



STOPPLE® Plugging Machine

Sizes: 4-inch and Larger



T.D. Williamson

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■ STOPPLE® Plugging Machine

Description

TDW STOPPLE® Plugging Machines serve as temporary block valves installed anywhere in a piping system. They are used to isolate a section of line for repairs or additions without interruption of service.

The STOPPLE Plugging Machine consists of three major sections: a hydraulic cylinder or jackscrew, a plugging head housing, and a plugging head.

Features

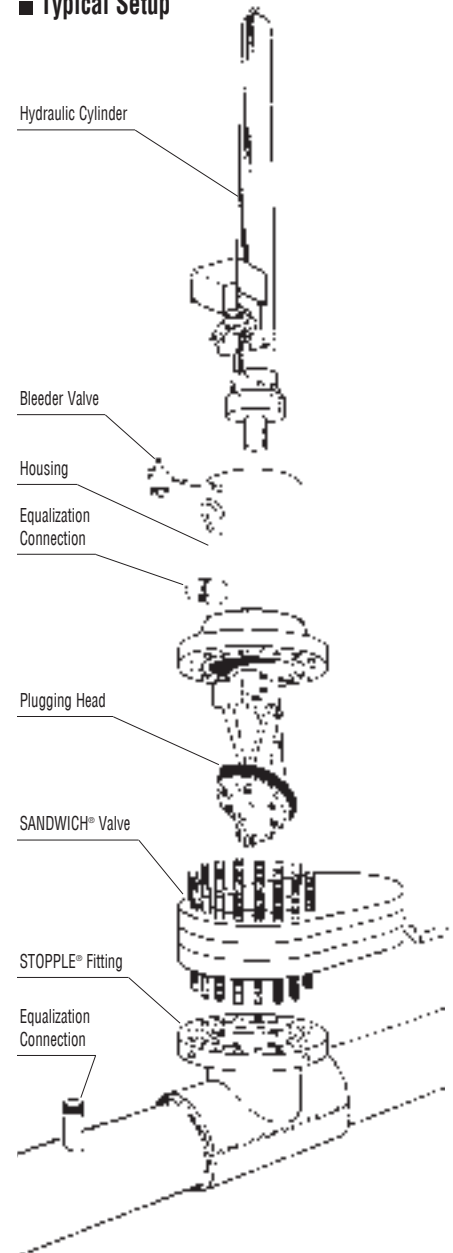
Operation of the hydraulic STOPPLE Plugging Machine is easy due to the location of the control valve, which is positioned at the lower end of the hydraulic cylinder. The hydraulically operated control bar has a direct reading scale visible to the operator, enabling him to know the plugging head position at all times.

- The TDW STOPPLE Plugging Machine is available for pipe sizes 4" (DN 100) and larger.

Its maximum operating temperature is 180°F (82°C).

* For design code options not listed and additional sizes, consult your sales representative.

Typical Setup





STOPPLE® Plugging Machine

Cylinder Operation

Jackscrew Operated Cylinder	Lbs.	Kg.	Part Number
4" (DN 100) and 6" (DN 150)	69	31	08-0299-0000
Hydraulic Operated Cylinders			
6" (DN 150), 8" (DN 200), 10" (DN 250), 12" (DN 300)	235	107	08-2116-0000
14" (DN 350), 16" (DN 400), 18" (DN 450), 20" (DN 500)	862	391	08-2117-0000
22" (DN 550), 24" (DN 600), 26" (DN 650), 30" (DN 750), 36" (DN 900)	1800	816	08-2118-0000

STOPPLE® Housings

Housings For Hydraulic Cylinders:

Inches	DN	Lbs.	Kg.	Part Number
8	200			08-2414-0000
10	250			08-2415-0000
12	300			08-2902-0000
16	400			08-2762-0000
18	450			08-2759-0000
20	500			08-2760-0000
24	600			08-2849-0000
26	650			08-2699-0000
28	700			08-2724-0000
30	750			12337355
32	800			12316520
34	850			12305074
36	900			08-2816-0000
40	1,000			08-2908-0000
42	1,050			08-2917-0000
48	1,200			08-2742-0000

Note: Housings are equipped with flanges which are drilled, faced and pressure-rated to match ANSI Class 150, 300 or 600 flanges.

