not permit the stem to be unsupported through a length or more than 10 feet.

### **Electric Motor Operators**

A variety of electric motor operators are available to meet your specifications.

### **Extension Stems**

Valve extension stems are available in steel, or bronze and are provided with a 2" square nut or handwheel as specified. When ordering extension stems state the length and give distance from bottom face of flange to top of handwheel or nut, or to base of floor stand.

### **Floor Boxes**

Floor boxes are designed for use with non-rising stem valves. Installed in concrete floors or slabs they provide support for the extension stem and a cover for the operating nut on the stem.

### **Chainwheels**

Chainwheels are normally used for operation of valves located overhead. They are provided with chain guides to prevent chain from slipping off the wheel. They can be furnished rust proof if specified. Chain wheels are mounted directly on the handwheel and are of approximately the same diameter.

# ENGINEERING FEATURES

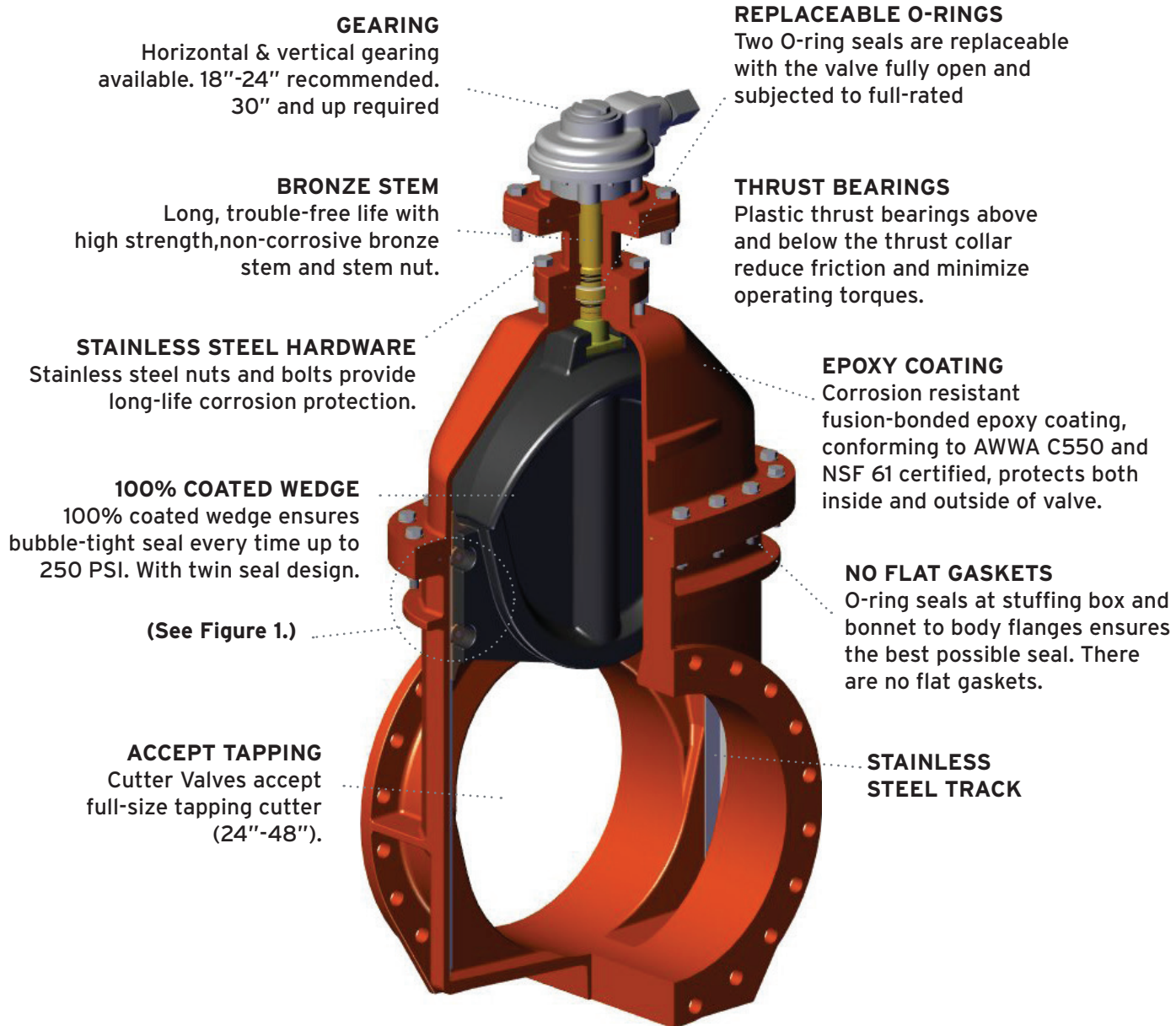
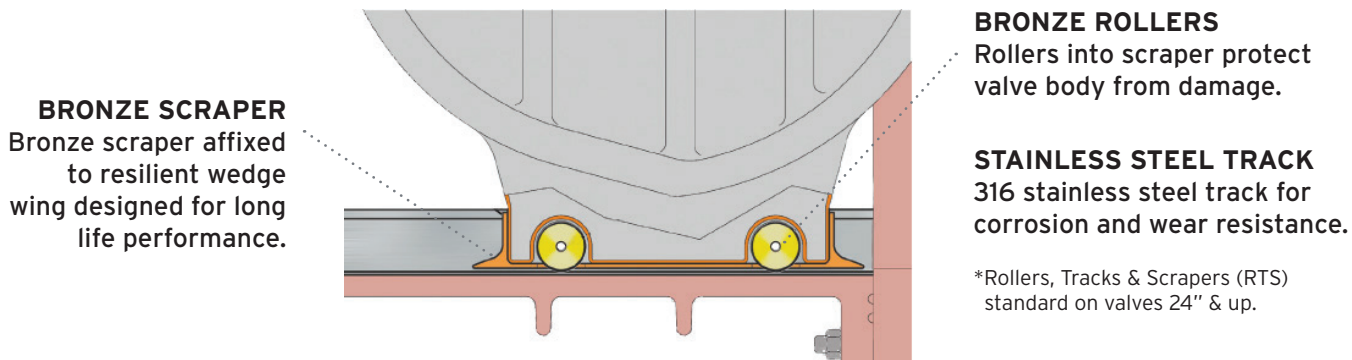


FIG 1. CLEANTRACK™ TECHNOLOGY



# RECOMMENDED SPECIFICATIONS

## RESILIENT WEDGE GATE VALVE 2"-54"

### GENERAL

The valves shall be either non-rising or rising stem, opening by turning left to right, and provided with 2" square operating nut or a handwheel with the "open" and an arrow cast in the metal to indicate the direction to open.

The body, bonnet and stuffing plate shall be coated with fusion bonded epoxy, both interior and exterior on body and bonnet. Epoxy shall be applied in accordance with AWWA C550 and be NSF61 and NSF372 certified. Position Indicator Valve plates shall be painted black.

Waterway shall be smooth, unobstructed & free of pockets, cavities, & depressions in the seat area. Valves shall be able to accept a full-size tapping cutter.

### REFERENCE STANDARDS

Resilient Seated Gate Valves shall conform to the latest version of AWWA Standard C515 covering Resilient Seated Gate Valves for water supply service. Valves used in portable water service shall be certified to NSF/ANSI 61 "Drinking Water System Components- Health Effects" and certified to be lead free in accordance with NSF/ANSI 372.

### VALVE BODY

The AWWA C515 valves shall have ductile iron body. The valve body shall be cast and manufactured to ASTM A-536 Grade 70-50-5 ductile iron. The wedge and disc shall be totally encapsulated with rubber. The sealing rubber shall be permanently bonded to the wedge to meet ASTM tests for rubber metal bond ASTM D249. The valve body interior and exterior shall be coated with fusion bonded epoxy suitable for overcoating when required.

### VALVE BONNET

The AWWA C515 valves shall be cast and manufactured to ASTM A-536 Grade 70-50-5 ductile iron. The valve bonnet shall be cast and manufactured to ASTM A-536 Grade 70-50-5 ductile iron. The valve bonnet interior and exterior shall be coated with fusion bonded epoxy suitable for overcoating when required.

### VALVE WEDGE

Valve wedge shall feature a metal insert fully encapsulated with EPDM meeting ASTM D249.

### TESTING

All valves should be tested in accordance with AWWA C515 requirements. Manufacturers shall provide written confirmation of testing when requested by customer.

