

SHORTSTOPP® Fittings Applications



Data Sheet No. **SS Fittings**

Date: 04.2023

Supersedes: 12.2018

Since the early 60s, TDW SHORTSTOPP® Fittings have been used in gas distribution systems crisscrossing five continents. They have saved operators precious time in emergencies and have reduced construction and labor costs by shortening the time needed to do a job.



■ **Welding Fitting**
See Bulletin 2100.003



■ **Type II 3-WAY Tee™**
See Bulletin 2100.002



■ **Spherical 3-WAY Tee™**
See Bulletin 2100.007

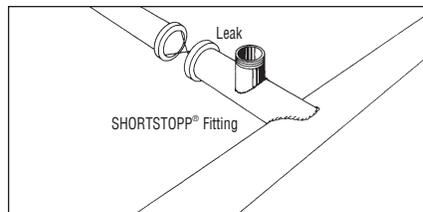


■ **Mechanical SHORTSLEEVE™ Fitting**
See Bulletin 2110.001

Threaded SHORTSTOPP® Welding Fitting 1-1/4" through 3"

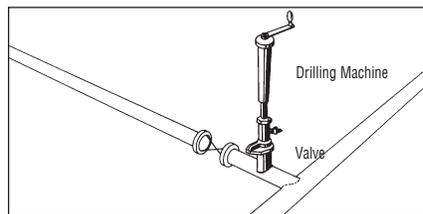
A typical job would involve a leak around the flange connection of a gate valve on a 2" lateral.

A 2" SHORTSTOPP® fitting is welded to the lateral between the leaking flange and the main.

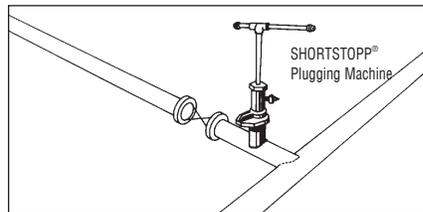


A SHORTCUTT® Valve and drilling machine are installed. The line is tapped.

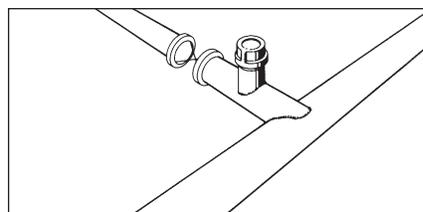
After the tap, a SHORTSTOPP® plugging machine stops off the line. The gate valve is closed, isolating the leaking connection.



After the leak is repaired, the gate valve is opened, and the equipment recovered.



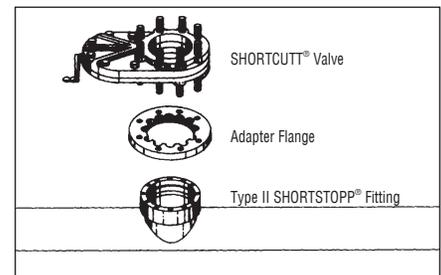
The completion plug is set in the fitting and pipe cap is installed to finish the job.



Type II SHORTSTOPP® Welding Fitting 4", 6", 8", 10" and 12"

The Type II features a reusable bolt-on adapter flange which adapts the bolt circle pattern of the SHORTCUTT® valve to the bolt circle pattern of the fitting.

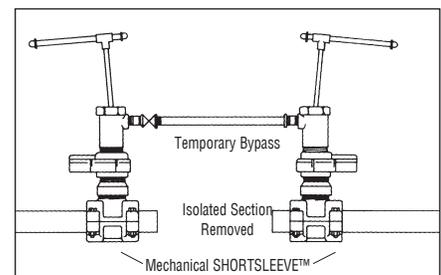
The compact profile makes the Type II easier to coat and wrap once it is installed. It also reduces the possibility of damage by earthmoving equipment. Welding time is decreased because of easy access to the weld area.



The SHORTPLUG™ Completion Plug is lowered through the valve and locked inside the SHORTSTOPP® fitting. The plug locks in the fitting groove. An O-ring seals against pressure.

