Anvil® Forged Steel Fittings

Class 3000 Threaded

Fig. 2115 Crosses
Fig. 2113 90° Street Elbows
Fig. 2116 Laterals



Figure 2115 Crosses	Si	ze	1	A	ı	4	Unit W	leight
	NPS	DN	in	mm	in	mm	lbs	kg
	1/8	6	0.81	21	0.88	22	-	-
	1/4	8	0.97	25	1.00	25	_	_
	3/8	10	1.12	28	1.31	33	_	_
	1/2	15	1.31	33	1.50	38	1.40	0.63
	3/4	20	1.50	38	1.81	46	2.10	0.95
+H	1	25	1.75	44	2.19	56	3.50	1.59
FORCE	111/4	32	2.00	51	2.44	62	4.30	1.95
	111/2	40	2.38	60	2.97	75	8.20	3.72
i← A→	2	50	2.50	64	3.31	84	8.40	3.81
	21/2	65	3.25	83	4.00	102	17.10	7.76
	3	80	3.75	95	4.75	121	20.00	9.07
	4	100	4.50	114	6.00	152	32.00	14.51

Figure 2113 90° Street Elbows	Si	ze	,	A		G	ı	4	Unit V	Veight
	NPS	DN	in	mm	in	mm	in	mm	lbs	kg
	1/8	6	0.75	19	1.00	25	0.75	19	-	-
← G→	1/4	8	0.88	22	1.25	32	1.00	25	0.23	0.10
The state of the s	3/8	10	1.00	25	1.50	38	1.25	32	0.38	0.17
	1/2	15	1.12	28	1.62	41	1.50	38	0.53	0.24
	Å 3/4	20	1.38	35	1.88	48	1.75	44	0.88	0.40
	<u>1</u>	25	1.75	44	2.25	57	2.00	51	1.40	0.63
AB913 ←H→	111/4	32	2.00	51	2.62	66	2.44	62	2.40	1.09
	111/2	40	2.12	54	2.81	71	2.75	70	2.90	1.32
	2	50	2.50	64	3.31	84	3.31	84	5.00	2.27

Figure 2116 La	terals	Si	ze		В		К		L	Unit V	Veight
		NPS	DN	in	mm	in	mm	in	mm	lbs	kg
	* /*	1/2	15	1.56	39.62	2.56	65.02	3.56	90.42	1.75	0.79
	() () () () () () () () () ()	3/4	20	1.84	46.74	3.00	76.20	4.13	104.90	2.75	1.24
		1	25	2.22	56.39	3.50	88.90	4.81	122.17	4.63	2.10
		111/4	32	2.50	63.50	3.94	100.08	5.38	136.65	5.50	2.48
		111/2	40	3.03	79.96	4.75	120.65	6.44	163.58	10.81	4.91
	├	2	50	3.34	84.84	5.00	127.00	6.63	168.40	11.50	5.23

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

Anvil® Forged Steel Fittings

Fig. 2115 Crosses **Fig. 2113** 90° Street Elbows

Fig. 2116 Laterals





Materials

The steel for Anvil Forged Carbon Steel Fittings consists of forging, bars, seamless pipe or tubes which conform to the requirements for melting process, chemical composition and mechanical properties of ASTM A105.

Design Basis

ASME B16.11 - Forged fittings, socket-weld and threaded

Dimensions

ASME B16.11, unless otherwise noted

Threads

ASME B1.20.1 NPT Threads

Forged Steel Fittings

In accordance with ASME standard B16.11 - "Forged Fittings, Socket-Welding and Threaded" this table shows the schedule of pipe corresponding to each class of fitting for rating purposes.

Pressure Ratings					
Class					
N.P.T.	S.W.				
80	_				
160	80				
XXS/XXH	160				
	Sched N.P.T. 80 160				

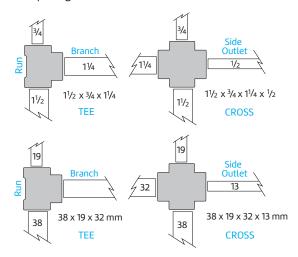
ASME B16.11 provides that the maximum allowable pressure of a fitting be computed in accordance with the applicable piping code or regulation for straight seamless pipe or for material of equivalent composition and mechanical properties to the fitting. Any corrosion or mechanical allowances and any reduction in allowable stress due to temperature or other service conditions must be applied to the pipe and fitting alike.

Standards and Specifications								
	Dimensions	Material	Thread	Pressure Rating				
	Forged Steel Threaded Fittings							
Class 2000, 3000, 6000	ASME B16.11	ASTM A105, ASTM A182, ASTM A350	ASME B1.20.1	ASME B16.11				

Reducing Fittings

Reducing elbows, tees and crosses are available in both threaded and socket-welding.

On reducing tees and crosses give the size of the largest run opening; then give the opposite opening. On a tee give the branch size last. On a cross give the largest side outlet third and the opposite opening last.





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Building connections that last™

Anvil® Forged Steel Fittings

Fig. 2115 Crosses Fig. 2113 90° Street Elbows Fig. 2116 Laterals



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 ½" through 2" thread varies from 4½ turns to 5 turns.
- For 2½" through 4" sizes, wrench tight makeup is considered two full turns past handtight. Handtight engagement for 2½" through 4" thread varies from 5½ turns to 6¾ turns.