## **MALLEABLE IRON FITTINGS**



## Class 300 (XS/XH)

FIGURE 1167	Size				End to End		Unit Weight			
Reducer		31	26		M		Black		Galv.	
	NPS	DN	NPS	DN	in	mm	lbs	kg	lbs	kg
	3/8	10	1/4	8	<b>1</b> <sup>7</sup> ⁄ <sub>16</sub>	37	0.21	0.10	0.21	0.10
	1/2	15	1/4	8	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	0.31	0.14	0.31	0.14
			3/8	10			0.34	0.15	0.34	0.15
1500 Wod	3/4	20	1/4	8	1 <sup>3</sup> ⁄4	44	0.46	0.21	_	_
			3/8	10			0.47	0.21	0.47	0.21
WSP			1/2	15			0.50	0.23	0.50	0.23
T.S.F		25	1/4	8	2	51	0.66	0.30	0.66	0.30
STAND OF			3/8	10			0.71	0.32	0.71	0.32
	1		1/2	15			0.71	0.32	0.71	0.32
			3/4	20			0.77	0.35	0.77	0.35
<u> </u>	11/4	32	1/2	15	23/8	60	1.12	0.51	1.12	0.51
<u> </u>			3/4	20			1.16	0.53	1.16	0.53
M ()			1	25			1.27	0.58	1.27	0.58
	1½	40	1/2	15	2 <sup>11</sup> /16	68	1.51	0.68	1.51	0.68
<u> </u>			3/4	20			1.57	0.71	1.57	0.71
			1	25			1.62	0.73	1.62	0.73
			11/4	32			1.78	0.81	1.78	0.81
	2	50	1/2	15	<b>3</b> <sup>3</sup> ⁄ <sub>16</sub>	81	2.39	1.08	2.39	1.08
			3/4	20			2.44	1.11	2.44	1.11
			1	25			2.54	1.15	2.54	1.15
			11/4	32			2.66	1.21	2.66	1.21
			11/2	40			2.72	1.23	2.72	1.23
	21/2	65	11/2	40	311/16	94	4.09	1.85	4.09	1.85
			2	50			4.32	1.96	_	_
	3	80	11/2	40	<b>4</b> ½16	103	5.79	2.63	_	_
			2	50			5.83	2.64	5.83	2.64
			21/2	65			6.45	2.93	6.45	2.93
	4	100	2	50	427	111	9.50	4.31	_	_
			3	80	43//8		10.00	4.54	_	_

Note: See following page for pressure-temperature ratings. Galvanized weights may vary. Please contact your Anvil Representative if you need verification. All Elbows & Tees 3/s" (10 DN) and Larger are 100% Gas Tested at a Minimum of 100 PSI. (6.9 bar)

PROJECT INFORMATION	APPROVAL STAMP
Project:	☐ Approved
Address:	Approved as noted
Contractor:	☐ Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

### MALLEABLE IRON FITTINGS





### **Malleable Iron Threaded Pipe Unions Pressure - Temperature Ratings** Pressure **Temperature** Class 250 **Class 150 Class 300** (°C) (°F) psi bar bar -20° -28.9° to to 300 20.7 500 34.5 600 41.4 150° 65.6° 200° 93.3° 265 18.3 455 31.4 550 37.9 250° 121.1° 225 15.5 405 27.9 505 34.8 300° 148.9° 12.8 31.7 185 360 24.8 460 350° 176.7° 10.3 28.6 150 315 21.7 415 400° 204.4° 110 7.6 270 18.6 370 25.5 450° 232.2° 75 5.2 225 15.5 325 22.4 500° 260.0° 180 12.4 280 19.3 287.8° 550° 130 9.0 230 15.9

**Note**: Unions with Copper or Copper Alloy seats are not intended for use where temperature exceeds 450°F





For Listings/Approval Details and Limitations, visit our website at www.anvilintl.com or contact an Anvil Sales Representative.

