



# Service Saddle

## Double Bale

# 313



**Description:** Double bale Ductile Iron service saddle with TaperSeal™ gasket and wraparound bales to connect branch lines, instruments, and other appurtenances to pipe.

**Application:** Tapping pipe for branch connections and to install service connections, air and vacuum valves.

### Key Features:

- Meets applicable AWWA C800 Standards
- The wide saddle body provides stability on the pipe
- The gasket is fully bonded to the cavity to hold it in place
- NPT, CC and other threaded outlets available in sizes 5/8" thru 4"
- A closed lug on one side, combined with the bale, acts as a hinge for easier installation

### Materials Specifications (subject to change):

BODY: Ductile Iron per ASTM A536

BALE: Carbon Steel ASTM A108 (C1018) or HSLA (C111) electro-galvanized with di-chromate seal ASTM-B633

NUTS: Cold formed semi-finished heavy hex Steel A563 electro-galvanized with di-chromate seal ASTM-B633

WASHERS: Carbon Steel ASTM A108, electro-galvanized with a di-chromate seal ASTM B633

GASKET: Nitrile (Buna N) NSF 61® compounded to resist oil, acids, alkalies, most (aliphatic) hydrocarbon fluids, water and other chemicals

Temperature Range: -20°F to 180°F

FINISH: Flexi-Coat® Fusion-Bonded Epoxy Finish, per AWWA C213

*Optional: 304 Stainless Steel hardware available upon request*

**Working Pressure:** Up to 300 PSI, depending on size and application

**Pipe Applications:** Steel, Ductile Iron, and Cast Iron. For other pipe material, please contact Smith-Blair Engineering.

**Taps:** 3/4" and 1" NPT taps; 1 1/4", 1 1/2", 2" and 2 1/2" NPT taps, 3" & 4" NPT taps; 5/8", 3/4" and 1" CC taps; 1 1/4", 1 1/2" and 2" CC taps

**Sizes (in inches):** Varies by tap type; see tables for size details



# Service Saddle

## Double Bale

313

5/8", 3/4" and 1" CC Taps

STANDARD			CATALOG NUMBER			CTN. QTY	METRIC		
NOM. SIZES INCHES	O.D. RANGE INCHES	WT. EACH LBS.	5/8" CC/16 MM	3/4" CC/20 MM	1" CC/25 MM		NOM. SIZE MM	O.D. RANGE MM	WT. EACH KG.
1-1/4-1-1/2	1.61-1.92	3	313-00019205-000	313-00019207-000	313-00019209-000	6	32-40	41-48	1
2	2.35-2.56	3	313-00025605-000	313-00025607-000	313-00025609-000	6	50	60-65	1
2-1/4-2-1/2	2.44-2.91	3	313-00029105-000	313-00029107-000	313-00029109-000	6	57-63	62-73	2
3	2.97-3.54	4	313-00035405-000	313-00035407-000	313-00035409-000	6	80	76-89	2
3-4	3.74-4.13	6	313-00041305-000	313-00041307-000	313-00041309-000	6	80-100	95-105	3
4	4.40-4.50	6	313-00045005-000	313-00045007-000	313-00045009-000	6	100	112-114	3
4	4.40-4.80	6	313-00048005-000	313-00048007-000	313-00048009-000	6	100	112-122	3
4-5	5.00-5.63	6	313-00056305-000	313-00056307-000	313-00056309-000	6	100-125	121-143	3
6	5.94-6.70	6	313-00066305-000	313-00066307-000	313-00066309-000	4	150	151-170	3
6	5.94-6.90	6	313-00069005-000	313-00069007-000	313-00069009-000	4	150	151-175	3
6	6.84-7.60	7	313-00076005-000	313-00076007-000	313-00076009-000	4	150	174-193	3
6-8	7.69-8.72	7	313-00087205-000	313-00087207-000	313-00087209-000	4	150-200	195-221	4
6-8	7.69-9.05	8	313-00090505-000	313-00090507-000	313-00090509-000	4	150-200	195-230	4
8-10	8.54-10.10	8	313-00101005-000	313-00101007-000	313-00101009-000	4	200-250	217-256	4
10	10.75-11.10	10	313-00111005-000	313-00111007-000	313-00111009-000	4	250	273-282	4
10-12	10.64-12.12	10	313-00121205-000	313-00121207-000	313-00121209-000	4	250-300	271-307	4
12	12.75-13.20	14	313-00132005-000	313-00132007-000	313-00132009-000	4	300	324-335	7
12-14	12.62-14.32	15	313-00143205-000	313-00143207-000	313-00143209-000	4	300-350	321-363	7
12-14	14.73-15.65	18	313-00156505-000	313-00156507-000	313-00156509-000	1	300-350	375-397	8
14-16	15.95-17.25	19	313-00172505-000	313-00172507-000	313-00172509-000	1	350-400	406-438	9
16	17.25-17.80	19	313-00178005-000	313-00178007-000	313-00178009-000	1	410	438-452	9
16-18	17.40-18.88	19	313-00188805-000	313-00188807-000	313-00188809-000	1	400-450	442-479	9
*18	19.38-19.68	20	313-00195005-000	313-00195007-000	313-00195009-000	1	450	492-500	9
*20	21.55-21.65	20	313-00216005-000	313-00216007-000	313-00216009-000	1	500	547-550	9
*24	25.75-25.85	20	313-00258005-000	313-00258007-000	313-00258009-000	1	600	654-657	9