Plugging Heads & Sealing Elements

Size		Plugging Heads			Sealing Elements		
Inches	DN	Lbs.	Kg.	Part Number	Lbs.	Kg.	Part Number
4	100	16	7	08-2692-0000*	1	.5	08-0036-0005
6	150	45	20	08-2690-0000*	2	.9	08-0040-0005
8	200	120	54	08-2684-0000*	2	.9	08-0246-0005
10	250	190	86	08-2703-0000*	4	2	08-0247-0005
12	300	270	122	08-2839-0000*	5	2	08-0248-0005
16	400	710	322	08-2761-0000	9	4	08-0250-0005
18	450	840	381	08-2841-0000	12	5	08-0251-0005
20	500	1,250	567	08-2670-0000	19	9	08-0252-0005
24	600	2,500	1134	08-2671-0000	37	17	08-0254-0005
26	650	3,150	1429	08-2698-0000	40	18	08-1863-0005
28	700	3,750	1701	08-2723-0000			
30	750	4,600	2087	08-2697-0000	64	29	08-1623-0005
32	800	4,950	2245	08-2777-0000			
34	850	6,500	2948	08-2745-0000			
36	900	5,100	2313	08-2815-0000	77	35	08-2046-0005
40	1000	11,000	4990	08-2907-0000			
42	1050	12,000	5443	08-2915-0000			
48	1200	17,850	8097	08-2741-0000			

*This plugging head is furnished with 2 nose pieces. All Plugging heads listed are rated 1480 psi.

When ordering sealing elements specify pipe ID, pressure, material of sealing element desired and number of bolt holes and bolt circle diameter required. Factory recommends two elements be purchased with each plugging head, one to be used as a spare. STD Machines are designed for STD weight pipe. If used in heavy or thin wall pipe, special components may be required.

STOPPLE® Housings

Housings For Jackscrew Cylinders:

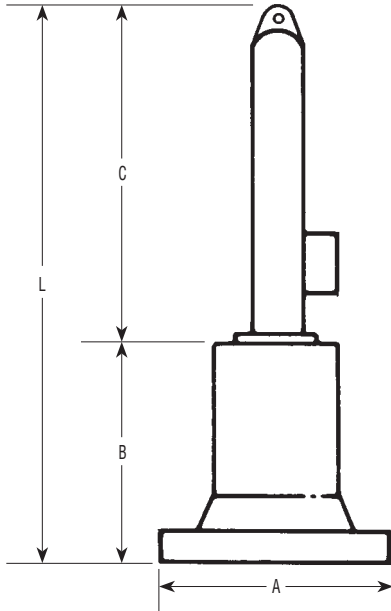
Inches	DN	Lbs.	Kg.	Part Number
4	100			08-0319-0000
6	150			08-0322-0000

Note: Housings are equipped with flanges which are drilled, faced and pressure-rated to match ANSI Class 150, 300 or 600 flanges.



STOPPLE® Plugging Machine

Approximate Dimensions for Determining Machine Clearances



Size		A*		B*		C		L	
Inches	DN	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4	100	11	280	14	356	58	1473	72	1829
6	150	14	356	17	432	58	1473	75	1905
8	200	17	432	19	483	85	2159	104	2642
10	250	20	508	23	533	85	2159	108	2743
12	300	22	559	25	610	85	2159	110	2794
14	350	24	610	32	787	124	3150	156	3962
16	400	27	686	35	889	124	3150	159	4039
18	450	30	762	39	991	124	3150	163	4140
20	500	32	813	42	1041	124	3150	166	4216
22	550	35	889	46	1168	166	4216	212	5385
24	600	37	940	52	1321	166	4216	218	5537
26	650	40	1015	52	1321	166	4216	218	5537
30	750	45	1143	60	1524	166	4216	226	5740
36	900	52	1321	67	1803	166	4216	233	5918

*Maximum with 600 Class Flange.

The TDW 660/760 Tapping Machine power unit normally operates 6" (DN 150) to 12" (DN 300) plugging machines. The power unit for the 1200 Tapping Machines operates 14" (DN 350) and larger.