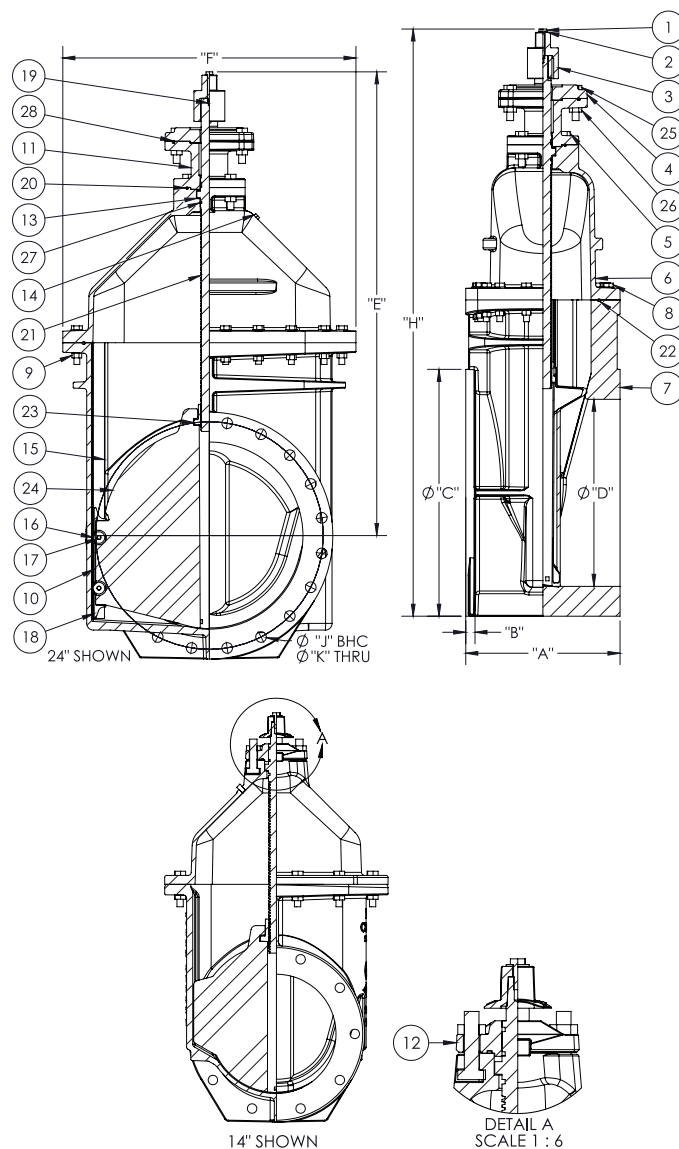


# C515 NON-RISING RESILIENT SEATED GATE VALVE

## FLANGED ENDS

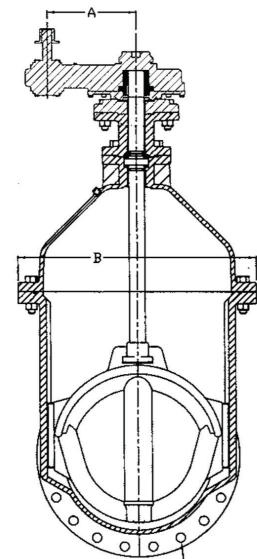
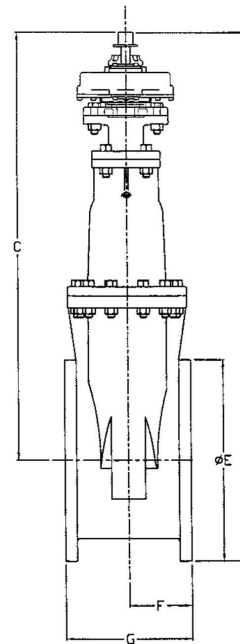
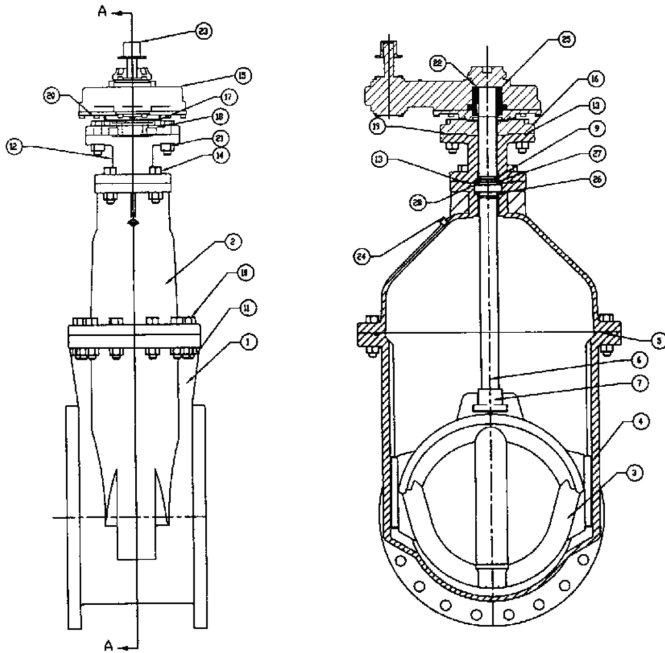
### SIZES 2"-24"

PARTS LIST		
SIZE	A	B
1	Bolt	GR 2 ZN SAE J429
2	Washer	GR 2 ZN SAE J429
3	OP Nut	Grey Iron ASTM A126 Class B
4	Adaptor Plate (18"-24")	Ductile Iron ASTM A536 70-50-05
5	Hex Head Bolt	GR 2 ZN SAE J429 / ASTM F593 S30400/S31600
6	Cover	Ductile Iron ASTM A536 70-50-05
7	Body	Ductile Iron ASTM A536 70-50-05
8	Hex Head Bolt	GR 2 ZN SAE J429 / ASTM F593 S30400/S31600
9	Hex Nut	GR 2 ZN SAE J429 / ASTM F593 S30400/S31600
10	Wedge Cover (18"-20")	Delrin
11	Extension (18"-24")	Ductile Iron ASTM A536 70-50-05
12	Stuffing Box (2"-16")	Ductile Iron ASTM A536 70-50-05
13	Thrust Washer	Delrin
14	Pipe Plug (14"-24")	18-8SS
15	Track (24")	AL Bronze ASTM B148 C95400
16	Roller (24")	Copper Alloy ASTM B584 C95400
17	Pin (24")	316 Stainless Steel
18	Scraper (24")	Copper Alloy ASTM B584 C95400
19	Square Key (18"-24")	GR 2 ZN SAE J429
20	O-Ring	EPDM
21	Stem	Manganese Bronze ASTM B584 C86700 / 304SS ASTM A276 S30400 / 316SS ASTM A276 S31600 / NDZ B763 C99500 (2"-12")
		Manganese Bronze ASTM B584 C86200 / 304SS ASTM A276 S30400 / 316SS ASTM A276 S31600 / NDZ B763 C99500 (14"-24")
22	O-Ring	EPDM
23	Stem Nut	Manganese Bronze ASTM B584 C86700 (2"-12")
		Copper Alloy ASTM B584 C87850 (14"-24")
24	Wedge	Ductile Iron ASTM A536 70-50-05 / EPDM Rubber
25	Ind. Post Plate Hex Bolts	ASTM F593 S30400
26	Ind. Post Plate Hex Nuts	ASTM F594 S30400
27	Stem O-Ring	EPDM
28	Ind. Post Plate O-Ring	EPDM



DIMENSIONS										
SIZE	A	B	C	D	E	F	H	J	K	No. Turns to Open
2	7"	5/8"	6"	2"	11-7/16"	6"	14-7/16"	4-3/4"	5/8" x 4	6-1/2
2-1/2	7-1/2"	11/16"	7"	2-1/2"	12-1/16"	7"	15-9/16"	5-1/2"	5/8" x 4	8
3	8"	3/4"	7-1/2"	3"	12-3/8"	7-1/2"	16-15/16"	6"	5/8" x 4	10
4	9"	15/16"	9"	4-1/4"	14-3/4"	9"	20-1/4"	7-1/2"	5/8" x 4	13
6	10-1/2"	1"	11"	6-1/4"	19"	11-3/8"	24-1/8"	9-1/2"	3/4" x 8	19
8	11-1/2"	1-1/8"	13-1/2"	8-1/4"	22-1/2"	13-1/2"	29-1/2"	11-3/4"	3/4" x 8	25
10	13"	1-3/16"	16"	10-1/4"	26-1/2"	16"	34-1/2"	14-1/4"	7/8" x 12	31
12	14"	1-1/4"	19"	12-1/4"	30"	19"	39-1/2"	17"	7/8" x 12	37
14	15"	1-3/8"	21-1/16"	14-1/4"	38-5/16"	26-11/16"	49"	18-3/4"	1" x 12	52
16	16"	1-7/16"	23-1/2"	16-1/4"	37-5/16"	26-11/16"	49-1/8"	21-1/4"	1" x 16	52
18	17"	1-9/16"	25"	18-1/4"	56-1/16"	32-1/4"	68-9/16"	22-3/4"	1-1/4" x 16	64
20	18"	1-11/16"	27-1/2"	20-1/4"	56-1/4"	32-1/4"	70"	25"	1-1/4" x 20	64
24	20"	1-7/8"	32"	24-1/4"	60-1/8"	38"	76-1/8"	29-1/2"	1-3/8" x 20	88

