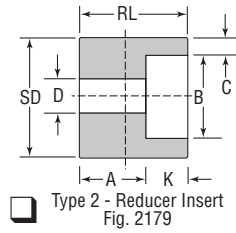
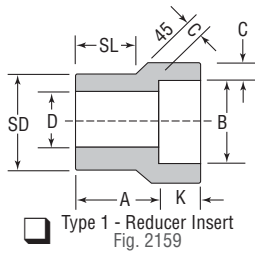


## Socket Weld Reducer Inserts



### CLASS 3000 For use with Schedule 40 and 80 Pipe

Reducer inserts comply with MSS standard SP-79. They enable standard socket-weld fittings to be used for making any combination of pipe line reductions quickly and economically. Socket-weld reducer inserts serve SD D the same purpose as threaded reducing bushings with threaded fittings.

Size		Class 3000 – For use with Schedule 40 and 80 Pipe														
SD	B	Type	A		D		C Min.		K		SL		RL Min.		Unit Weight	
			in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg
1/2	15	1	0.81	20.57	0.364	9.25	0.149	3.78	0.438	11.11	0.62	15.75	–	–	0.18	0.08
		1	0.81	20.57	0.493	12.52	0.158	4.00	0.438	11.11	0.62	15.75	–	–		
3/4	20	2	0.69	17.53	0.364	9.25	0.149	3.78	0.375	9.53	–	–	1.06	27	0.25	0.11
		2	0.62	15.75	0.493	12.52	0.158	4.00	0.438	11.11	–	–	1.06	27		
		1	0.88	22.35	0.622	15.80	0.184	4.67	0.438	11.11	0.69	17.53	–	–		
1	25	2	0.75	19.05	0.364	9.25	0.149	3.78	0.375	9.53	–	–	1.12	28	0.35	0.16
		2	0.69	17.53	0.493	12.52	0.158	4.00	0.438	11.11	–	–	1.12	28		
		2	0.62	15.75	0.622	15.80	0.184	4.67	0.438	11.13	–	–	1.12	28		
		1	0.94	23.88	0.824	20.93	0.193	4.90	0.563	14.29	0.75	19.05	–	–		
1 1/4	32	2	0.88	22.35	0.364	9.25	0.149	3.78	0.375	9.53	–	–	1.25	32	0.35	0.25
		2	0.81	20.57	0.493	12.52	0.158	4.00	0.438	11.11	–	–	1.25	32		
		2	0.75	19.05	0.622	15.80	0.184	4.67	0.438	11.13	–	–	1.25	32		
		2	0.69	17.53	0.824	20.93	0.193	4.90	0.563	14.29	–	–	1.25	32		
		1	1.00	25.40	1.049	26.65	0.224	5.69	0.563	14.29	0.81	20.57	–	–		
1 1/2	40	2	0.88	22.35	0.493	12.52	0.158	4.00	0.438	11.11	–	–	1.31	33	0.62	0.28
		2	0.81	20.57	0.622	15.80	0.184	4.67	0.438	11.13	–	–	1.31	33		
		2	0.75	19.05	0.824	20.93	0.193	4.90	0.563	14.29	–	–	1.31	33		
		2	0.69	17.53	1.049	26.65	0.224	5.69	0.500	12.70	–	–	1.31	33		
		1	1.12	28.45	1.380	35.05	0.239	6.00	0.563	14.29	0.88	22.35	–	–		
2	50	2	1.00	25.40	0.622	15.80	0.184	4.67	0.438	11.13	–	–	1.50	38	1.50	0.68
		2	0.94	23.88	0.824	20.93	0.193	4.90	0.563	14.29	–	–	1.50	38		
		2	0.88	22.35	1.049	26.65	0.224	5.69	0.563	14.30	–	–	1.50	38		
		2	0.81	20.57	1.380	35.05	0.239	6.00	0.563	14.30	–	–	1.50	38		
		1	1.25	31.75	1.610	40.64	0.250	6.35	0.563	14.29	1.00	25.40	–	–		
2 1/2	65	–	1.56	39.62	0.824	20.93	0.193	4.90	0.562	14.27	–	–	2.12	54	3.00	1.36
		–	1.50	38.10	1.049	26.65	0.224	5.69	0.562	14.27	–	–	2.12	54		
		–	1.44	36.58	1.380	35.05	0.239	6.00	0.562	14.27	–	–	2.12	54		
		–	1.38	35.05	1.610	40.64	0.250	6.35	0.562	14.27	–	–	2.12	54		
		–	1.81	46.00	2.067	52.50	0.273	6.93	0.688	17.48	1.50	38.10	–	–		
3	80	–	1.25	31.75	1.049	26.65	0.224	5.69	0.562	14.27	–	–	1.87	47	4.40	2.00
		–	1.19	30.23	1.380	35.05	0.239	6.00	0.562	14.27	–	–	1.87	47		
		–	1.12	28.45	1.610	40.64	0.250	6.35	0.562	14.27	–	–	1.87	47		
		–	1.00	25.40	2.067	52.50	0.273	6.93	0.688	17.48	–	–	1.87	47		
		–	1.50	38.10	2.469	62.71	0.345	8.76	0.688	17.48	1.25	31.75	–	–		

The larger size NPS is the insert size.

To minimize the possibility of cracking of the fillet welds, it is recommended that the shank portion of the reducer be withdrawn approximately .0625 in. (1.6 mm) away from the contact with the bottom of the socket before starting the weld. Likewise, the pipe is to be kept away from contacting the bottom of the reducer socket before welding.

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.

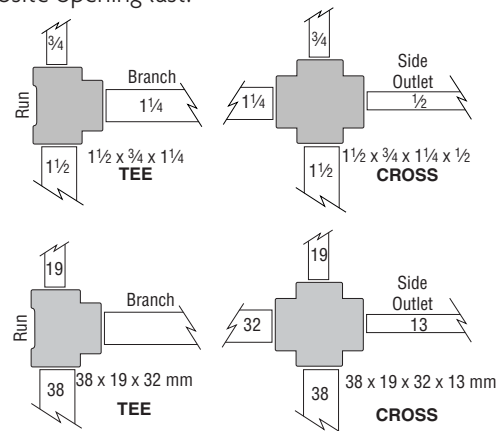
PRESSURE RATINGS		
Class	Schedule	
	N.P.T.	S.W.
2000	80	-
3000	160	80
6000	XXS/XXH	160

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
<b>FORGED STEEL THREADED FITTINGS</b>				
Class 2000, 3000, 6000	ASME B16.11	ASTM A105, ASTM A182, ASTM A350	ASME B1.20.1	ASME B16.11