

Save Time and Money with Stainless Steel...

US-SS STAINLESS STEEL CANAL GATE SIZES 6"-48"



With the **US-SS - Canal Gate**, the flat back, non-grout design allows the rubber gasket to seal against the wall, thus eliminating the cost of installing the gate with a grout pad. Spigot back frame can be provided for any type pipe.

ALL Stainless Steel Canal Gate

Model: US-SS - CANAL GATE

- All Stainless Steel construction
- Special "non-grout gasket"
- Neoprene seal is easily replaceable
- Bi-Directional upon request
- UHMWPE Guides for easy operation
- Easy to use, effortless open and close
- Metal to J-bulb seating surface
- Bolted together for easy field maintenance
- Flat back or spigot back frames
- Flat reinforced slide
- Rolled threads on stem, minimal wear on lift nut
- Designed head pressure up to 15ft.
- Environmentally friendly materials
- Non environmentally degrading
- No toxic paints or coatings
- Sustainability

FLOW CHARTS AVAILABLE ON REQUEST

Save Time and Money by replacing worn out gates and valves with a new generation of stainless steel and aluminum gates and valves, made by **Mechanical Associates** in Fresno, California.

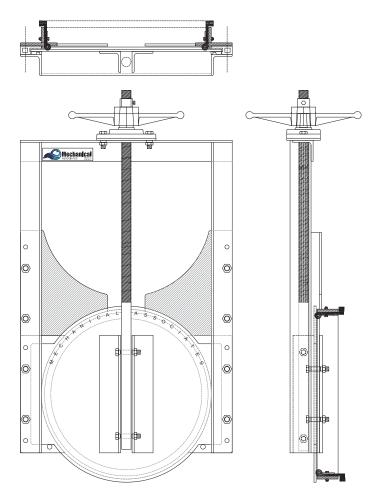
Mechanical Associates' stainless steel and aluminum gates provide long life and excellent value for the investment. Installation is quick and easy. Field replaceable neoprene seats gives a drip tight seal. Stainless steel and aluminum construction will provide long life in corrosive conditions, with little or no maintenance or replacement parts required.

Also available from Mechanical Associates Line Gates, Slide Gates, Pressure Gates, Canal Gates, Flap Gates, and more..



TECHNICAL SPECIFICATIONS

UNIVERSAL SERVICE (US) CANAL GATE US-SS



FEATURES:

- All Stainless Steel Construction
- Special "Groutless Gasket"
- Neoprene Seal is Easily Replaceable
- B-Directional Upon Request
- UHMW PE Guides
- Easy to use, Effortless Open and Close
- Metal to J-Bulb Seating Surface
- Bolted Together for Field Maintenance
- Flat Reinforces Slide
- Rolled Threads on Stem, Minimal Wear
- Hand Wheel Operation Standard
- Environmentally friendly
- Non environmentally degrading
- No toxic paints or coatings

OPTIONS:

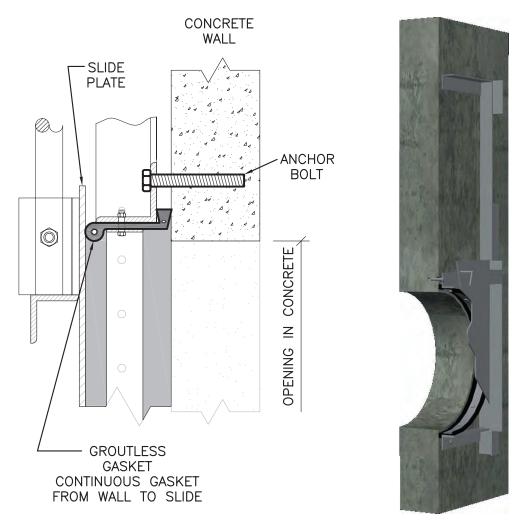
- Flat Back or Spigot Back Frames
- Electric Actuator
- Gear Actuator
- Non-Rising Stem

PARTS & MATERIALS		
Handwheel	Cast Iron: ASTM-A126 CL. B	
Lift Nut	Commercial Bronze	
Base Plate	Aluminum Alloy 6061-T6	
Collar	Cast Iron: ASTM-A126 CL. B	
Bolts & Nuts	Stainless Steel ASTM A-276 TY.304	
Stem	Stainless Steel ASTM A-276 TY.304	
Frame Weldament	Stainless Steel ASTM A-276 TY.304	
Cover Guide	Stainless Steel ASTM A-276 TY.304	
Groutless Gasket	Neoprene Rubber: ASTM D-2000	
Slide Weldament	Stainless Steel ASTM A-276 TY.304	
Neoprene Seal	Neoprene Rubber: ASTM D-2000	

MOUNTING OPTIONS

PATENT PENDING

GROUTLESS GASKET:



Our Groutless Gasket was developed in conjunction with our Stainless Steel Canal Gate. This system was designed to eliminate the process of using grout for gate installation, which can be costly and time consuming.

The Groutless Gasket can be used in any shape wall opening, traditional or custom. Installation is simple and straightforward. Install anchors into the wall, mount the gate, and tighten anchor nuts for a snug fit. On walls that are uneven or pitted due to age, we recommend a bead of urethane sealant be applied to the gasket before installing it against the wall. The sealant will fill voids in the wall, allowing for a tight seal.

This gasket can also be used with Flap Gates. The gasket is installed between the gate and flange when installed on pipe.