# C515 NON-RISING RESILIENT SEATED GATE VALVE FLANGED ENDS WITH SPUR GEARING SIZES 14"-24"



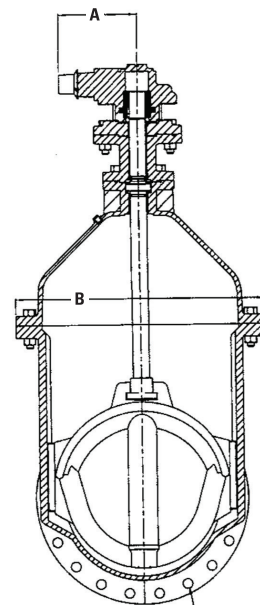
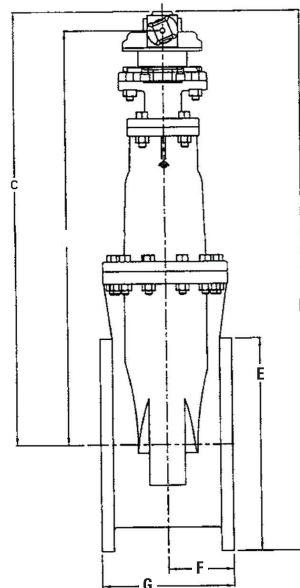
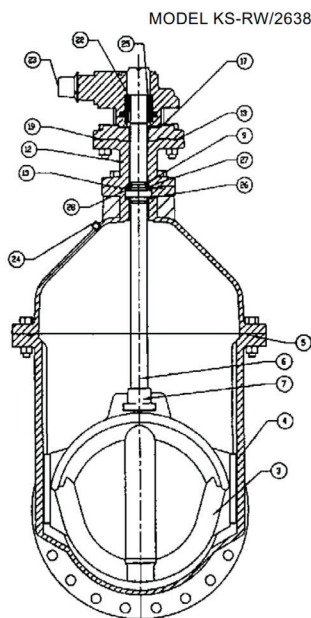
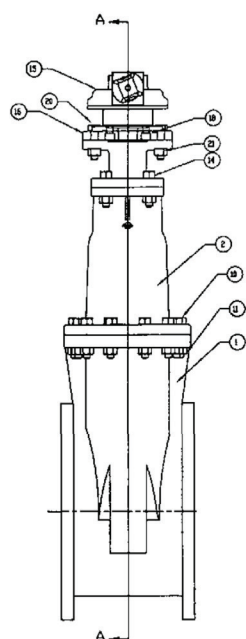
H- No. & Size of Bolts  
Drilling per ANSI B16.1  
Class 125

DIMENSIONS								
SIZE	A	B	C	D	E	F	G	H
14	8	26-11/16	52-1/8	63	21	7-1/2	15	1" x 12
16	8	26-11/16	51-1/8	63	23-1/2	8	16	1" x 16
18	12	32-1/4	58	70-1/2	25	8-1/2	17	1-1/8" x 16
20	12	32-1/4	57	70-1/2	27-1/2	9	18	1-1/8" x 20
24	12	38	62-5/8	78-5/8	32	10	20	1-3/8" x 20

30" & larger sizes require gearing.  
24" are now furnished with rollers, tracks, and scrapers.

PARTS LIST				PARTS LIST				PARTS LIST			
No.	PART	MATERIAL	ASTM DESIGNATION	No.	PART	MATERIAL	ASTM DESIGNATION	No.	PART	MATERIAL	ASTM DESIGNATION
1	Body	Ductile Iron	ASTM A536 GR 65-45-12	11	Hex Nut	Stainless Steel	ASTM F593-304	20	Hex Bolt	Stainless Steel	ASTM F593-304
2	Cover	Ductile Iron	ASTM A536 GR 65-45-12	12	Extension	Ductile Iron	ASTM A536 GR 65-45-12	21	Hex Nut	Stainless Steel	ASTM F593-304
3	Wedge	Ductile Iron / Rubber EPDM	ASTM A536 GR 65-45-12 / EPDM	13	O-ring	Rubber	NBR	22	Key	Steel	
4	Wedge Cap (18"-24")	Delrin	Delrin	14	Hex Head Bolt	Stainless Steel	ASTM F593-304	23	OP Nut	Ductile Iron	ASTM A536 GR 65-45-12
5	O-ring	Rubber	NBR	15	Actuator - 3:1 (18"-24") 2:1 (14"-16")			24	Pipe Plug	Steel	Steel
6	Stem	Bronze	ASTM B584 C86700	16	Adapter Plate	Ductile Iron	ASTM A536 GR 65-45-12	25	Drive Sleeve	Steel	AISI 1023
7	Stem Nut	Bronze	ASTM B584 C86700	17	Actuator Gasket	Rubber	NBR	26	Cover Bushing	Bronze	ASTM B584 C86700
9	O-ring	Rubber	NBR	18	Socket Head Bolt	Alloy Steel	Alloy Steel	27	Extension Bushing	Bronze	ASTM B584 C86700
10	Hex Head Bolt	Stainless Steel	ASTM F593-304	19	O-ring	Rubber	NBR	28	Thrust Bearing (18"-24")	Delrin	Delrin

# C515 NON-RISING RESILIENT SEATED GATE VALVE FLANGED ENDS WITH BEVELED GEARING SIZES 14"-24"



H- No. & Size of Bolts  
Drilling per ANSI B16.1  
Class 125

DIMENSIONS									
SIZE	A	B	C	D	E	F	G	H	J
14	9-1/8	26-11/16	48-5/8	59-1/2	21	7-1/2	15	1" x 12	46-3/8
16	9-1/8	26-11/16	47-5/8	59-1/2	23-1/2	8	16	1" x 16	45-3/8
18	10-1/8	32-1/4	55-3/4	68-1/4	25	8-1/2	17	1-1/8" x 16	55-3/4
20	10-1/8	32-1/4	54-3/4	68-1/4	27-1/2	9	18	1-1/8" x 20	52-3/4
24	10-1/8	38	60-3/8	76-1/4	32	10	20	1-3/8" x 20	57-7/8

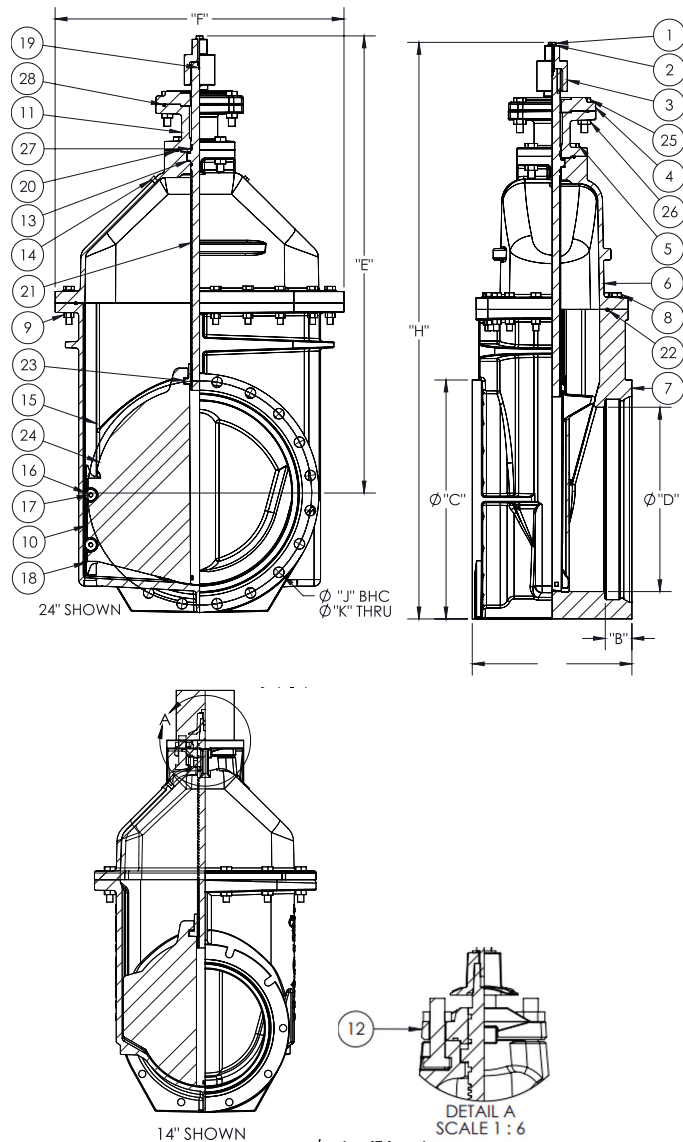
30" & larger sizes require gearing.  
24" are furnished with rollers, tracks, and scrapers.

