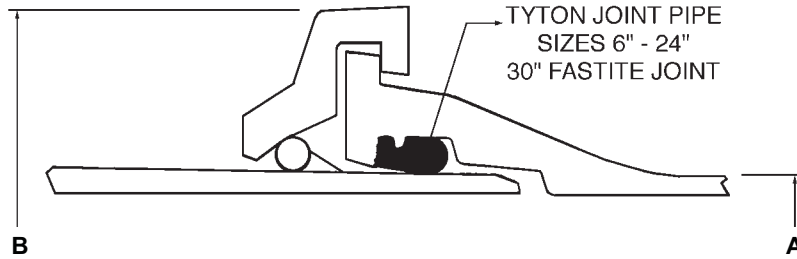


## SUPER-LOCK® RESTRAINED JOINT PIPE



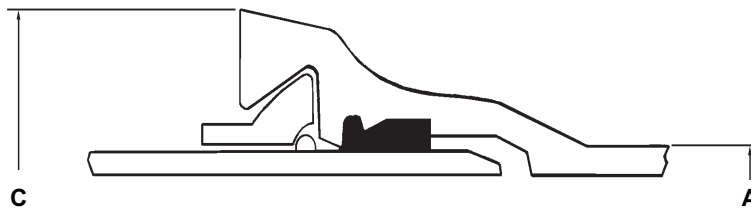
**Type A 6"-30"**

Nominal Pipe Size inches	Pressure Rating* psi	Joint deflection in Degrees	Inches in 18 feet	A Pipe O.D. Inches	B Retainer O.D. Inches
6	350	4	15	6.90	11.75
8	350	4	15	9.05	14.38
10	350	4	15	11.10	16.75
12	350	4	15	13.20	19.13
14	350	3	11	15.30	21.75
16	350	3	11	17.40	24.00
18	350	3	11	19.50	26.38
20	350	3	11	21.60	28.63
24	350	3	11	25.80	33.75
30	250	2	7	32.00	40.13
36	250	2	7	38.30	43.875

\*In the 14" and larger sizes, pressure rating is limited to the rating of the pipe barrel thickness selected. Dimensions subject to manufacturing tolerances.

## PUSH-ON RESTRAINED JOINT PIPE

An All Ductile Iron, Restrained Push-On Joint



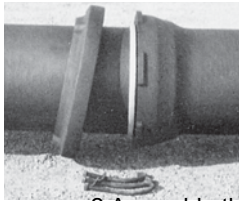
**Type B  
Size 36" Fastite Joint**

Push-on Restrained Joint pipe is a positive means of restraining Push-On Joint pipe and fittings. The joint is completely boltless and is recommended for both exposed and underground installations with working pressures well in excess of normal service requirements.

The joint can be deflected after assembly to facilitate installation and accommodate earth settlement or movement. The design assures uniform load distribution between the restraining components when the joint is deflected. The unique design provides for quick and easy disassembly should the need arise.

The joint complies with all the push-on requirements of ANSI/AWWA-C111/A21.11. Ductile pipe furnished with this joint is made in accordance with ANSI/AWWA-C151/A21.51. For ANSI/AWWA-C151/A21.51 thickness selection tables see pages 2 and 5.

## CLOW SUPER LOCK® ASSEMBLY INSTRUCTIONS



1. Remove hook bolts securing retainer to plain end. Clean plain end of pipe. Clean out any dirt behind retainer lugs. Lubricant may be applied to the beveled nose.

2. Assemble the joint in accordance with Clow Assembly Instructions. Make certain that the bell is clean prior to gasket insertion. Be sure that the correct gasket is used.



3. Guide plain end into Super-Lock bell and provide reasonably straight alignment. "Make" joint by pushing the plain end into the bell. A jack or come-a-long may also be used to pull the plain end into the bell. Position retainer so that

the recesses line up with the lugs on the bell. Slide retainer over bell and rotate until the lugs on the bell and the retainer line up.



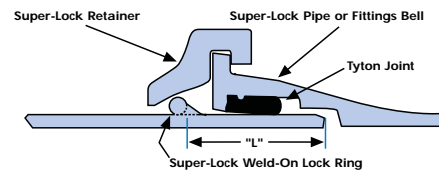
4. At drilled hole on retainer O.D., insert retainer lock in recess formed by lugs on bell and retainer. Insert roll pin in drilled hole and drive flush with retainer O.D.



5. Take any necessary deflection after joint is completely assembled.

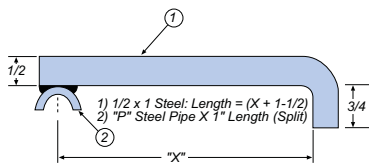
## WELD-ON LOCK RING FOR FIELD-CUT PIPE

- ① Cut the pipe to the required laying length. The cut must be smooth and lie in the plane that is square with the axis of the pipe. Use a welder's wrap or other device, if necessary, to mark the pipe prior to cutting.
- ② Make certain the cut plain end is beveled for a distance of 3/8" to 1/2" along the barrel and smooth any sharp corners that could damage the gasket during joint assembly. (Proper beveling is very important and the use of a portable grinder is suggested).
- ③ Remove the asphaltic coating on the pipe in the area the retainer ring is to be welded - using a solvent wash or by burning with a torch. After the coating has been removed, grind the ring location to bright metal.
- ④ Slide the retainer casting on the pipe with the lugged side toward the plain end.
- ⑤ Slide the lock ring on the pipe and clamp the ring securely to the pipe in the location indicated at right:



Description	Size	Description	Size
6" Pipe	L=3 3/4"	18" Pipe	L=5 1/8"
8"-12" Pipe	L=4"	20" Pipe	L=5 3/8"
14" Pipe	L=4 3/4"	24" Pipe	L=5 1/2"
16" Pipe	L=5"	30" Pipe	L=7 1/8"

- ⑥ Use three (3) locating bars shown to secure field ring. Place the first bar at one end of the ring and the other two bars further around the pipe so that all bars are 6 to 10 inches apart. Clamp the bars securely by means of C-clamps or vise grips.



Pipe size	6	8-12"	14"	16"	18"	20"	24"	30"
"X"	4	4 1/4	5 1/16	5 5/16	5 7/16	5 11/16	5 13/16	7 1/2
"P"	1/2 EX-HVY.			1/2 STD. WT.				3/4 EX. HVY.

As welding progresses around the pipe, the bar is removed from the welded area and re-clamped further around the pipe, maintaining two clamps ahead of the area being welded. (See illustration photo)



Weld the lock ring to the pipe barrel on the side next to the spigot end as illustrated above. The weld electrode must be 55% nickel-Huntington Alloys Ni-Rod 55 or equal. Apply a 5/16" fillet weld using 1/8" diameter electrode.

Start at the end of the ring and skip weld every 2 inches-progressing around the pipe to the other end of the ring. Make sure that both ends of the ring are welded.

The recommended amperage range for 1/8" diameter rod is 75 to 95 amps-using a D.C. arc welder employing reverse polarity.

⑦ Thoroughly clean the weld and ring to remove all well flux and splatter. Clean any weld splatter off the pipe spigot to assure proper joint assembly and gasket seating.

⑧ Paint the ring, weld and ground pipe surface with a smooth, uniform coat of brushable mastic, asphaltic base paint or machinery enamel.



⑨ Inspect the pipe lining for possible damage. Cement-mortar lining are normally not adversely affected by such welding procedures; however, if cement lining damage occurs, it should be patched in accordance with the procedures recommended in the ANSI/AWWA C104/A21.4 standard on cement-mortar linings.

⑩ Assemble the Super-Lock joint per Clow assembly instructions.