\*Fabricated straps, epoxy coated carbon Steel.

1 1/4", 1 1/2" and 2" CC Taps

STANDARD			CATALOG NUMBER			CTN. QTY	METRIC		
NOM. SIZES INCHES	O.D. RANGE INCHES	WT. EACH LBS.	1-1/4" CC/32 MM	1-1/2" CC/40 MM	2" CC/50 MM		NOM. SIZE MM	O.D. RANGE MM	WT. EACH KG.
2	2.35-2.56	3	313-00025611-000	-	-	6	50	60-65	1
	2.97-3.54	5	313-00035411-000	313-00035413-000	-	6	80	76-89	2
3-4	3.74-4.13	8	313-00041311-000	313-00041313-000	313-00041315-000	6	80-100	95-104	3
4	4.40-4.50	6	313-00045011-000	313-00045013-000	313-00045015-000	6	100	112-114	3
4	4.40-4.80	6	313-00048011-000	313-00048013-000	313-00048015-000	6	100	112-122	3
4-5	4.74-5.14	8	313-00051411-000	313-00051413-000	313-00051415-000	6	100-125	120-130	3
4-5	5.00-5.63	9	313-00056311-000	313-00056313-000	313-00056315-000	4	100-125	127-143	4
6	5.94-6.70	9	313-00066311-000	313-00066313-000	313-00066315-000	4	150	151-170	4
6	5.94-6.90	9	313-00069011-000	313-00069013-000	313-00069015-000	4	150	151-175	4
6	6.84-7.60	7	313-00076011-000	313-00076013-000	313-00076015-000	4	150	174-193	3
6-8	7.69-8.72	11	313-00087211-000	313-00087213-000	313-00087215-000	4	150-200	195-221	5
6-8	7.69-9.05	11	313-00090511-000	313-00090513-000	313-00090515-000	4	150-200	195-230	5
8-10	8.54-10.10	9	313-00101011-000	313-00101013-000	313-00101015-000	4	200-250	217-256	4
10	10.75-11.10	10	313-00111011-000	313-00111013-000	313-00111015-000	4	250	273-282	5
10-12	10.64-12.12	11	313-00121211-000	313-00121213-000	313-00121215-000	4	250-300	271-307	5
12	12.75-13.20	14	313-00132011-000	313-00132013-000	313-00132015-000	4	300	324-335	6
12-14	12.62-14.32	14	313-00143211-000	313-00143213-000	313-00143215-000	4	300-350	321-363	6
12-14	14.73-15.65	18	313-00156511-000	313-00156513-000	313-00156515-000	1	300-350	375-397	8
14-16	15.95-17.25	19	313-00172511-000	313-00172513-000	313-00172515-000	1	350-400	406-438	9

\*Fabricated straps, epoxy coated carbon Steel.

### 1¼", 1½" and 2" CC Taps Continued

STANDARD			CATALOG NUMBER			CTN. QTY	METRIC		
NOM. SIZES INCHES	O.D. RANGE INCHES	WT. EACH LBS.	1-1/4" CC/32 MM	1-1/2" CC/40 MM	2" CC/50 MM		NOM. SIZE MM	O.D. RANGE MM	WT. EACH KG.
16	17.25-17.80	19	313-00178011-000	313-00178013-000	313-00178015-000	1	410	438-452	9
16-18	17.40-18.88	19	313-00188811-000	313-00188813-000	313-00188815-000	1	400-450	442-479	9
*18	19.38-19.68	20	313-00195011-000	313-00195013-000	313-00195015-000	1	450	492-500	9
*20	21.55-21.65	20	313-00216011-000	313-00216013-000	313-00216015-000	1	500	547-550	9
*24	25.75-25.85	20	313-00258011-000	313-00258013-000	313-00258015-000	1	600	654-657	9

\*Fabricated straps, epoxy coated carbon Steel.