PARTS LIST				PARTS LIST				PARTS LIST		
No.	PART	MATERIAL	ASTM DESIGNATION	No.	PART	MATERIAL	ASTM DESIGNATION	No.	PART	ASTM DESIGNATION
1	Body	Ductile Iron	ASTM A536 GR 65-45-12	11	Hex Nut	Stainless Steel	ASTM F593-304	20	Hex Bolt	Stainless Steel
2	Cover	Ductile Iron	ASTM A536 GR 65-45-12	12	Extension	Ductile Iron	ASTM A536 GR 65-45-12	21	Hex Nut	Stainless Steel
3	Wedge	Ductile Iron / Rubber EPDM	ASTM A536 GR 65-45-12 / EPDM	13	O-ring	Rubber	NBR	22	Key	Steel
4	Wedge Cap (18"-24")	Delrin	Delrin	14	Hex Head Bolt	Stainless Steel	ASTM F593-304	23	OP Nut	Ductile Iron
5	O-ring	Rubber	NBR	15	Actuator - 3:1 (18"-24") 2:1 (14"-16")			24	Pipe Plug	Steel
6	Stem	Bronze	ASTM B584 C86700	16	Adapter Plate	Ductile Iron	ASTM A536 GR 65-45-12	25	Drive Sleeve	Steel
7	Stem Nut	Bronze	ASTM B584 C86700	17	Actuator Gasket	Rubber	NBR	26	Cover Bushing	Bronze
9	O-ring	Rubber	NBR	18	Socket Head Bolt	Alloy Steel	Alloy Steel	27	Extension Bushing	Bronze
10	Hex Head Bolt	Stainless Steel	ASTM F593-304	19	O-ring	Rubber	NBR	28	Thrust Bearing (18"-24")	Delrin

# C515 NON-RISING RESILIENT SEATED GATE VALVE

## MECHANICAL JOINT

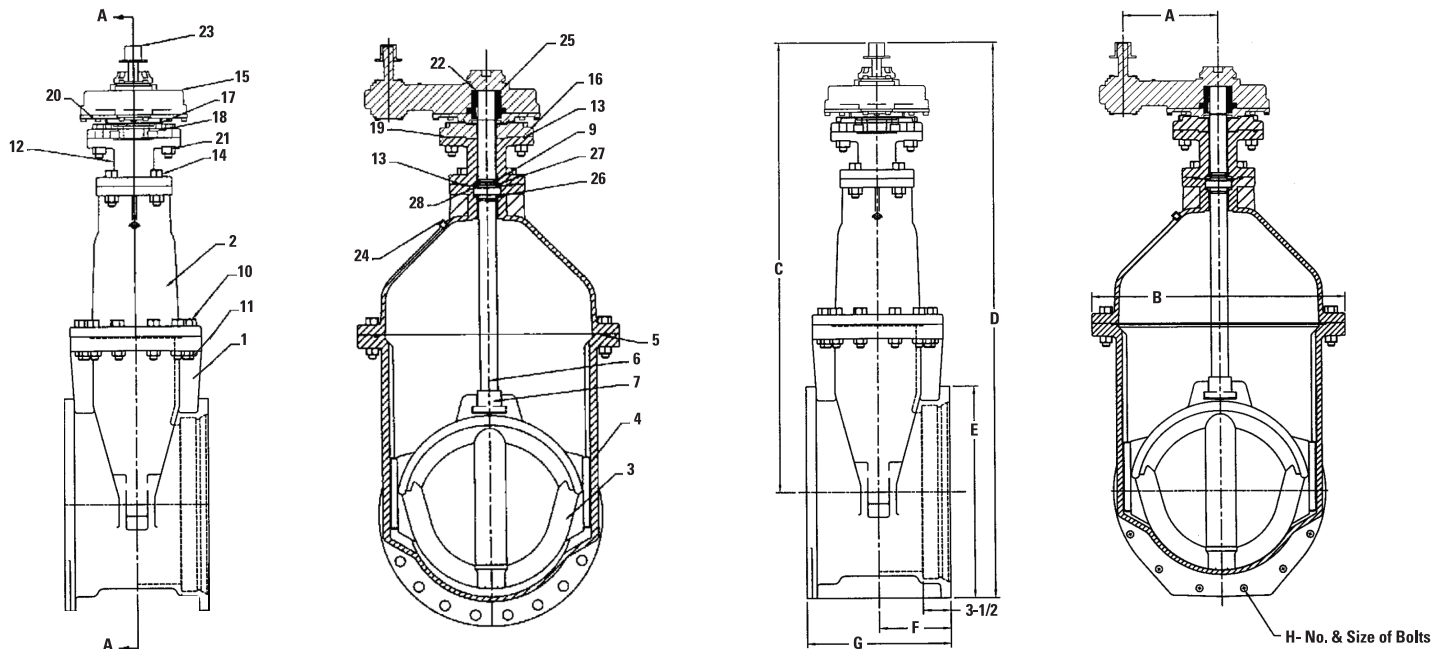
### SIZES 2"-24"



PARTS LIST		
SIZE	A	B
1	Bolt	GR 2 ZN SAE J429
2	Washer	GR 2 ZN SAE J429
3	OP Nut	Grey Iron ASTM A126 Class B
4	Adaptor Plate (18"-24")	Ductile Iron ASTM A536 70-50-05
5	Hex Head Bolt	GR 2 ZN SAE J429 / ASTM F593 S30400/S31600
6	Cover	Ductile Iron ASTM A536 70-50-05
7	Body	Ductile Iron ASTM A536 70-50-05
8	Hex Head Bolt	GR 2 ZN SAE J429 / ASTM F593 S30400/S31600
9	Hex Nut	GR 2 ZN SAE J429 / ASTM F593 S30400/S31600
10	Wedge Cover (18"-20")	Delrin
11	Extension (18"-24")	Ductile Iron ASTM A536 70-50-05
12	Stuffing Box (2"-16")	Ductile Iron ASTM A536 70-50-05
13	Thrust Washer	Delrin
14	Pipe Plug (14"-24")	18-8SS
15	Track (24")	AL Bronze ASTM B148 C95400
16	Roller (24")	Copper Alloy ASTM B584 C95400
17	Pin (24")	316 Stainless Steel
18	Scraper (24")	Copper Alloy ASTM B584 C95400
19	Square Key (18"-24")	GR 2 ZN SAE J429
20	O-Ring	EPDM
21	Stem	Manganese Bronze ASTM B584 C86700 / 304SS ASTM A276 S30400 / 316SS ASTM A276 S31600 / NDZ B763 C99500 (2"-12") Manganese Bronze ASTM B584 C86200 / 304SS ASTM A276 S30400 / 316SS ASTM A276 S31600 / NDZ B763 C99500 (14"-24")
22	O-Ring	EPDM
23	Stem Nut	Manganese Bronze ASTM B584 C86700 (2"-12") Copper Alloy ASTM B584 C87850 (14"-24")
24	Wedge	Ductile Iron ASTM A536 70-50-05 / EPDM Rubber
25	Ind. Post Plate Hex Bolts	ASTM F593 S30400
26	Ind. Post Plate Hex Nuts	ASTM F594 S30400
27	Stem O-Ring	EPDM
28	Ind. Post Plate O-Ring	EPDM

DIMENSIONS										
SIZE	A	B	C	D	E	F	H	J	K	No. Turns to Open
2	8-1/4"	2-1/2"	4-1/2"	2"	10-7/8"	6"	14-7/16"	4-3/4"	5/8" x 2	6-1/2
3	8-1/2"	2-1/2"	7-3/4"	3"	12-3/8"	7-1/2"	17"	6-1/8"	5/8" x 4	10
4	9-1/2"	2-1/2"	9-1/8"	4-1/4"	14-3/4"	9"	19-3/4"	7-1/2"	3/4" x 4	13
6	10-1/2"	2-1/2"	11-1/8"	6-1/4"	19"	11-3/8"	24-5/16"	9-5/8"	3/4" x 6	19
8	13-1/8"	2-1/2"	13-1/8"	8-1/4"	22-1/2"	13-1/2"	29-11/16"	11-3/4"	3/4" x 6	25
10	15-1/2"	2-1/2"	15-1/2"	10-1/4"	26-1/2"	16"	34-1/2"	14"	3/4" x 8	31
12	16"	2-5/8"	18"	12-1/4"	30"	19"	39"	16"	3/4" x 8	37
14	17"	3-1/2"	20-1/4"	14-1/4"	38-3/4"	26-11/16"	48-1/2"	18-3/4"	3/4" x 10	52
16	17"	3-1/2"	22-1/2"	16-1/4"	37-3/4"	26-11/16"	48-5/8"	21"	3/4" x 12	52
18	18-3/4"	3-1/2"	24-3/4"	18-1/4"	57-1/16"	32-1/4"	68-13/16"	23-1/4"	7/8" x 12	64
20	18"	3-1/2"	27"	20-1/4"	56-1/4"	32-1/4"	69-3/8"	25"-1/2	7/8" x 14	64
24	20"	3-1/2"	32"	24-1/4"	60-1/16"	38"	76-1/16"	29-1/2"	3/4" x 16	88

