



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

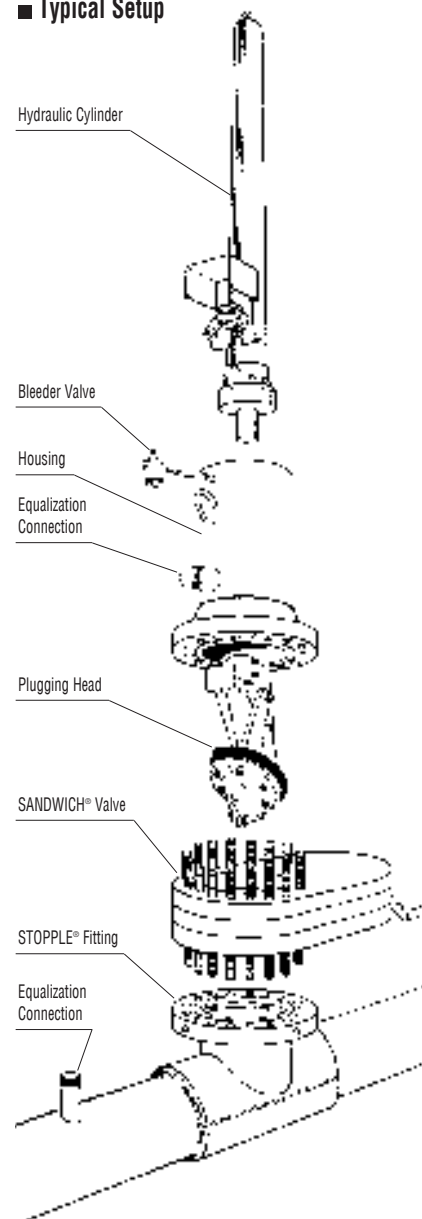
Operation of the hydraulic STOPPLE Plugging Machine is easy due to the location of the control valve, which is positioned at the lower end of the hydraulic cylinder. The hydraulically operated control bar has a direct reading scale visible to the operator, enabling him to know the plugging head position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

- The TDW STOPPLE Plugging Machine is available for pipe sizes 4-inch (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

Hydraulic Operated Cylinders	Lbs.	Kg.	Part Number
4" (DN100) - 12" (DN 300)	235	107	08-2116-0000
14" (DN 350) - 20" (DN 500)	862	391	08-2117-0000
22" (DN 550) - 34" (DN 850)	1800	816	08-2118-0000
36" (DN 900) - 48" (1150)	2090	948	08-2119-0000

STOPPLE® Housings, Plugging Heads & Sealing Elements (For use with hydraulic cylinders)

Class 150

Size

Inches	DN	Housings	Plugging Heads	Sealing Elements
4	100		08-2578-0000*	08-0036-0005
6	150	08-0270-0000	08-2579-0000*	08-0040-0005
8	200	08-0202-0000	08-2580-0000*	08-0246-0005
10	250	08-0203-0000	08-2581-0000*	08-0247-0005
12	300	08-0204-0000	08-2582-0000*	08-0248-0005
14	350		08-1892-0000	08-0249-0005
16	400	08-0206-0000	08-1893-0000	08-0250-0005
18	450	08-0207-0000	08-1894-0000	08-0251-0005
20	500	08-0208-0000	08-1895-0000	08-0252-0005
24	600	08-0210-0000	08-1897-0000	08-0254-0005
26	650	08-0211-0000	08-1898-0000	08-1863-0005
30	750	08-0212-0000	08-1900-0000	08-1623-0005
36	900	08-0423-0000	08-2048-0000	08-2046-0005

*This plugging head is furnished with 2 nose pieces.

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

When ordering sealing elements specify pipe ID, pressure, and material of sealing element desired. 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® Plugging Machine

STOPPLE® Housings, Plugging Heads & Sealing Elements (For use with hydraulic cylinders)

Class 300

Size				
Inches	DN	Housings	Plugging Heads	Sealing Elements
4	100		08-2578-0000*	08-0036-0005
6	150	08-0276-0000	08-2579-0000*	08-0040-0005
8	200	08-0213-0000	08-2580-0000*	08-0246-0005
10	250	08-0214-0000	08-2581-0000*	08-0247-0005
12	300	08-0215-0000	08-2582-0000*	08-0248-0005
14	350	08-0216-0000	08-1892-0000	08-0249-0005
16	400	08-0217-0000	08-1893-0000	08-0250-0005
18	450	08-0218-0000	08-1894-0000	08-0251-0005
20	500	08-0219-0000	08-1895-0000	08-0252-0005
24	600	08-0221-0000	08-1897-0000	08-0254-0005
26	650	08-0222-0000	08-1898-0000	08-1863-0005
30	750	08-0223-0000	08-1900-0000	08-1623-0005
36	900	08-0360-0000	08-2048-0000	08-2046-0005

*This plugging head is furnished with 2 nose pieces.

