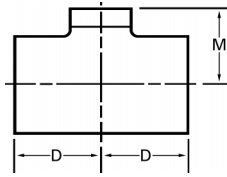
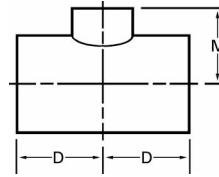
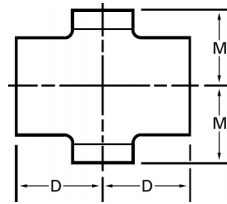


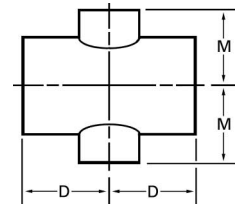
# Reducing Tees and Crosses



Drawn Outlets



Nozzle-Welded Outlets



- Available in either the “as welded” or “annealed” condition as described more fully under smooth flow elbows on page 6.
- Alloys stocked include Types 304, 304L, 316, 316L and 317L. However, reducing tees and crosses can normally be produced in any weldable corrosion resistant alloy.
- Non-standard sizes and dimensions are available.
- ID size reducing tees and crosses are available.

Nominal Pipe Size			Outside Diameter		Run	Outlet	D	M
3/4	X	3/4	X	1/2	1.05	X 1.05	X .840	1 1/8 1 1/8
1	X	1	X	3/4	1.31	X 1.31	X 1.05	1 1/2 1 1/2
			X	1/2		X .840	1 1/2 1 1/2	
1 1/4	X	1 1/4	X	1	1.66	X 1.66	X 1.31	1 7/8 1 7/8
			X	3/4		X 1.05	1 7/8 1 7/8	
			X	1/2		X .840	1 7/8 1 7/8	
1 1/2	X	1 1/2	X	1 1/4	1.90	X 1.90	X 1.66	2 1/4 2 1/4
			X	1		X 1.31	2 1/4 2 1/4	
			X	3/4		X 1.05	2 1/4 2 1/4	
			X	1/2		X .840	2 1/4 2 1/4	
				2	X 2	X 1 1/2	2 1/2 2 3/8	
						X 1 1/4	2 1/2 2 1/4	
						X 1	2 1/2 2	
2	X	2	X	1 1/2	2 3/8	X 2 3/8	X 1.90	2 1/2 2 3/8
			X	1 1/4		X 1.66	2 1/2 2 1/4	
			X	1		X 1.31	2 1/2 2	
				2 1/2	X 2 1/2	X 2	3 2 3/4	
						X 1 1/2	3 2 5/8	
						X 1 1/4	3 2 1/2	
2 1/2	X	2 1/2	X	2	2 7/8	X 2 7/8	X 2 3/8	3 2 3/4
			X	1 1/2		X 1.90	3 2 5/8	
			X	1 1/4		X 1.66	3 2 1/2	
				3	X 3	X 2 1/2	3 3 3/8 3 1/4	
						X 2	3 3 3/8 3	
						X 1 1/2	3 3 3/8 2 7/8	
						X 1 1/8	3 3 3/8 2 3/4	
3	X	3	X	2 1/2	3 1/2	X 3 1/2	X 2 7/8	3 3 3/8 3 1/4
			X	2		X 2 3/8	3 3 3/8 3	
			X	1 1/2		X 1.90	3 3 3/8 2 7/8	
			X	1		X 1.66	3 3 3/8 2 3/4	
				4	X 4	X 3	4 1/8 3 7/8	
						X 2 1/2	4 1/8 3 3/4	
						X 2	4 1/8 3 1/2	
						X 1 1/2	4 1/8 3 3/8	

Nominal Pipe Size			Outside Diameter		Run	Outlet	D	M
4	X	4	X	3	4 1/2	X 4 1/2	X 3 1/2	4 1/8 3 7/8
			X	2 1/2		X 2 7/8	4 1/8 3 3/4	
			X	2		X 2 3/8	4 1/8 3 1/2	
			X	1 1/2		X 1.90	4 1/8 3 3/8	
				5	X 5	X 4	4 7/8 4 5/8	
						X 3	4 7/8 4 3/8	
						X 2 1/2	4 7/8 4 1/4	
						X 2	4 7/8 4 1/8	
5	X	5	X	4	5 9/16	X 5 9/16	X 4 1/2	4 7/8 4 5/8
			X	3		X 3 1/2	4 7/8 4 3/8	
			X	2 1/2		X 2 7/8	4 7/8 4 1/4	
			X	2		X 2 3/8	4 7/8 4 1/8	
				6	X 6	X 5	5 5/8 5 3/8	
						X 4	5 5/8 5 1/8	
						X 3	5 5/8 4 7/8	
						X 2 1/2	5 5/8 4 3/4	
6	X	6	X	5	6 5/8	X 6 5/8	X 5 9/16	5 5/8 5 3/8
			X	4		X 4 1/2	5 5/8 5 1/8	
			X	3		X 3 1/2	5 5/8 4 7/8	
			X	2 1/2		X 2 7/8	5 5/8 4 3/4	
				8	X 8	X 6	7 6 5/8	
						X 5	7 6 3/8	
						X 4	7 6 1/8	
						X 3	7 5 7/8	
8	X	8	X	6	8 5/8	X 8 5/8	X 6 5/8	7 6 5/8
			X	5		X 5 9/16	7 6 3/8	
			X	4		X 4 1/2	7 6 1/8	
			X	3		X 3 1/2	7 5 7/8	
				10	X 10	X 8	8 1/2 8	
						X 6	8 1/2 7 5/8	
						X 5	8 1/2 7 1/2	
						X 4	8 1/2 7 1/4	
10	X	10	X	8	10 3/4	X 10 3/4	X 8 5/8	8 1/2 8
			X	6		X 6 5/8	8 1/2 7 5/8	
			X	5		X 5 9/16	8 1/2 7 1/2	
			X	4		X 4 1/2	8 1/2 7 1/4	

Dimensions are per ANSI B16.9 and are listed in inches.

Alloys: pg. 56, 57 Wall Thicknesses: pg. 49, 50 Tolerances: pg. 58 Specifications: pg. 54, 55