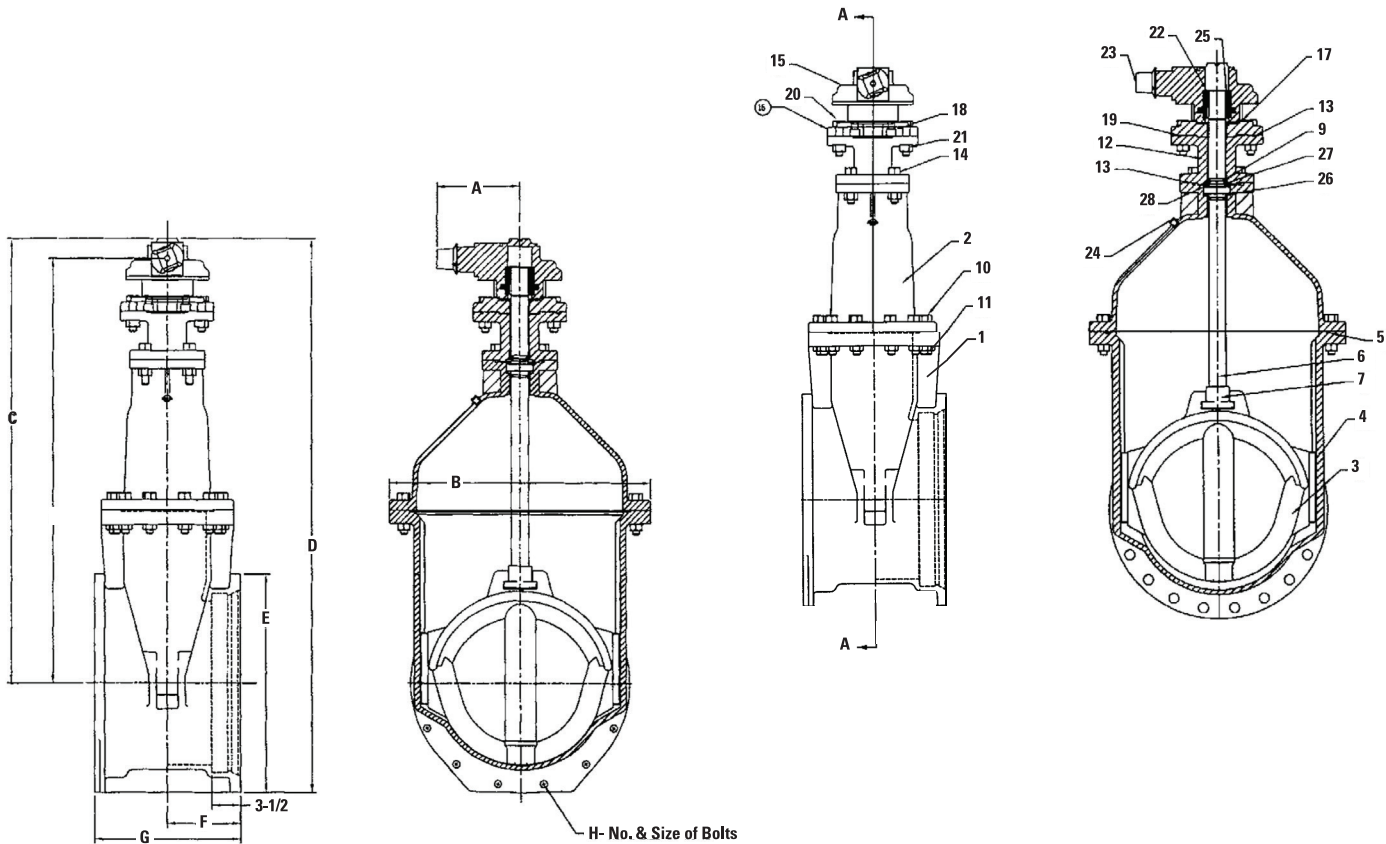
# C515 NON-RISING RESILIENT SEATED GATE VALVE MECHANICAL JOINT WITH SPUR GEARING SIZES 14"-24"



DIMENSIONS								
SIZE	A	B	C	D	E	F	G	H
14	8	26-11/16	52-1/8	62-1/2	20-1/4	8-1/2	17	3/4" x 10
16	8	26-11/16	51-1/8	62-1/2	22-1/2	8-1/2	17	3/4" x 12
18	12	32-1/4	58	70-1/2	24-3/4	9	18	7/8" x 12
20	12	32-1/4	57	70-1/2	27	9	18	7/8" x 14
24	12	38	62-5/8	78-1/4	31-1/4	10-1/2	21	3/4" x 16
30" & larger sizes require gearing. 24" are now furnished with rollers, tracks, and scrapers.								

PARTS LIST				PARTS LIST				PARTS LIST			
No.	PART	MATERIAL	ASTM DESIGNATION	No.	PART	MATERIAL	ASTM DESIGNATION	No.	PART	MATERIAL	ASTM DESIGNATION
1	Body	Ductile Iron	ASTM A536 GR 65-45-12	11	Hex Nut	Stainless Steel	ASTM F593-304	20	Hex Bolt	Stainless Steel	ASTM F593-304
2	Cover	Ductile Iron	ASTM A536 GR 65-45-12	12	Extension	Ductile Iron	ASTM A536 65-45-12	21	Hex Nut	Stainless Steel	ASTM F593-304
3	Wedge	Ductile Iron / Rubber EPDM	ASTM A536 GR 65-45-12 / EPDM	13	O-ring	Rubber	NBR	22	Key	Steel	
4	Wedge Cap (18"-24")	Delrin	Delrin	14	Hex Head Bolt	Stainless Steel	ASTM F593-304	23	OP Nut	Ductile Iron	ASTM A536 65-45-12
5	O-ring	Rubber	NBR	15	Actuator - 3:1 (18"-24") 2:1 (14"-16")			24	Pipe Plug	Steel	Steel
6	Stem	Bronze	ASTM B584 C86700	16	Adapter Plate	Ductile Iron	ASTM A536 GR 65-45-12	25	Drive Sleeve	Steel	AISI 1023
7	Stem Nut	Bronze	ASTM B584 C86700	17	Actuator Gasket	Rubber	NBR	26	Cover Bushing	Bronze	ASTM B584 C86700
9	O-ring	Rubber	NBR	18	Socket Head Bolt	Alloy Steel	Alloy Steel	27	Extension Bushing	Bronze	ASTM B584 C86700
10	Hex Head Bolt	Stainless Steel	ASTM F593-304	19	O-ring	Rubber	NBR	28	Thrust Bearing (18"-24")	Delrin	Delrin

# C515 NON-RISING RESILIENT SEATED GATE VALVE MECHANICAL JOINT WITH BEVEL GEARING SIZES 14"-24"



DIMENSIONS									
SIZE	A	B	C	D	E	F	G	H	J
14	9-1/8	26-11/16	48-5/8	59	20-1/4	8-1/2	17	3/4" x 10	46-5/8
16	9-1/8	26-11/16	47-5/8	59	22-1/2	8-1/2	17	3/4" x 12	45-5/8
18	10-1/8	32-1/4	55-3/4	68-1/4	24-3/4	9-5/32	18	7/8" x 12	53-3/4
20	10-1/8	32-1/4	54-3/4	68-1/4	27	9-5/32	18	7/8" x 14	52-3/4
24	10-1/8	38	59-7/8	75-1/8	31-1/2	9-1/2	19	3/4" x 16	57-3/8

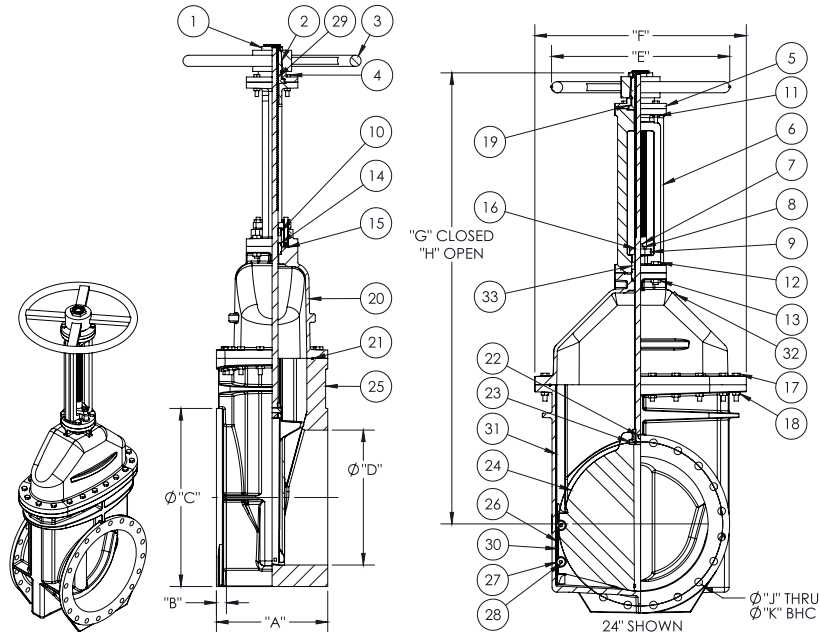
30" & larger sizes require gearing.  
24" are furnished with rollers, tracks, and scrapers.