Hydraulic cylinder (08-2116-0000) is furnished with hydraulic couplings for 660/760 Tapping Machine power unit.

Hydraulic cylinders (08-2117-0000, 08-2118-0000, and 08-2119-0000) are furnished with hydraulic couplings for 1200 Tapping Machine power units.

Hydraulic cylinder (08-2117-0000) can be used with the 660/760 power unit with the purchase of a conversion kit (08-0384-0000).

If other power unit to hydraulic cylinder combinations are to be used, be sure to specify so that proper couplings can be furnished.

Plugging Head Specifications

	Control Bar Travel		Max. Operating Pressure	
	Inches	mm	psi	bar
with Jackscrew Cylinder				
4" (DN 100) and 6" (DN 150)	48	1219	900	62
with Hydraulic Cylinders				
*6" (DN 150), 8" (DN 200), 10" (DN 250), 12" (DN 300)	72	1829	900	62
14" (DN 350), 16" (DN 400), 18" (DN 450), 20" (DN 500)	102	2604	750	52
22" (DN 550), 24" (DN 600), 26" (DN 650), 30" (DN 750)	140	3556	625	43
36" (DN 900)	140	3556	1000	70

NOTE: This chart is applicable to STOPPLE® equipment ordered from and manufactured at the Tulsa Manufacturing Plant. STOPPLE equipment ordered from and manufactured at TDW (SA) in Belgium is designed for a standard maximum operating pressure of 1,000 psi (70 bar). For STOPPLE equipment requiring higher pressure ratings or sizes other than those indicated in the above chart, consult the factory.

*When ordering 6" (DN 150) STOPPLE equipment, please specify either jackscrew or hydraulic cylinder.

■ Fall Protection Assembly

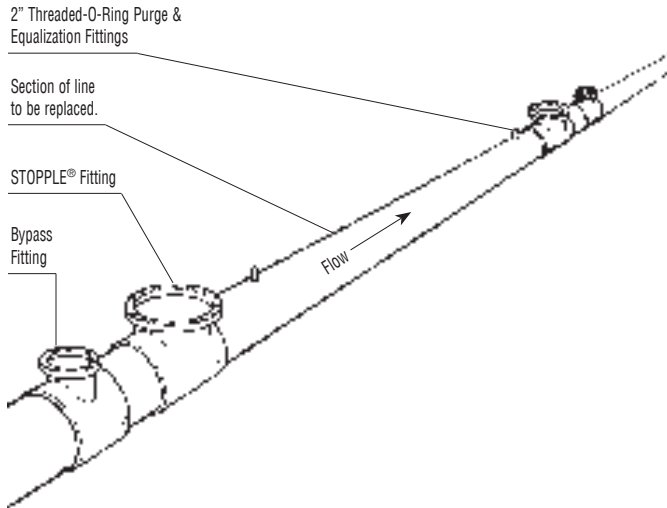
Safety Harness Assembly

Cylinder	Fall Protection Assembly
08-2116-0000	08-2546-0000
08-2117-0000	08-2547-0000
08-2118-0000	08-2548-0000
08-2119-0000	08-2549-0000



Plugging Without Shutdown - Typical Procedure

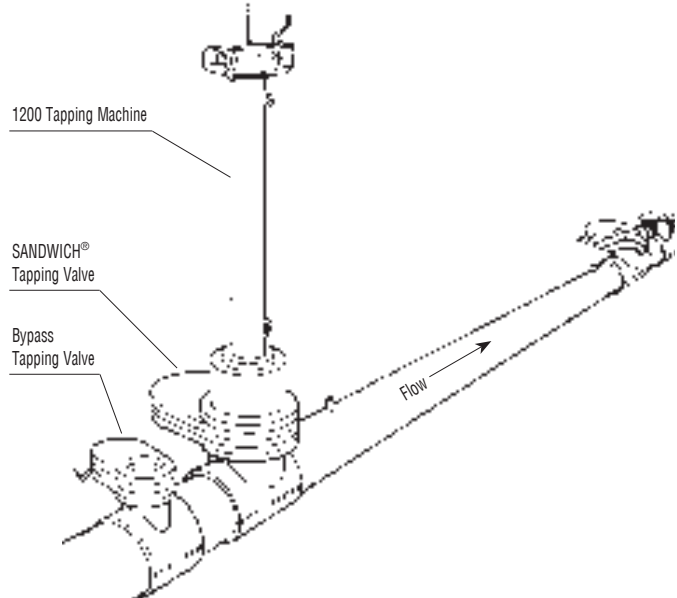
1. Weld Fittings



STOPPLE® Fittings with LOCK-O-RING® Flanges* are welded on each end of the section to be isolated. Bypass fittings with LOCK-O-RING Flanges and equalization fittings are welded to the line.

