

Class 6000 Socket Weld

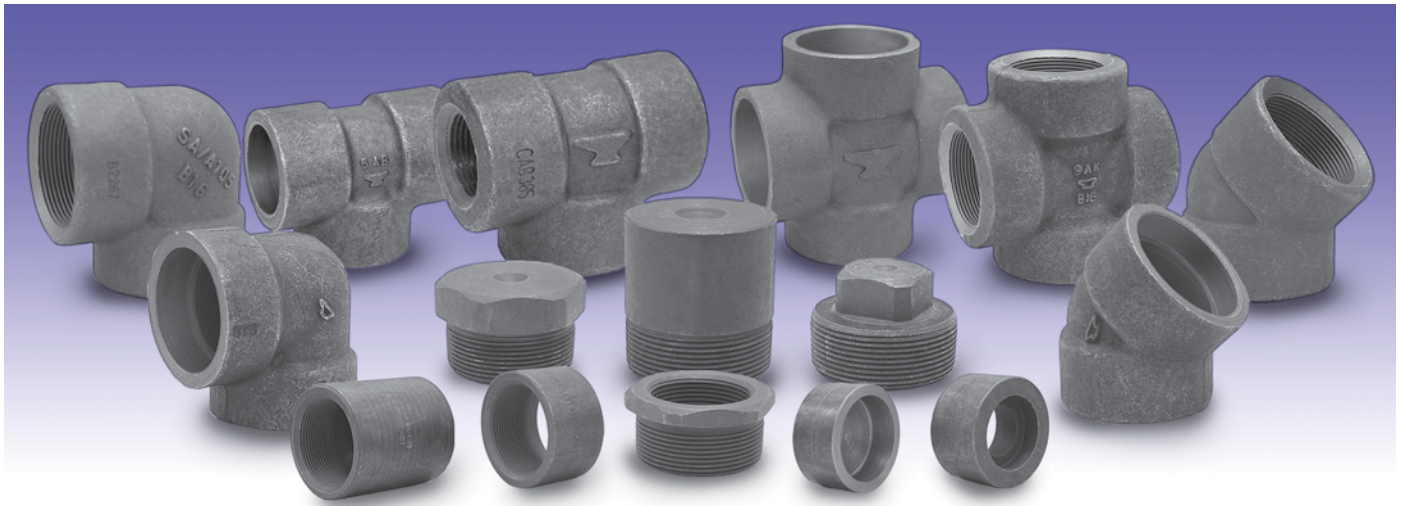
FIGURE 2170 90° Elbows	Size		A Nominal		B Socket Dia.		C Minimum		D Bore Dia.		J Socket Depth Minimum		Unit Weight				
	NPS	DN	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg			
1/2	15	0.75	19.0	.875	22.2	.855	21.8	0.204	5.18	.494	12.5	.434	11.0	0.38	9.5	0.90	0.41
3/4	20	0.88	22.5	1.085	27.6	1.065	27.2	0.238	6.04	.642	16.3	.582	14.8	0.50	12.5	1.50	0.68
1	25	1.06	27.0	1.350	34.3	1.330	33.9	0.273	6.93	.845	21.5	.785	19.9	0.50	12.5	2.32	1.05
1 1/4	32	1.25	32.0	1.695	43.1	1.675	42.7	0.273	6.93	1.190	30.2	1.130	28.7	0.50	12.5	3.00	1.36
1 1/2	40	1.50	38.0	1.935	49.2	1.915	48.8	0.307	7.80	1.368	34.7	1.308	33.2	0.50	12.5	5.50	2.49
2	50	1.62	41.0	2.426	61.7	2.406	61.2	0.374	9.50	1.717	43.6	1.657	42.1	0.62	16.0	6.50	2.95
2 1/2	65	2.25	57.1	2.931	74.4	2.906	73.9	0.41	10.41	2.185	55.5	2.065	52.5	0.62	16.0	12.00	5.44
3	80	2.50	63.5	3.560	90.3	3.535	89.8	0.48	12.19	2.684	68.2	2.564	65.1	0.62	16.0	19.60	8.89
4	100	2.62	66.5	4.570	115.7	4.545	115.2	0.58	14.73	3.498	88.8	3.378	85.8	0.75	19.0	36.40	16.51

FIGURE 2171 45° Elbows	Size		A		B Socket Dia.		C Minimum		D Bore Dia.		J Socket Depth Minimum		Unit Weight				
	NPS	DN	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg			
1/2	15	0.50	12.5	.875	22.2	.855	21.8	0.204	5.18	.494	12.5	.434	11.0	0.38	9.5	0.90	0.41
3/4	20	0.56	14.0	1.085	27.6	1.065	27.2	0.238	6.04	.642	16.3	.582	14.8	0.50	12.5	1.50	0.68
1	25	0.69	17.5	1.350	34.3	1.330	33.9	0.273	6.93	.845	21.5	.785	19.9	0.50	12.5	2.32	1.05
1 1/4	32	0.81	20.5	1.695	43.1	1.675	42.7	0.273	6.93	1.190	30.2	1.130	28.7	0.50	12.5	3.00	1.36
1 1/2	40	1.00	25.5	1.935	49.2	1.915	48.8	0.307	7.80	1.368	34.7	1.308	33.2	0.50	12.5	5.50	2.49
2	50	1.12	28.5	2.426	61.7	2.406	61.2	0.374	9.50	1.717	43.6	1.657	42.1	0.62	16.0	6.50	2.95
2 1/2	65	1.25	31.8	2.931	74.4	2.906	73.9	0.41	10.41	2.185	55.5	2.065	52.5	0.62	16.0	12.00	5.44
3	80	1.38	35.1	3.560	90.3	3.535	89.8	0.48	12.19	2.684	68.2	2.564	65.1	0.62	16.0	19.60	8.89
4	100	1.58	40.1	4.570	115.7	4.545	115.2	0.58	14.73	3.498	88.8	3.378	85.8	0.75	19.0	36.40	16.51

Note: When the pipe is seated against the bottom of the socket prior to welding, to prevent possible cracking of the fillet welds, it is recommended that the pipe be withdrawn approximately 1/16 in (1.6mm) away from contact with the bottom of the socket before starting the weld.

Average of socket wall thickness around periphery shall be no less than listed values. The minimum values are permitted in localized areas.

PROJECT INFORMATION		APPROVAL STAMP	
Project:		<input type="checkbox"/> Approved	
Address:		<input type="checkbox"/> Approved as noted	
Contractor:		<input type="checkbox"/> Not approved	
Engineer:		Remarks:	
Submittal Date:			
Notes 1:			
Notes 2:			



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.

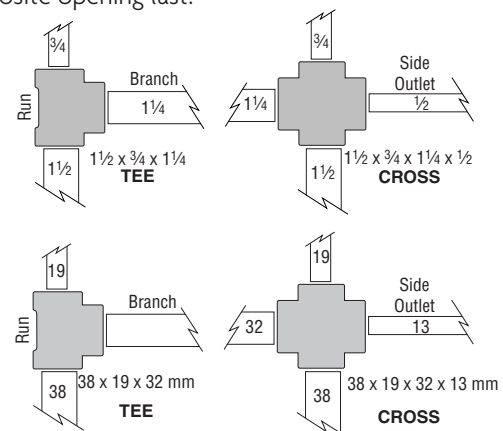
PRESSURE RATINGS		
Class	Schedule	
	N.P.T.	S.W.
2000	80	-
3000	160	80
6000	XXS/XXH	160

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.

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.



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