PARTS LIST				PARTS LIST				PARTS LIST			
No.	PART	MATERIAL	ASTM DESIGNATION	No.	PART	MATERIAL	ASTM DESIGNATION	No.	PART	MATERIAL	ASTM DESIGNATION
1	Body	Ductile Iron	ASTM A536 GR 65-45-12	11	Hex Nut	Stainless Steel	ASTM F593-304	20	Hex Bolt	Stainless Steel	ASTM F593-304
2	Cover	Ductile Iron	ASTM A536 GR 65-45-12	12	Extension	Ductile Iron	ASTM A536 GR 65-45-12	21	Hex Nut	Stainless Steel	ASTM F593-304
3	Wedge	Ductile Iron / Rubber EPDM	ASTM A536 GR 65-45-12 / EPDM	13	O-ring	Rubber	NBR	22	Key	Steel	
4	Wedge Cap (18"-24")	Delrin	Delrin	14	Hex Head Bolt	Stainless Steel	ASTM F593-304	23	OP Nut	Ductile Iron	ASTM A536 GR 65-45-12
5	O-ring	Rubber	NBR	15	Actuator - 3:1 (18"-24") 2:1 (14"-16")			24	Pipe Plug	Steel	Steel
6	Stem	Bronze	ASTM B584 C86700	16	Adapter Plate	Ductile Iron	ASTM A536 GR 65-45-12	25	Drive Sleeve	Steel	AISI 1023
7	Stem Nut	Bronze	ASTM B584 C86700	17	Actuator Gasket	Rubber	NBR	26	Cover Bushing	Bronze	ASTM B584 C86700
9	O-ring	Rubber	NBR	18	Socket Head Bolt	Alloy Steel	Alloy Steel	27	Extension Bushing	Bronze	ASTM B584 C86700
10	Hex Head Bolt	Stainless Steel	ASTM F593-304	19	O-ring	Rubber	NBR	28	Thrust Bearing (18"-24")	Delrin	Delrin

# C515 OS&Y RESILIENT SEATED GATE VALVE

## FLANGED ENDS

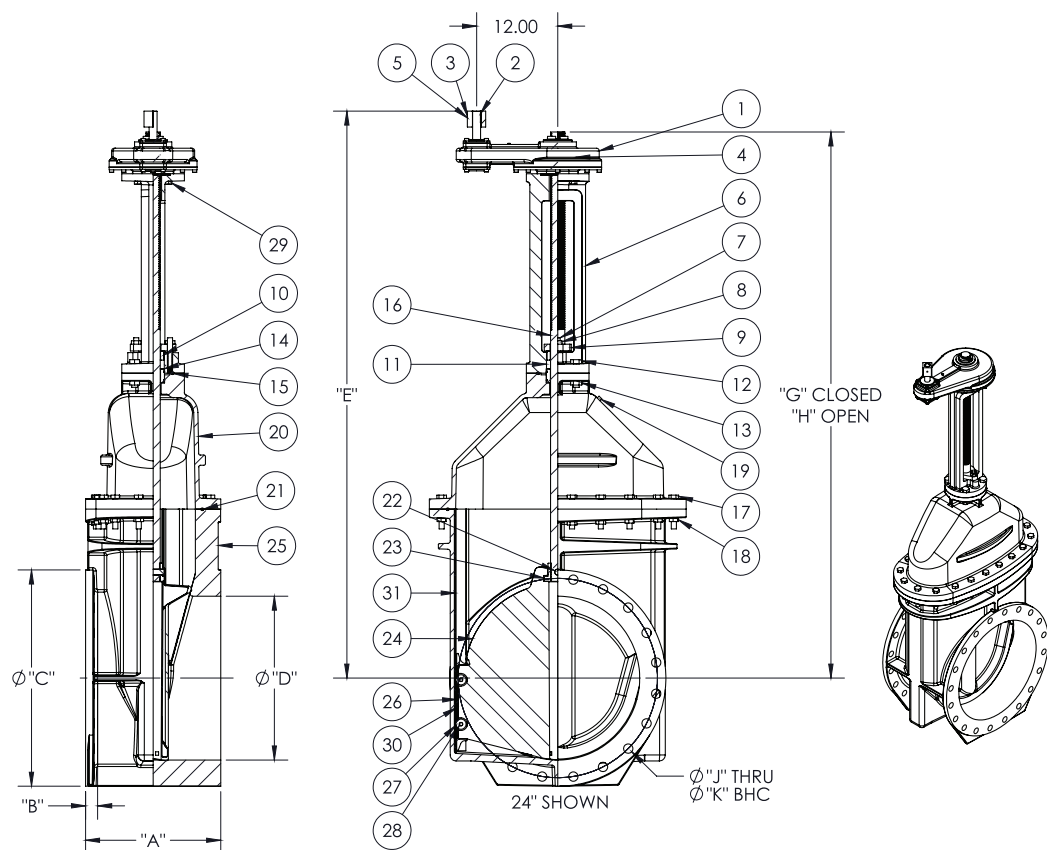
### SIZES 2"-24"



PARTS LIST		
SIZE	DESCRIPTION	MATERIAL
1	Hold Down Nut	Bronze ASTM B584 C87850 / C57610 (2"-12")
		Bronze ASTM B584 C83600 (14"-24")
2	Yoke Nut	Bronze ASTM B584 C86700 (2"-12")
		Bronze ASTM B584 C83600 (14"-24")
3	Handwheel	Ductile Iron ASTM A536 70-50-05 (2"-12")
		Gray Iron ASTM A126 Class B (14"-24")
4	Hex Cap Screw	ZN A307 Grade B / ASTM F593 S30400 / S31600
5	Adapter (14"-24")	Gray Iron ASTM A126 Class B
6	Yoke	Ductile Iron ASTM A536 70-50-05 (2"-12")
		Gray Iron ASTM A126 Class B (14"-24")
7	Stud (14"-24")	ASTM F593 S30400 / S31600
8	Hex Nut	ZN A307 Grade B / ASTM F593 S30400 / S31600
9	Follower Plate (14"-16")	Gray Iron ASTM A126 Class B
10	Packing Gland	Ductile Iron ASTM A536 70-50-05 (2"-12")
		Bronze ASTM B584 C83600 (14"-24")
11	Hex Nut	ZN A307 Grade B / ASTM F593 S30400 / S31600
12	Hex Cap Screw	GR 2 ZN SAE J429 / 304SS ASTM 18-8SS
13	Hex Nut	ZN A307 Grade B / ASTM F593 S30400 / S31600
14	Bushing (14-24")	ZN A307 Grade B / ASTM F593 S30400 / S31600
15	Yoke O-Ring	Buna-N ASTM D2000 (2"-12")
		EPDM (14"-24")
16	Stem	304SS ASTM A276 S30400 / 316SS ASTM A276 S31600 / ECO Brass ASTM B371 C69300 / Silicon Bronze "A" (Everdur) ASTM B98 C65500 (2"-12")
		304SS ASTM A276 S30400 / 316SS ASTM A276 S31600 / Silicon Bronze "A" (Everdur) ASTM B98 C65500 (14"-24")
17	Hex Cap Screw	ZN A307 Grade B / ASTM F593 S30400 / S31600
18	Hex Nut	ZN A307 Grade B / ASTM F593 S30400 / S31600
19	Flat Washer	ZN A307 Grade B / ASTM F593 S30400 / S31600
20	Cover	Ductile Iron ASTM A536 70-50-05 (2"-12")
		Ductile Iron ASTM A536 65-45-12 (14"-24")
21	Cover O-Ring	Buna-N ASTM D2000 (2"-12")
		EPDM (14"-24")
22	Stem O-Ring	Buna-N ASTM D2000 (2"-12")
		EPDM (14"-24")
23	Stem Nut	Bronze ASTM B584 CDA 844 (2"-12")
		Bronze ASTM B584 C87610 / Bronze ASTM B584 C87850 / Bronze ASTM B763 C99500 (NDZ) (14"-20")
24	Wedge	Bronze ASTM B584 C83600 (24")
		Ductile Iron ASTM A584 70-50-05 & EPDM (2"-12")
25	Body-Flanged Type	Ductile Iron ASTM A536 65-45-12 & EPDM (14"-24")
		Ductile Iron ASTM A536 65-45-12 (2"-24")
26	Scraper (24")	Bronze ASTM B584 C83600
27	Roller (24")	Bronze ASTM B584 C83600
28	Pin (24")	Stainless Steel AISI 303
29	Square Key (18"-24")	GR 2 ZN SAE J429
30	Wedge Cap (18"-20")	Delrin
31	Track (24")	Stainless Steel AISI 316
32	Pipe Plug (14"-24")	18-8SS
33	Packing	Braided, Lubricated (Non-Asbestos)

