

# BEXAR METROPOLITAN WATER DISTRICT MATERIALS SPECIFICATIONS

## Section 010 Fitting Repair Service Saddle

### 010.1 Scope of Work/Description

This specification covers band and bale-mounted repair service saddles with CC and NPT tapped outlet for installation on ductile iron, cast iron, and asbestos clay water mains of the nominal outside diameter pipe size ranges noted. This specification does not cover saddles to be used on concrete steel cylinder pipe or polyvinyl chloride pipe.

### 010.2 General Requirements

1. Ductile iron saddle casting or body shall be the double or single band type of the size specified. Material shall be in accordance with ASTM A536 requirements. The coating shall be fusion-bonded epoxy or fusion plastic coated in accordance with AWWA C-213. Coatings in contact with potable water shall be NSF 61 approved.
2. Bronze saddle casting or body shall be the double bale type of the size specified. Material shall be in accordance with ASTM B62 and B5484 (85-5-5-5) requirements and fabricated to ANCI/AWWA C800, latest revision.
3. Stainless steel bands bolts and nuts shall conform to ASTM A240, type 304 (18-8). Bronze bales bolts and nuts shall be silicon bronze conforming to ASTM B98, or waterworks bronze conforming to ASTM B5484. Straps of either the band or bale type shall be fabricated to the outside diameter pipe dimensions of the appropriate AWWA Standards.
4. The nominal width of each double stainless steel bands for saddles to be installed on 12 inch or smaller water main pipe diameters shall measure one and one-half inches each (1 1/2"). The nominal width of the single stainless steel band shall measure three inches. The design bearing criteria shall be in accordance with AWWA M23.
5. Gaskets shall be virgin rubber, NSF 61 approved, meet ASTM D-2000 and be compounded to produce permanence and resistance to set after installation and deterioration during storage.
6. Quality control procedures shall be employed to insure that the saddle casting, straps (bronze bale or stainless steel band), and gasket are manufactured to be free of any visible defects. Each saddle shall have a working pressure rating not less than the following:

Pipe Size (inches)	Minimum Working Pressure Rating (psi)
12 and smaller	175

**010.3 Repair Service Saddle Ranges (minimum)**

Nominal Dia.	O.D. Range*
4" x (3/4)", 1", (1 1/2)", 2" NPT	A. 4.79" - 5.32"
6" x (3/4)", 1", (1 1/2)", 2" NPT	A/B 6.90" - 7.40"
8" x (3/4)", 1", (1 1/2)", 2" NPT	A/B 9.00" - 9.63"
10" x (3/4)", 1", (1 1/2)", 2" NPT	A. 11.04" - 12.12"
12" x (3/4)", 1", (1 1/2)", 2" NPT	A/B 13.14" - 14.38"

The Bexar Metropolitan Water District may, at not cost to the manufacturer, subject random service saddles to testing by an independent laboratory for compliance with these standards. Any visible defect or failure to meet the quality standards herein will be grounds for rejecting the entire order.

The attached qualified products list identifies specific manufactured items by catalog number that are approved.

\*Ranges may be broadened, but not narrowed.

**010.4 Repair Service Saddles Approved Manufacturers and Models:**

Manufacturer	Model (DI, AC)
Smith-Blair, Inc.	313 epoxy coated with stainless straps
The Ford Meter Box Co., Inc.	202 B

END OF SECTION