Pressure - Temperature Ratings											
		Pressure									
Temperature		Class 150		Class 300							
				Sizes ½"-1" (6-25 mm)		Sizes 1¼"–2" (32–51 mm)		Sizes 2½"-3" (64-76 mm)			
(°F)	(°C)	psi	bar	psi	bar	psi	bar	psi	bar		
-20° to 150°	-28.9° to 65.6°	300	20.7	2,000	137.9	1,500	103.4	1,000	68.9		
200°	93.3	265	18.3	1,785	123.1	1,350	93.1	910	62.7		
250°	121.1	225	15.5	1,575	108.6	1,200	82.7	825	56.9		
300°	148.9	185	12.8	1,360	93.8	1,050	72.4	735	50.7		
350°	176.7	150	10.3	1,150	79.3	900	62.1	650	44.8		
400°	204.4	_	_	935	64.5	750	51.7	560	38.6		
450°	232.2	_	_	725	50.0	600	41.4	475	32.8		

**Malleable Iron Threaded Fittings** 

Anvil Class 150/300 Malleable Iron Fittings conform to ASME B16.3 and Unions conform to ASME B16.39.

35.2

20.7

450

300

31.0

20.7

385

300

26.5

20.7

510

300

ALL ELBOWS & TEES %" (10 DN) and LARGER ARE 100% GAS TESTED AT A MINIMUM OF 100 PSI. (6.9 bar)

Standards and Specifications										
	Dimensions	Material	Galvanizing****	Thread	<b>Pressure Rating</b>	Federal/Other				
MALLEABLE IRON FITTINGS										
Class 150/PN 20	ASME B16.3●	ASTM A-197	ASTM A-153	ASME B1 20.1+	ASME B16.3●	ASME B16.3**				
Class 300/PN 50	ASME B16.3●	ASTM A-197	ASTM A-153	ASME B1 20.1+	ASME B16.3●					
MALLEABLE IRON UNIONS										
Class 150/PN 20	ASME B16.39●	ASTM A-197	ASTM A-153	ASME B1 20.1+	ASME B16.39●	ASME B16.39***				
Class 250	ASME B16.39●	ASTM A-197	ASTM A-153	ASME B1 20.1+	ASME B16.39●					
Class 300/PN 50	ASME B16.39●	ASTM A-197	ASTM A-153	ASME B1 20.1+	ASME B16.39●					

500°

550°

260.0

287.8

<sup>•</sup> an American National standard (ANSI), + ASME B1.20.1 was ANSI B2.1, \*\* Formerly WW-P-521, \*\*\* Formerly WW-U-531

<sup>\*\*\*\*</sup> ASTM B 633. Type I, SC 4, may be supplied as alternate zinc coating per applicable ASME B16 product standard.

### MALLEABLE IRON FITTINGS



# **General Assembly of Threaded Fittings**

- 1) Inspect both male and female components prior to assembly.
  - Threads should be free from mechanical damage, dirt, chips and excess cutting oil.
  - Clean or replace components as necessary.
- 2) Application of thread sealant
  - Use a thread sealant that is fast drying, sets-up to a semi hard condition and is vibration resistant. Alternately, an anaerobic sealant may be utilized.
  - Thoroughly mix the thread sealant prior to application.
  - Apply a thick even coat to the male threads only. Best application is achieved with a brush stiff enough to force sealant down
    to the root of the threads.
- 3) Joint Makeup
  - For sizes up to and including 2" pipe, wrench tight makeup is considered three full turns past handtight. Handtight engagement for 1/2" through 2" thread varies from 41/2 turns to 5 turns.
  - For  $2^{1}/2^{"}$  through 4" sizes, wrench tight makeup is considered two full turns past handtight. Handtight engagement for  $2^{1}/2^{"}$  through 4" thread varies from  $5^{1}/2$  turns to  $6^{3}/4$  turns.