**SECTION \_\_\_\_\_\_\_\_\_\_\_ STAINLESS STEEL SHEAR GATES**

 GENERAL

1. The hand-pull shear gates shall be provided as specified and as shown in the Contract Documents.

PERFORMANCE REQUIREMENTS

1. Leakage for the shear gates shall be restricted to 0.1 gpm/ft or less of the seal perimeter at the design seating head and unseating head.
2. Shear gates shall be designed to be suitable for the application and designed to handle 10-ft of seating head and 10-ft of unseating head as a minimum.

SUBMITTALS

1. Submittals shall include, at a minimum, detailed custom drawings of the gate assembly with dimensional and mounting information and a listing of the materials of construction. General arrangement drawings and cut sheets are not considered acceptable drawings.

QUALITY ASSURANCE

1. The basis for the design of the shear gates is the Model RW7400-S as manufactured by RW Gate Company, Troy, NY.
2. All gates shall be shop inspected for proper operation prior to shipment.
3. Welds shall be performed by welders with ASME Section IX certification.
4. The gate manufacturer shall be ISO 9001:2015 certified.

MATERIALS OF CONSTRUCTION

1. All stainless steel referenced in this specification shall be Type (304)(316) or Type (304L)(316L), ASTM A240 or ASTM A276 unless otherwise indicated herein.
	1. All welded stainless steel components shall be constructed of Type (304L)(316L) stainless steel.
	2. All structural stainless steel used in the construction of slide plates and frames shall have a minimum material thickness of 3/16-inch.
	3. All non-welded stainless steel components, excluding anchor bolts and assembly bolts, shall be Type (304)(316) or Type (304L)(316L) stainless steel.
	4. Anchor bolts and assembly bolts shall be Type 316 stainless steel.

SLIDE PLATE

1. The slide plate shall consist of a stainless steel plate that is formed and reinforced as necessary to withstand the specified head conditions.
	1. The slide plate shall be provided with a connection point for the lifting handle.
		1. Lifting handles shall be formed from round bar or shall be lifting slots in the top of the stop plate as shown on the Contract Drawings.

FRAME

1. The frame shall be constructed of stainless steel plate, formed as necessary for rigidity, and shall be reinforced to withstand the specified operating conditions.
	1. The frame shall be a rigid, one-piece assembly.
	2. The frame shall be of the configuration as shown in the Contract Drawings.
	3. A resilient seal shall be provided on the frame and the seal shall be secured with assembly bolts.
	4. All seals shall be field replaceable without the need to remove the frame from the wall.

LIFTING HANDLE

1. The lifting handle shall have a T shape and shall be constructed of 1-inch minimum diameter stainless steel tube.
2. A stainless steel mounting bracket shall be provided to secure the lifting handle.
3. An adjustable hook shall be provided as part of the lifting handle assembly to hold the slide plate at defined travel positions.

ANCHORAGE

1. Anchor bolts shall be 316 stainless steel, fully threaded and shall have a minimum diameter of 1/2-inch.
	1. Anchor bolts shall be of the epoxy type.

FINISH

1. All heat tint and slag from the welding process shall be passivated in accordance with ASTM A380.

INSTALLATION

1. Installation shall be performed in accordance with the gate manufacturer’s installation instructions and the approved installation drawings.
2. Installation instructions and installation drawings shall be found in the O&M manual.
3. A resilient gasket and/or mastic shall be applied, by the Contractor, between the frame and the pipe flange or wall to ensure that there is no leakage around the gate.