DIMENSIONS										
SIZE	A	B	C	D	E	F	G	H	J	No. Turns to Open
2	7"	5/8"	6"	2"	7-1/4"	6"	13-3/32"	15-7/8"	5/8" x 4	6-1/2
2-1/2	7-1/2"	11/16"	7"	2-1/2"	7-1/4"	7"	13-7/8"	16-3/8"	5/8" x 4	8
3	8"	3/4"	7-1/2"	3"	10"	7-1/2"	15-5/8"	18-7/8"	5/8" x 4	10
4	9"	15/16"	9"	4-1/4"	10"	9"	18-1/4"	22-3/4"	5/8" x 4	13-1/2
6	10-1/2"	1"	11"	6-1/4"	12"	11-3/8"	23-3/4"	30-1/8"	3/4" x 8	19-1/2
8	11-1/2"	1-1/8"	13-1/2"	8-1/4"	14"	13-1/2"	29-1/4"	37-3/4"	3/4" x 8	25-1/2
10	13"	1-3/16"	16"	10-1/4"	18"	16"	35-3/8"	45-3/4"	7/8" x 12	31-1/2
12	14"	1-1/4"	19"	12-1/4"	18"	19"	40-5/8"	53-1/8"	7/8" x 12	37-3/4
14	15"	1-3/8"	21-1/16"	14-1/4"	22"	26-11/16"	59-3/4"	74-3/4"	1" x 12	52
16	16"	1-7/16"	23-1/2"	16-1/4"	22"	26-11/16"	59-3/4"	74-3/4"	1" x 16	52
18	17"	1-9/16"	25"	18-1/4"	24"	32-1/4"	71-1/4"	92-9/16"	1-1/4" x 16	64
20	18"	1-11/16"	27-1/2"	20-1/4"	24"	32-1/4"	67-3/8"	94-3/8"	1-1/4" x 20	64
24	20"	1-7/8"	32"	24-1/4"	32"	38"	81-3/8"	110-5/8"	1-3/8" x 20	88

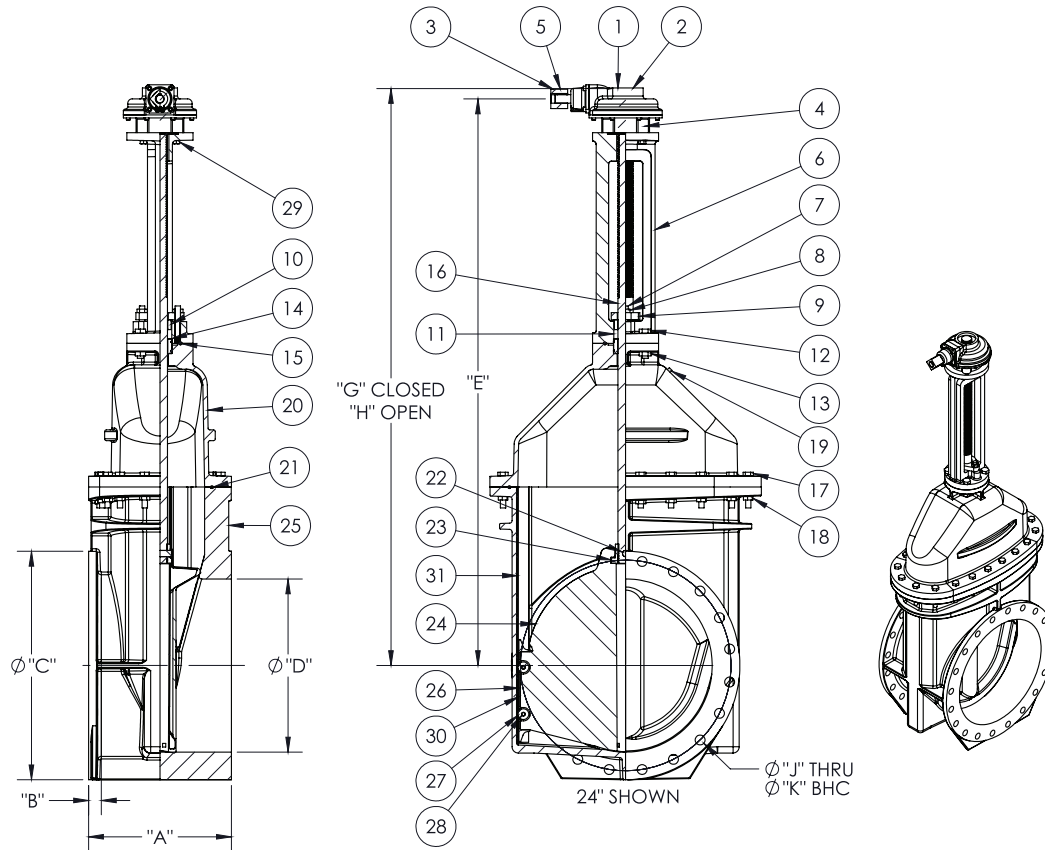
# C515 OS&Y RESILIENT SEATED GATE VALVE FLANGED ENDS WITH SPUR GEARING SIZES 14"-24"



DIMENSIONS										No. Turns to Open
SIZE	A	B	C	D	E	G	H	J	K	
14	15"	1-3/8"	21-1/16"	14-1/4"	64-1/2"	59-3/4"	74-3/4"	1" X 12	18-3/4"	52
16	16"	1-7/16"	23-1/2"	16-1/4"	64-1/2"	59-3/4"	74-3/4"	1" X 16	21-1/4"	52
18	17"	1-9/16"	25"	18-1/4"	74-5/8"	71-1/4"	92-9/16"	1-1/4" X 16	22-3/4"	64
20	18"	1-11/16"	27-1/2"	20-1/4"	74-5/8"	67-3/8"	94-3/8"	1-1/4" X 20	25"	64
24	20"	1-7/8"	32"	24-1/4"	83-1/2"	81-3/8"	110-5/8"	1-3/8" X 20	29-1/2"	88

PARTS LIST			PARTS LIST			PARTS LIST		
No.	PART	MATERIAL	No.	PART	MATERIAL	No.	PART	MATERIAL
1	EXECCO IS7	Bronze ASTM B584 C83600	12	Hex Cap Screw	GR 2 ZN SAE J429 / 304SS ASTM 18-8SS	23	Stem Nut	Bronze ASTM B584 C87610 / Bronze ASTM B584 C87850 / Bronze ASTM B763 C99500 (NDZ) (14"-20")
2	Square Key	GR 2 ZN SAE J429	13	Hex Nut	ZN A307 Grade B / ASTM F593 S30400/S31600	24	Wedge	Bronze ASTM B584 C83600 (24")
3	OP Nut	Gray Iron ASTM A126 Class B	14	Bushing	ZN A307 Grade B / ASTM F593 S30400/S31600			Ductile Iron ASTM A536 Grade 65-45-12
4	Output Sleeve	Aluminum Bronze ASTM B505 C95800	15	Yoke O-ring	EPDM	25	Body-Flanged Type	Ductile Iron ASTM A536 Grade 65-45-12
5	Roll Pin	Stainless Steel	16	Stem	304SS ASTM A276 S30400 / 316SS ASTM A276 S31600 / Silicon Bronze "A" (Everdur) ASTM B98 C65500	26	Scraper (24")	Bronze ASTM B584 C83600
6	Yoke	Gray Iron ASTM A126 Class B	17	Hex Cap Screw	ZN A307 Grade B / ASTM F593 S30400/S31600	27	Roller (24")	Bronze ASTM B584 C83600
7	Stud	ASTM F593 S30400/S31600	18	Hex Nut	ZN A307 Grade B / ASTM F593 S30400/S31600	28	Pin (24")	Stainless Steel AISI 303
8	Hex Nut	ZN A307 GRADE B / ASTM F593 S30400/S31600	19	Pipe Plug	18-8SS	29	Hex Cap Screw	ZN A307 Grade B / ASTM F593 S30400 / S31600
9	Follower Plate (14"-16")	Gray Iron ASTM A126 Class B	20	Cover	Ductile Iron ASTM A536 65-45-12 ASTM B16 Alloy 306	30	Wedge Cap (18"-20")	Delrin
10	Packing Gland	Bronze ASTM B584 C83600	21	Cover O-Ring	EPDM	31	Track (24")	Stainless Steel AISI 316
11	Packing	Braided, Lubricated (Non-Asbestos) Fiber	22	Stem O-Ring	EPDM			

