

# Flat-Bottomed Tees

Sizes: 1-1/4- to 12-inches



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■ Threaded Flat-Bottomed Tee  
Sizes 1-1/4- through 3-inch



■ Flanged Flat-Bottomed Tee  
Sizes 4- through 12-inch

## Description

Flat-Bottomed Tees are designed for hot tap tie-ins of lateral taps and crossover connections, eliminating need for a valve on the connection.

The Flat-Bottomed Tee is provided with a weld bevel. TDW recommends the review of approved welding procedures for the appropriate gaps between the flat-bottomed tee and the header pipe. For pre-scarfed 3-Way Tees, refer to bulletin 2100.002.

To isolate flow or pressure into connecting lines, the side outlet of the tee can be plugged with TDW SHORTSTOPP® 60 Plugging Machine equipment at pressures up to 60 psi or with SHORTSTOPP® II at pressures up to 150 psi.

For higher pressures up to 285 psi, special side outlet plugging equipment is available on special order. Consult the factory.

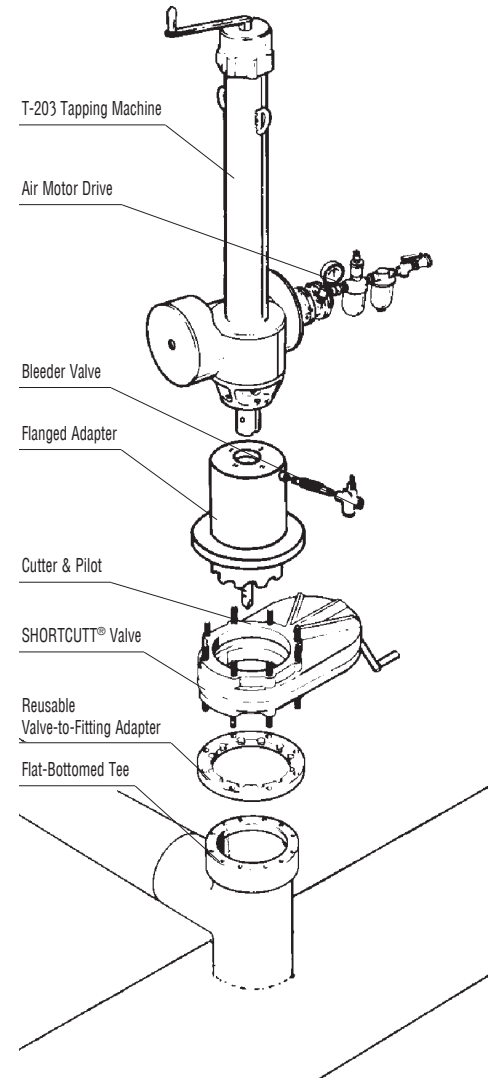
## Features

The design of the 4 in., 6 in., 8 in., 10 in. and 12 in. Type IIa Flat-Bottomed Tee requires a reusable, bolt-on flange adapter which adapts the tee to valves with ASME Class 150 bolt patterns.

When used with SHORTSTOPP® Plugging Machines, the maximum recommended working pressure and temperature should be limited to that of the plugging equipment, but not exceeding that of the fitting itself.

All fittings are compatible with most ASME Class 150 applications. With the plugging equipment removed, the maximum working pressure is 285 psi (20 bar) at 100° F (38° C) or 245 psi (17 bar) at 180° F (82° C) per ASME B31.4. See chart on page 2 for MOAP per ASME B31.8.

## ■ Typical 4- through 12-in. Tapping Setup





# Flat-Bottomed Tees



■ **Threaded Flat-Bottomed Tees**  
Sizes 1-1/4- through 3-in. (DN 32 - 80)

Complete Threaded Flat-Bottomed Tee includes: cap, completion plug, O-ring and tee.

## Flat-Bottomed Tees for Use with SHORTSTOPP® 60, SHORTSTOPP® II and SHORTSTOPP® 275 Plugging Machines

Size Inches	DN	Part Number	Approx. Weight		Design Factor**				Nominal Wall Thickness
			Lb.	Kg.	0.72	0.60	0.50	0.40	Side Outlet
1-1/4	32	06-7313-0000	4	1.8	285	285	285	285	Schedule 40
1-1/4	32	06-8619-0000	4	1.8	285	285	285	285	Schedule 40
1-1/2	38	26-0219-0000	6	2.8	285	285	285	285	Schedule 40
2	50	26-0220-0000	7.5	3.5	285	285	285	285	Schedule 40
3	80	26-0221-0000	13	6	285	285	285	285	Schedule 40

\* For thin wall pipe to side outlet.  
\*\* Maximum Allowable Operating Pressure (in psi), Per ASME B31.8 at -20 to +100° F  
NOTE: Drilling and plug setting at pressures to 285 psi at 100° F using high pressure, full-opening (2-1/16 in. and 3-1/16 in.) tapping valve or new SHORTCUTT® 500 Valves.



■ **Flanged Flat-Bottomed Tees**  
Sizes 4- through 12-in. (DN 100 - 300)

Complete Flanged Flat-Bottomed Tee includes: cover flange, gasket, bolts, plastic capplugs, completion plug with O-ring and tee.

All Flat-Bottomed Tees are designed to meet ASME Class 150 service ratings and are for maximum operating pressures of 245 psi at 180° F or 285 psi (20 bar) at 100° F (38° C) after plugging equipment has been removed.