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

When ordering sealing elements specify pipe ID, pressure, and material of sealing element desired. 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® Plugging Machine

STOPPLE® Housings, Plugging Heads & Sealing Elements (For use with hydraulic cylinders)

Class 600

Size		Housings	Plugging Heads	Sealing Elements
Inches	DN			
4	100	08-2412-0000	08-2692-0000	08-2692-CHART-SUFF
6	150	08-1715-0000	08-2690-0000	08-2690-CHART-SUFF
8	200	08-2414-0000	08-2684-0000	08-2684-CHART-SUFF
10	250	08-2415-0000	08-2703-0000	08-2703-CHART-SUFF
12	300	08-2902-0000	08-2839-0000	08-2839-CHART-SUFF
14	350	12335406	08-2840-0000	08-2840-CHART-SUFF
16	400	08-2762-0000	08-2761-0000	08-2701-CHART-SUFF
18	450	08-2759-0000	08-2841-0000	08-2841-CHART-SUFF
20	500	08-2760-0000	08-2670-0000	08-2670-CHART-SUFF
24	600	08-2849-0000	08-2671-0000	08-2377-CHART-SUFF
26	650	08-2699-0000	08-2698-0000	08-2698-CHART-SUFF
28	700	08-2724-0000	08-2723-0000	08-2723-CHART-SUFF
30	750	12337355	08-2697-0000	08-2468-CHART-SUFF
32	800	12316520	08-2777-0000	08-2777-CHART-SUFF
34	850	12305074	08-2745-0000	08-2745-CHART-SUFF
36	900	08-2816-0000	08-2815-0000	08-2815-CHART-SUFF
40	1,000	08-2908-0000	08-2907-0000	08-2907-CHART-SUFF
42	1,050	08-2917-0000	08-2915-0000	08-2694-CHART-SUFF
48	1,200	08-2742-0000	08-2741-0000	08-2741-CHART-SUFF

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

When ordering sealing elements specify pipe ID, pressure, and material of sealing element desired. 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.

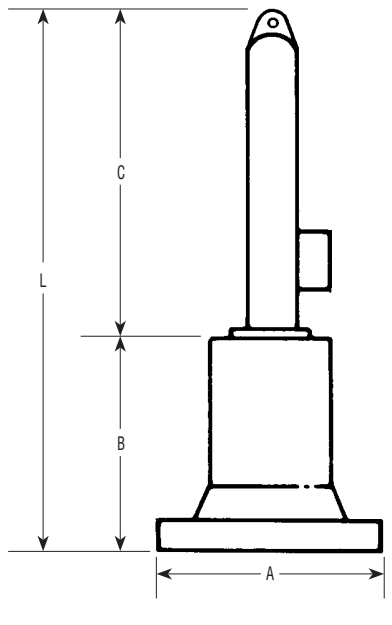
Jackscrew Configuration (900 PSI MAOP)

Inches	DN	Class	Housing	Actuator	Plugging Head	Sealing Element
4	100	150#	08-0319-0000	08-0299-0000	08-2578-0000	08-0036-CHART-SUFF
6	150	150#	08-0322-0000	08-0299-0000	08-2579-0000	08-0040-CHART-SUFF
4	100	300#	08-0320-0000	08-0299-0000	08-2578-0000	08-0036-CHART-SUFF
6	150	300#	08-0323-0000	08-0299-0000	08-2579-0000	08-0040-CHART-SUFF
4	100	600#	08-0300-0000	08-0299-0000	08-2578-0000	08-0036-CHART-SUFF
6	150	600#	08-0302-0000	08-0299-0000	08-2579-0000	08-0040-CHART-SUFF

Note: Control Bar Travel is 48 inches (1219 mm).

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 4" (DN 100) through 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

with Hydraulic Cylinders

	Control Bar Travel inches / mm		Max. Operating Pressure PSI / Bar	
*4" (DN100), 6" (DN 150), 8" (DN 200), 10" (DN 250), 12" (DN 300)	72	1829	1480	102
14" (DN 350), 16" (DN 400), 18" (DN 450), 20" (DN 500)	102	2604	1480	102
22" (DN 550), 24" (DN 600), 26" (DN 650), 30" (DN 750)	140	3556	1480	102
36" (DN 900)	140	3556	1480	102