US CANAL GATE (US-SS) TECHNICAL SPEC

US-SS-HD DESIGN CRITERIA

DESIGN FEATURES:

- UP TO 35 FEET OF SEATING HEAD (see chart)
- UP TO 10 FEET OF OFF-SEATING HEAD (see chart)
- ALL STAINLESS STEEL CONSTRUCTION
- UHMWPE GUIDES FOR EASE OF OPERATION
- REINFORCED SLIDE
- MULTIPLE LIFT CONFIGURATIONS
- GROUTLESS INSTALLATION
- BOLT TOGETHER DESIGN FOR EASE OF MANTENANCE
- FIXTURE WELDED
- GATES ARE DESIGNED FOR WATER, WASTEWATER, & AGRICULTURAL APPLICATIONS
- CUSTOM SIZES AVAILABLE ON REQUEST
- FLOW CHARTS AVAILABLE ON REQUEST

GENERAL

The US-SS Series gate has been designed for Water and Wastewater treatment facilities, Flood Control, Irrigation Canals, Dairy Farms, and Diversion Stands.

FRAME OPTIONS

The gates shall be either self-contained with yoke and bench stand operators, or non-self-contained with separate stem guides and operator, in accordance with the requirements of the specifications. Specific configurations shall be as noted on the gate schedule or as shown on the plans.

SFAI

Mechanical Associates' exclusive "Groutless" Neoprene J-Bulb Gasket. These shall form a tight seal between the frame and the slide (disc). This tight seal shall provide an allowable leakage rate of no more than 0.1 gallons per minute (GPM) per peripheral foot of perimeter opening for seating heads and 0.1 GPM per peripheral foot for unseating heads. The clear opening shall be the same size as the waterway, unless otherwise specified.

FRAME AND GUIDES

The gate frame shall be a rigid unit composed of stainless steel guide rails with UHMW guides upstream and downstream. The guides will be of sufficient length to support two-thirds of the height of the slide when in the full open position.

SLIDE COVER (DISC)

The slide cover (disc) shall be stainless steel reinforced plate. The slide cover shall not deflect more than 1/360th of the span of the gate under the maximum head The stem connection shall be either the clevis type, with structural members welded to the slide and a bolt to act as a pivot pin, or a threaded and bolted (or keyed) thrust nut supported in a welded nut pocket. The clevis or pocket and yoke of the gate shall be capable of taking, without damage, at least twice the rated thrust output of the operator at 40 pounds pull.

MOUNTING OPTIONS

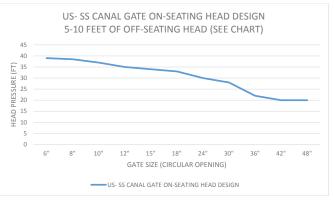
Groutless Gasket (Flush Mounting to Wall) Flange Back (Flange to Flange) Spigot Back (In Pipe or Over Pipe)

RECOMMENDED MAXIMUM SEATING AND UNSEATING HEADS		
GATE SIZE	RECOMMENDED MAXIMUM	RECOMMENDED MAXIMUM
	SEATING HEAD	UNSEATING HEAD
6"-12"	35 FEET	10 FEET
15" & 18"	32 FEET	10 FEET
24" & 30"	28 FEET	10 FEET
36" & 42"	20 FEET	10 FEET
48"	20 FEET	5 FEET

^{*} These recommendations are based on testing and engineering data.

US-SS STAINLESS STEEL CANAL GATE









US CANAL GATE (US-SS) TECHNICAL SPEC

TYPICAL SPECIFICATIONS FOR US-SS-SERIES FABRICATED SLIDE GATE

MECHANICAL ASSOCIATES' - US CANAL GATE (US-SS)

GENERAL

The gates shall be either self-contained with yoke and bench stand operators, or non-self-contained with separate stem guides and operator, in accordance with the requirements of these specifications. Specific configurations shall be as noted on the gate schedule or as shown on the plans.

SEALS

Mechanical Associates' exclusive "Groutless" Neoprene J-Bulb Gasket. These shall form a tight seal between the frame and the slide (disc). This tight seal shall provide an allowable leakage rate of no more than 0.1 gallons per minute (GPM) per peripheral foot of perimeter opening for seating heads and 0.1 GPM per peripheral foot for unseating heads. The clear opening shall be the same size as the waterway, unless otherwise specified.

FRAME AND GUIDES

The gate frame shall be a rigid unit composed of stainless steel guide rails with UHMW guides upstream and downstream. The guides will be of sufficient length to support two-thirds of the height of the slide when in the full open position.

SLIDE COVER (DISC)

The slide cover (disc) shall be stainless steel plate reinforced with structural shapes welded to the plate. The slide cover shall not deflect more than 1/720th of the span of the gate under the maximum head The stem connection shall be either the clevis type, with structural members welded to the slide and a bolt to act as a pivot pin, or a threaded and bolted (or keyed) thrust nut supported in a welded nut pocket. The clevis or pocket and yoke of the gate shall be capable of taking, without damage, at least twice the rated thrust output of the operator at 40 pounds pull.

MATERIALS

Frames, Rails, Cover Slides, Yokes

Stainless Steel - ASTM A-276, Type 304 or 316, as specified

Fasteners and Anchor Bolts

Stainless Steel - ASTM F-593 and 594, Type 304 or 316, as specified

<u>Stems</u>

Stainless Steel - ASTM A-276, Type 304 or 316, as specified

<u>Seals</u>

Neoprene Rubber - ASTM D-2000 BC 615/625 Grade BE 625

<u>Guiaes</u>

Ultra High Molecular Weight Polyethylene (UHMW PE)

<u>Finish</u>

Mill finish on all stainless steel surfaces