## Flat-Bottomed Tees for Use with SHORTSTOPP® 60, SHORTSTOPP® II and SHORTSTOPP® 275 Plugging Machines

Size Inches	DN	Part Number	Weight		Design Factor**				Nominal Wall Thickness
			Lb.	Kg.	0.72	0.60	0.50	0.40	Side Outlet
4	100	06-7239-0400-01	35	16	285	285	285	285	Schedule 40
4*	100	06-7239-0400-02	35	16	285	285	285	285	.188"
6	150	06-7240-0600-01	50	23	285	285	285	285	Schedule 40
6*	150	06-7240-0600-02	50	23	285	285	285	285	.188"
8	200	06-7241-0800-01	125	57	285	285	285	285	Schedule 40
8*	200	06-7241-0800-02	125	57	285	285	285	285	.219"
10	250	06-7319-1000-01	160	72.5	285	285	285	285	Schedule 40
10*	250	06-7319-1000-02	160	72.5	285	285	285	285	.235"
12	300	06-7320-1200-01	230	104	285	270	225	180	.375"
12*	300	06-7320-1200-02	230	104	285	270	225	180	.250"

\* For thin wall pipe to side outlet.  
\*\* Maximum Allowable Operating Pressure (in psi), Per ASME B31.8 at -20 to +100° F  
NOTE: Plug setting limited to 60 psi if using SHORTSTOPP® 60 equipment. Type II completion plugs are set at pressures up to 285 psi using SHORTSTOPP® 275/500 completion machines.

## Minimum Pipe Thickness (Inch)

Size	Header Pipe OD	Design Factor			
		0.72	0.60	0.50	0.40
1-1/4	1.66	0.019	0.023	0.027	0.034
1-1/2	1.90	0.021	0.026	0.031	0.039
2	2.375	0.027	0.032	0.039	0.048
3	3.50	0.040	0.048	0.057	0.071
4	4.50	0.051	0.061	0.073	0.092
6	6.625	0.075	0.090	0.108	0.135
8	8.625	0.098	0.117	0.140	0.176
10	10.75	0.122	0.146	0.175	0.219
12	12.75	0.144	0.173	0.208	0.260

NOTE: The TDW Fitting provides sufficient material thickness for itself and in many cases reinforcement for the branch opening in the pipe. The chart above specifies the minimum required wall thickness of pipe needed for self-reinforcement. (Based on 35,000 PSI SMYS.) The thicknesses shown in the chart include the thickness required for hoop and area of reinforcement.



# Valve-To-Fitting Adapters

## Spare Parts

Size		Spare O-Rings Part Number	Type IIa* Spare Gaskets Part Number
Inches	DN		
1-1/4	32	00-0117-0014	--
1-1/2	38	00-0117-0010	--
2	50	00-0117-0010	--
3	80	00-0117-0013	--
4	100	00-1250-0001	00-5238-0004-01
6	150	00-1250-0002	00-5238-0006-01
8	200	00-1250-0003	00-5238-0008-01
10	250	00-1250-0004	00-5238-0010-01
12	300	00-1250-0005	00-5238-0012-01

\*For use with Type IIa flanges only. Consult factory if gaskets are needed for Type II flanges.



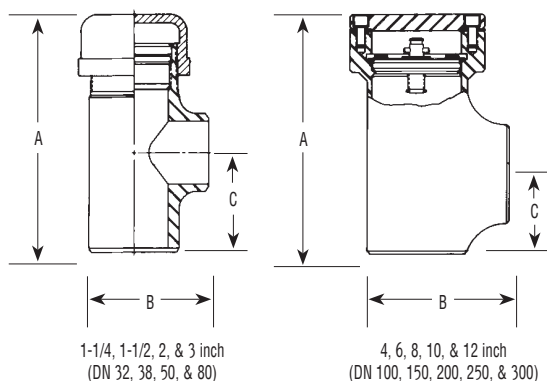
■ Valve-to-Fitting Adapter

The 4 x 6, 6 x 8, 8 x 10 and 10 x 12 inch adapters are used to adapt valve to next smaller size fitting.

## Valve-to-Fitting Adapters for 4- through 12-in. Flat-Bottomed Tees

Size		Part Number	Weight	
Inches	DN		Lbs.	Kg.
4	100	06-5724-0001	10	5
4x6	100x150	06-5724-0007	18	8
6	150	06-5724-0002	13	6
6x8	150x200	06-5724-0004	28-1/2	13
8	200	06-5724-0003	25	11
8x10	200x250	06-5724-0009	44	20
10	250	06-5724-0010	40	18
10x12	250x300	06-5724-0012	70	32
12	300	06-5724-0011	55	25

## Dimensions



Size		A		B		C	
Inches	DN	Inches	mm	Inches	mm	Inches	mm
1-1/4**	32	3-15/16	100	2-5/8	67	1-3/4	44
1-1/4***	32	5-3/4	121	2-5/8	67	3-5/8	92
1-1/2	38	7-3/16	152	3-1/4	83	3-1/2	89
2	50	7-1/4	184	3-1/4	83	3-3/4	95
3	80	10-1/8	257	4-3/4	121	4-7/16	113
4	100	11-1/2	292	6-3/8	162	4-1/8	105
6	150	15-1/8	384	8-13/16	224	5-3/8	136
8	200	17-3/8	441	10-7/8	276	6-7/16	163
10	250	21	533	14-7/8	378	9-5/8	244
12	300	23-13/16	605	17-3/8	441	11-7/16	290

\*\*Refers to Part Number 06-7313-0000

\*\*\*Refers to Part Number 06-8619-0000



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