### ¾" and 1" NPT Taps

STANDARD			CATALOG NUMBER		CTN. QTY	METRIC		
NOM. SIZE INCHES	O.D. RANGE INCHES	WT. EACH LBS.	¾" NPT/20 MM	1" NPT/25 MM		NOM. SIZE MM	O.D. RANGE MM	WT. EACH KG.
1-1/4-1-1/2	1.61-1.92	3	313-00019206-000	313-00019208-000	6	32-40	41-48	1
2	2.35-2.56	3	313-00025606-000	313-00025608-000	6	50	60-65	1
2-1/4-2-1/2	2.44-2.91	3	313-00029106-000	313-00029108-000	6	57-65	62-73	2
3	2.97-3.54	4	313-00035406-000	313-00035408-000	6	80	76-89	2
3-4	3.74-4.13	6	313-00041306-000	313-00041308-000	6	80-100	95-105	3
4	4.40-4.50	6	313-00045006-000	313-00045008-000	6	100	112-114	3
4	4.40-4.80	6	313-00048006-000	313-00048008-000	6	100	112-122	3
4-5	5.00-5.63	6	313-00056306-000	313-00056308-000	6	100-125	121-143	3
6	5.94-6.70	6	313-00066306-000	313-00066308-000	4	150	151-170	3
6	5.94-6.90	6	313-00069006-000	313-00069008-000	4	150	151-175	3
6	6.84-7.60	7	313-00076006-000	313-00076008-000	4	150	174-193	3
6-8	7.69-8.72	8	313-00087206-000	313-00087208-000	4	150-200	195-221	4
6-8	7.69-9.05	8	313-00090506-000	313-00090508-000	4	150-200	195-230	4
8-10	8.54-10.10	8	313-00101006-000	313-00101008-000	4	200-250	217-256	4
10	10.75-11.10	10	313-00111006-000	313-00111008-000	4	250	273-282	4
10-12	10.64-12.12	10	313-00121206-000	313-00121208-000	4	250-300	271-307	4
12	12.75-13.20	14	313-00132006-000	313-00132008-000	4	300	324-335	7
12-14	12.62-14.32	15	313-00143206-000	313-00143208-000	4	300-350	321-363	7
12-14	14.73-15.65	18	313-00156506-000	313-00156508-000	1	300-350	375-397	8
14-16	15.95-17.25	19	313-00172506-000	313-00172508-000	1	350-400	406-438	9
16	17.25-17.80	19	313-00178006-000	313-00178008-000	1	410	438-452	9
16-18	17.40-18.88	19	313-00188806-000	313-00188808-000	1	400-450	442-479	9
*18	19.38-19.68	20	313-00195006-000	313-00195008-000	1	450	492-499	9
*20	21.55-21.65	20	313-00216006-000	313-00216008-000	1	500	547-550	9
*24	25.75-25.85	20	313-00258006-000	313-00258008-000	1	600	654-657	9

\*Fabricated straps, epoxy coated carbon Steel.

### 1¼", 1½", 2" and 2½" NPT Taps

STANDARD			CATALOG NUMBER				CTN. QTY	METRIC		
NOM. SIZE INCHES	O.D. RANGE INCHES	WT. EACH LBS.	1-1/4" NPT/32 MM	1-1/2" NPT/40 MM	2" NPT/50 MM	2-1/2" NPT/65 MM		NOM. SIZE MM	O.D. RANGE MM	WT. EACH KG.
2	2.35-2.56	3	313-00025610-000	313-00025612-000	-	-	6	50	60-65	1
3	2.97-3.54	5	313-00035410-000	313-00035412-000	313-00035414-000	-	6	80	76-89	3
3-4	3.74-4.13	8	313-00041310-000	313-00041312-000	313-00041314-000	313-00041316-000	6	80-100	95-104	3
4	4.40-4.50	6	313-00045010-000	313-00045012-000	313-00045014-000	313-00045016-000	6	100	112-114	3
4	4.40-4.80	6	313-00048010-000	313-00048012-000	313-00048014-000	313-00048016-000	6	100	112-122	3
4-5	4.74-5.14	8	313-00051410-000	313-00051412-000	313-00051414-000	313-00051416-000	6	100-125	120-130	3
4-5	5.00-5.63	9	313-00056310-000	313-00056312-000	313-00056314-000	313-00056316-000	4	100-125	127-143	4
6	5.94-6.70	9	313-00066310-000	313-00066312-000	313-00066314-000	313-00066316-000	4	150	151-170	4

\*Fabricated straps, epoxy coated carbon Steel.