*See LOCK-O-RING Flanges, Bulletin 1120.001.

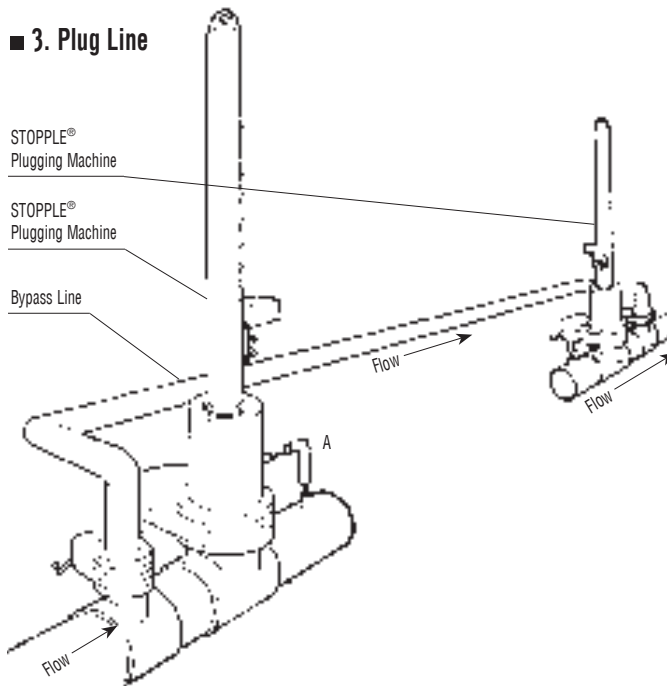
2. Make Taps



A Tapping Valve* is mounted on each fitting and taps are made through the valves into the pipeline. The cutter is withdrawn after each tap, the valve closed, and tapping machine removed.

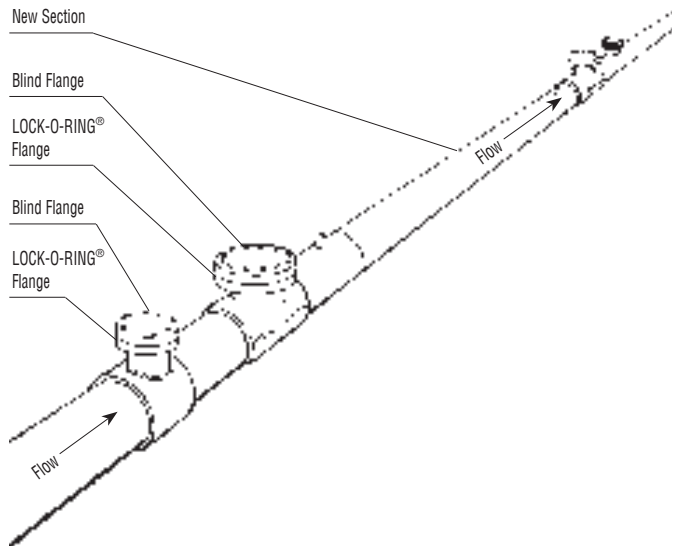
*See SANDWICH® Valve, Bulletin 1020.001.

3. Plug Line



Bypass connections are made and the bypass valves are opened. STOPPLE Plugging Machines are mounted and the plugging heads are lowered through valves into sealing position. After the new section is tied in, pressure is equalized by connection from the STOPPLE Housing to the pipeline (See A).

4. Recover Valves



Tapping machine cutters are replaced with LOCK-O-RING Plugs, and tapping machines (or machine) are mounted on valves. The LOCK-O-RING Plugs are lowered into position inside LOCK-O-RING Flanges. Tapping machines are removed, valves recovered, and blind flanges installed.