# C515 OS&Y RESILIENT SEATED GATE VALVE FLANGED ENDS WITH BEVEL GEARING SIZES 14"-24"



DIMENSIONS										No. Turns to Open
SIZE	A	B	C	D	E	G	H	J	K	
14	15"	1-3/8"	21-1/16"	14-1/4"	59-7/8"	59-3/4"	74-3/4"	1" X 12	18-3/4"	52
16	16"	1-7/16"	23-1/2"	16-1/4"	59-7/8"	59-3/4"	74-3/4"	1" X 16	21-1/4"	52
18	17"	1-9/16"	25"	18-1/4"	70-1/8"	71-1/4"	92-9/16"	1-1/4" X 16	22-3/4"	64
20	18"	1-11/16"	27-1/2"	20-1/4"	70-1/8"	67-3/8"	94-3/8"	1-1/4" X 20	25"	64
24	20"	1-7/8"	32"	24-1/4"	78-7/8"	81-3/8"	110-5/8"	1-3/8" X 20	29-1/2"	88

PARTS LIST			PARTS LIST			PARTS LIST		
No.	PART	MATERIAL	No.	PART	MATERIAL	No.	PART	MATERIAL
1	EXEECD 1B7	Bronze ASTM B584 C83600	12	Hex Cap Screw	GR 2 ZN SAE J429 / 304SS ASTM 18-8SS	23	Stem Nut	Bronze ASTM B584 C87610 / Bronze ASTM B584 C87850 / Bronze ASTM B763 C99500 (ND2) (14"-20")
2	Square Key	GR 2 ZN SAE J429	13	Hex Nut	ZN A307 Grade B / ASTM F593 S30400/S31600			Bronze ASTM B584 C83600 (24")
3	OP Nut	Gray Iron ASTM A126 Class B	14	Bushing	ZN A307 Grade B / ASTM F593 S30400/S31600	24	Wedge	Ductile Iron ASTM A536 Grade 65-45-12
4	Output Sleeve	Aluminum Bronze ASTM B505 C95800	15	Yoke O-ring	EPDM	25	Body-Flanged Type	Ductile Iron ASTM A536 Grade 65-45-12
5	Roll Pin	Stainless Steel	16	Stem	304SS ASTM A276 S30400 / 316SS ASTM A276 S31600 / Silicon Bronze "A" (Everdur) ASTM B98 C65500	26	Scraper (24")	Bronze ASTM B584 C83600
6	Yoke	Gray Iron ASTM A126 Class B	17	Hex Cap Screw	ZN A307 Grade B / ASTM F593 S30400/S31600	27	Roller (24")	Bronze ASTM B584 C83600
7	Stud	ASTM F593 S30400/S31600	18	Hex Nut	ZN A307 Grade B / ASTM F593 S30400/S31600	28	Pin (24")	Stainless Steel AISI 303
8	Hex Nut	ZN A307 GRADE B / ASTM F593 S30400/S31600	19	Pipe Plug	18-8SS	29	Hex Cap Screw	ZN A307 Grade B / ASTM F593 S30400 / S31600
9	Follow Plate (14"-16")	Gray Iron ASTM A126 Class B	20	Cover	Ductile Iron ASTM A536 65-45-12 ASTM B16 Alloy 306	30	Wedge Cap (18"-20")	Delrin
10	Packing Gland	Bronze ASTM B584 C83600	21	Cover O-Ring	EPDM	31	Track (24")	Stainless Steel AISI 316
11	Packing	Braided, Lubricated (Non-Asbestos) Fiber	22	Stem O-Ring	EPDM			



**NOTES:**



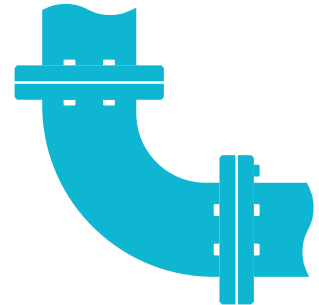
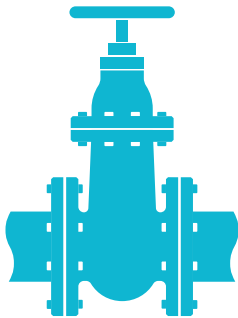
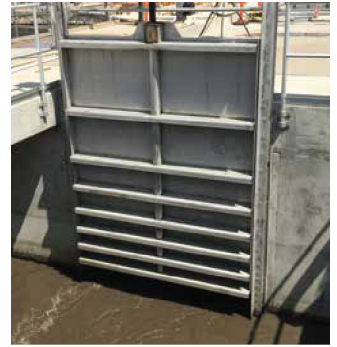
**NOTES:**



**NOTES:**

# 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

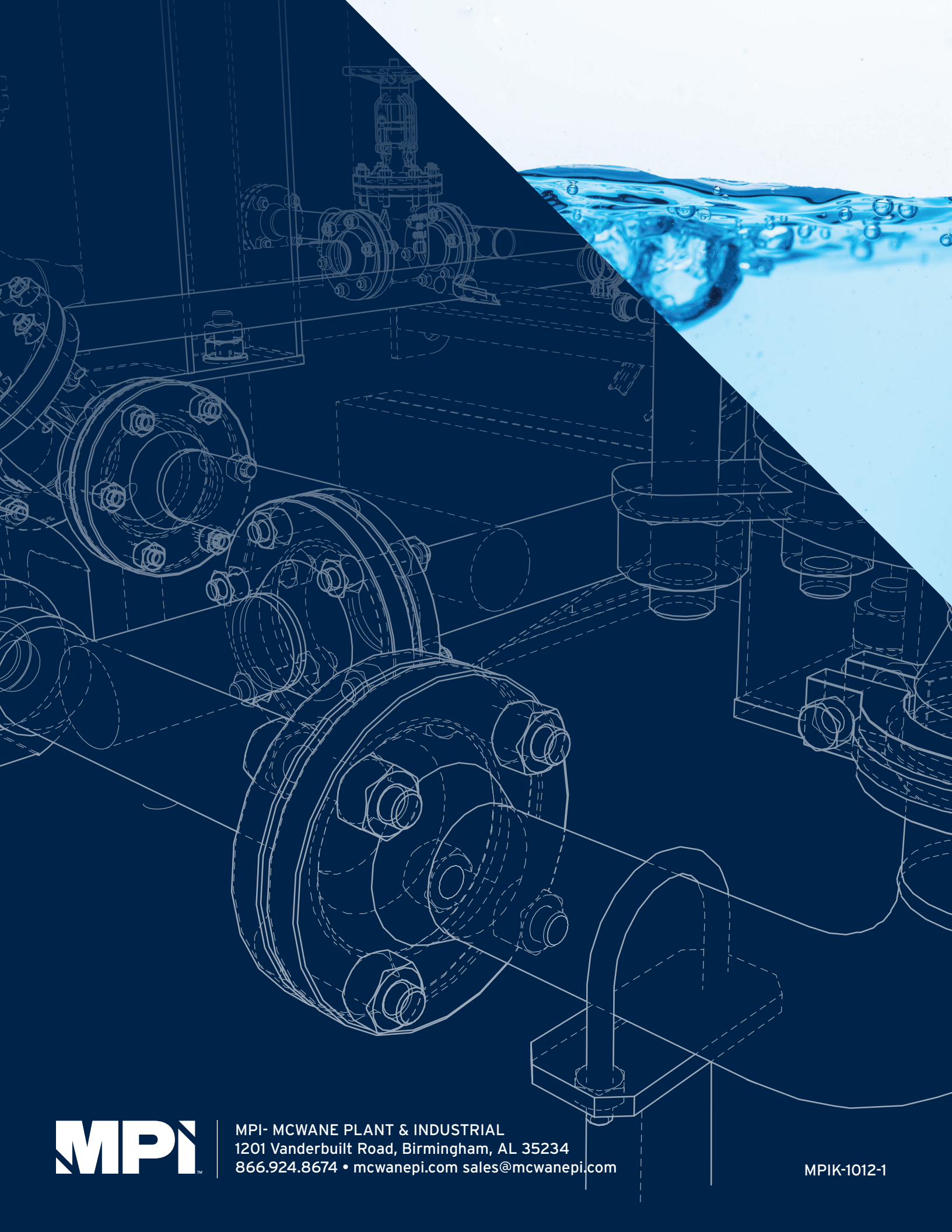
#### SOLUTIONS:

- Fabricated Stainless Steel Gates
- Fabricated Aluminum Gates
- Stop Logs & Stop Gates
- Cast Iron Slide (Sluice) 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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