### 1 1/4", 1 1/2", 2" and 2 1/2" NPT Taps Continued

STANDARD			CATALOG NUMBER				CTN. QTY	METRIC		
NOM. SIZE INCHES	O.D. RANGE INCHES	WT. EACH LBS.	1-1/4" NPT/32 MM	1-1/2" NPT/40 MM	2" NPT/50 MM	2-1/2" NPT/65 MM		NOM. SIZE MM	O.D. RANGE MM	WT. EACH KG.
6	5.94-6.90	9	313-00069010-000	313-00069012-000	313-00069014-000	313-00069016-000	4	150	151-175	4
6	6.84-7.60	7	313-00076010-000	313-00076012-000	313-00076014-000	313-00076016-000	4	150	174-193	3
6-8	7.69-8.72	11	313-00087210-000	313-00087212-000	313-00087214-000	313-00087216-000	4	150-200	195-221	5
6-8	7.69-9.05	11	313-00090510-000	313-00090512-000	313-00090514-000	313-00090516-000	4	150-200	195-230	5
8-10	8.54-10.10	9	313-00101010-000	313-00101012-000	313-00101014-000	313-00101016-000	4	200-250	217-256	4
10	10.75-11.10	10	313-00111010-000	313-00111012-000	313-00111014-000	313-00111016-000	4	250	273-282	4
10-12	10.64-12.12	11	313-00121210-000	313-00121212-000	313-00121214-000	313-00121216-000	4	250-300	271-307	5
12	12.75-13.20	15	313-00132010-000	313-00132012-000	313-00132014-000	313-00132016-000	4	300	324-355	7
12-14	12.62-14.32	14	313-00143210-000	313-00143212-000	313-00143214-000	313-00143216-000	4	300-350	321-363	6
12-14	14.73-15.65	18	313-00156510-000	313-00156512-000	313-00156514-000	313-00156516-000	1	300-350	375-397	8
14-16	15.95-17.25	19	313-00172510-000	313-00172512-000	313-00172514-000	313-00172516-000	1	350-400	406-438	9
16	17.25-17.80	19	313-00178010-000	313-00178012-000	313-00178014-000	313-00178016-000	1	410	438-452	9
16-18	17.40-18.88	19	313-00188810-000	313-00188812-000	313-00188814-000	313-00188816-000	1	400-450	442-479	9
*18	19.38-19.68	20	313-00195010-000	313-00195012-000	313-00195014-000	313-00195016-000	1	450	479-495	9
*20	21.55-21.65	20	313-00216010-000	313-00216012-000	313-00216014-000	313-00216016-000	1	500	547-550	9
*24	25.75-25.85	20	313-00258010-000	313-00258012-000	313-00258014-000	313-00258016-000	1	600	654-657	9

\*Fabricated straps, epoxy coated carbon Steel.

### 3" and 4" NPT Taps

STANDARD			CATALOG NUMBER		CTN. QTY	METRIC		
NOM. SIZE INCHES	O.D. RANGE INCHES	WT. EACH LBS.	3" NPT/80 MM	4" NPT/100 MM		NOM. SIZE MM	O.D. RANGE MM	WT. EACH KG.
6	5.94-6.70	10	313-00066317-000	-	4	150	151-171	5
6	6.84-7.60	13	313-00076017-000	313-00076018-000	4	150	174-193	6
8-10	8.54-10.10	15	313-00101017-000	313-00101018-000	3	200-250	217-256	7
10	10.75-11.10	14	-	-	-	-	-	-
10-12	11.30-12.12	14	313-00121217-000	313-00121218-000	2	250-300	271-307	6
12	12.75-13.20	18	-	-	-	-	-	-
12-14	13.40-14.32	18	313-00143217-000	313-00143218-000	2	300-350	321-363	8
12-14	14.73-15.65	28	313-00156517-000	313-00156518-000	2	300-350	375-397	13
14-16	15.98-16.59	28	313-00165917-000	313-00165918-000	1	350-400	406-421	13
16	17.25-17.80	29	313-00178017-000	313-00178018-000	1	400	439-452	13
16-18	17.81-18.88	30	313-00188817-000	313-00188818-000	1	400-450	452-479	13
*18	19.38-19.68	30	313-00195017-000	313-00195018-000	1	450	492-500	14

\*Fabricated straps, epoxy coated carbon Steel. 1/2 inch I.P. Taps can be accommodated by inserting a bushing in the 3/4 inch taps.

### BSP Thread Tap Codes

SIZE	CODE NUMBER	EXAMPLE
1/2"	59	1-1/4" NPT 313-00025610-000
3/4"	50	
1"	51	
1 1/4"	54	
1 1/2"	52	1-1/4" BSP 313-00025654-000
2"	53	
2 1/2"	55	
3"	56	