Safety Harness Assembly

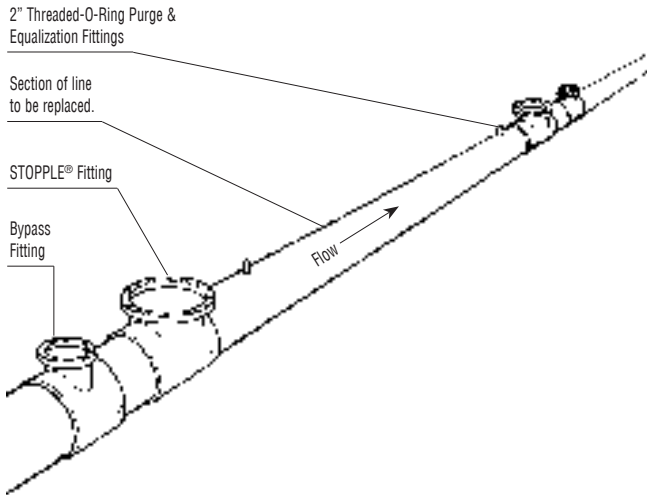
Cylinder	Fall Protection Assembly
08-2116-0000	08-2546-0000
08-2117-0000	08-2547-0000
08-2118-0000	08-2548-0000
08-2119-0000	08-2549-0000

Fall Protection Assembly



Plugging Without Shutdown - Typical Procedure

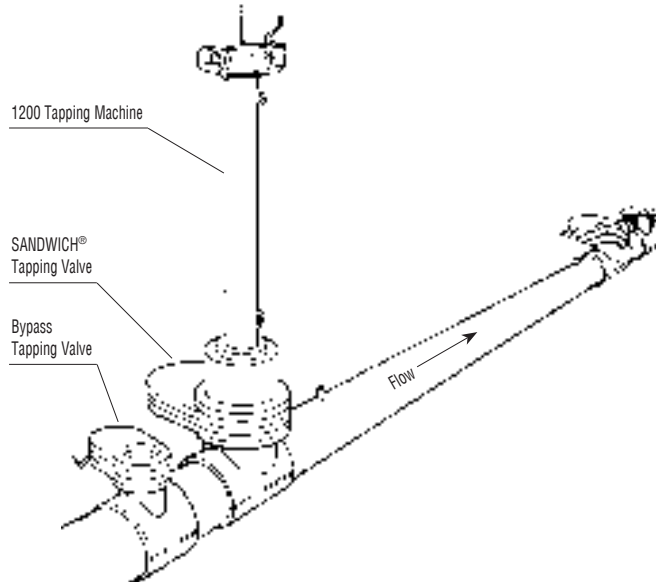
1. Weld Fittings



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.

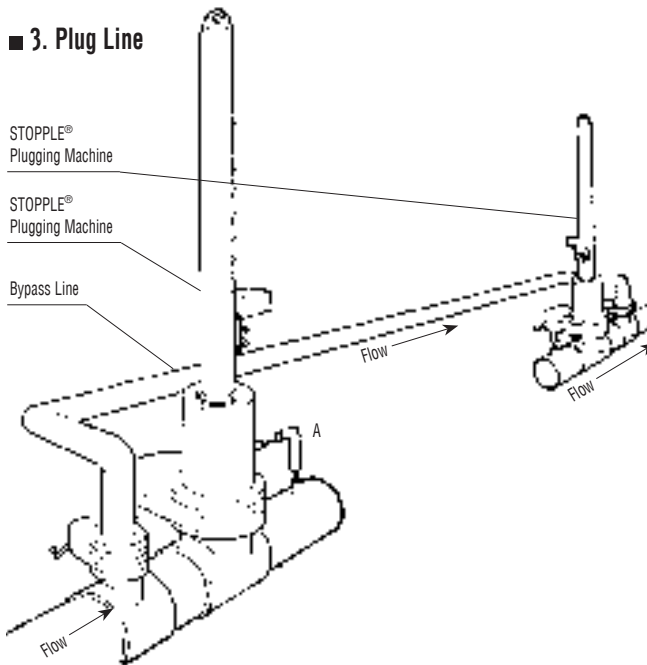
2. Make Taps



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.

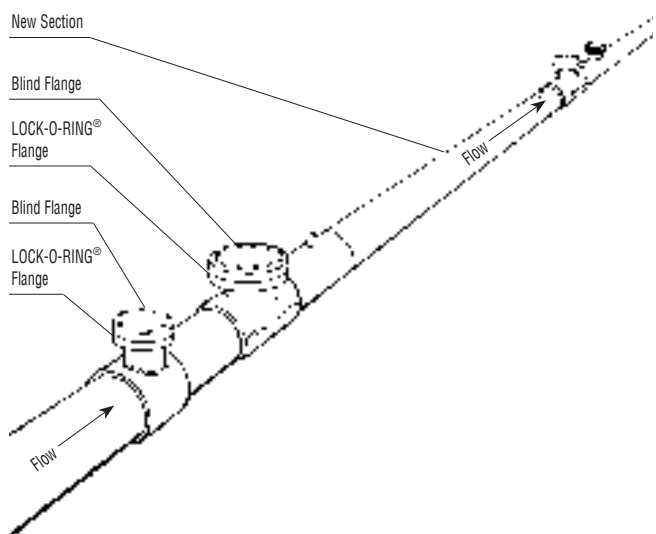
*See SANDWICH® Valve, Bulletin 1020.001.

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.