Mechanical SHORTSLEEVE™ Fitting

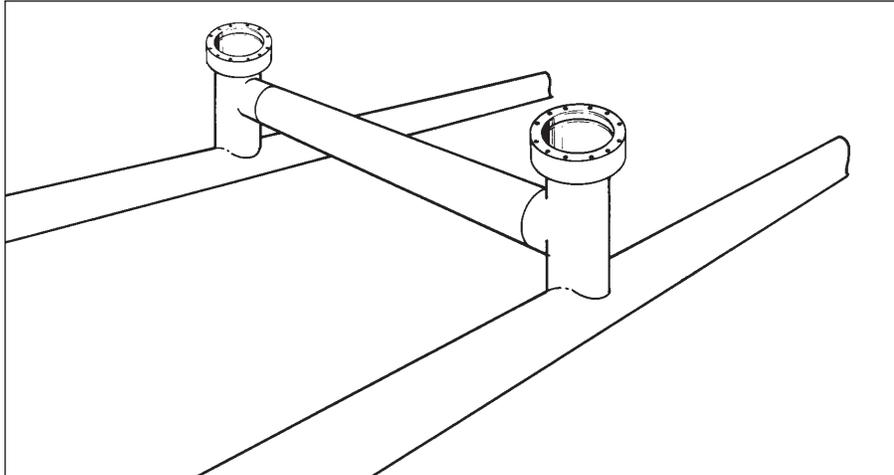
Designed for use with TDW SHORTCUTT® valves and standard full-opening valves, the mechanical SHORTSLEEVE™ Fitting is mechanically coupled to the line. It is an ideal fitting for use on 2" steel and 4"-12" cast-iron mains.





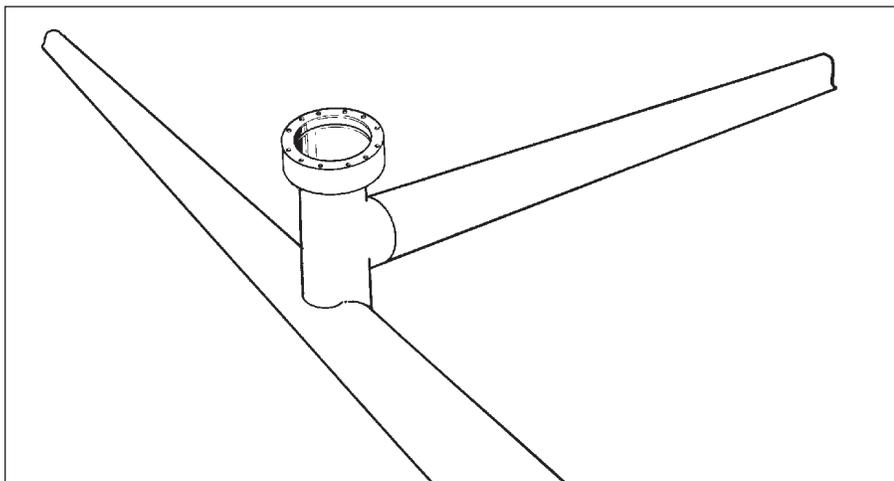
SHORTSTOPP® II Fittings Application

3-WAY™ Tee



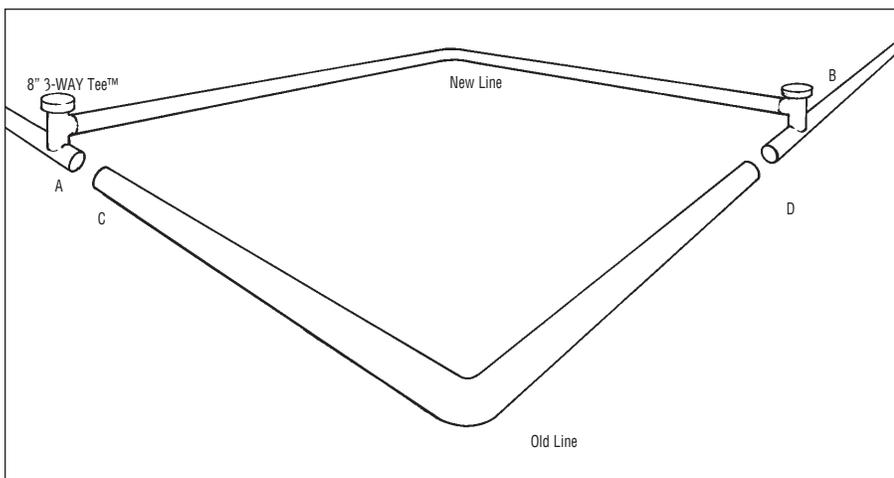
Interconnection

Use of 3-WAY™ Tees for making line crossovers permits either valveless interconnections or use of a valve between lines. The fittings allow pressure-testing of the line welds and remain in the piping system to provide future plug-off capability.



Lateral Connection

Using 3-WAY™ Tees for making lateral connections has several advantages. First, a valveless interconnection can be made, or a valve can be installed if desired. Second, the 3-WAY Tee permits a full-size tap opening and allows all line welding to be pressure tested. Finally, the branch opening can be plugged by a SHORTSTOPP® Plugging Machine.



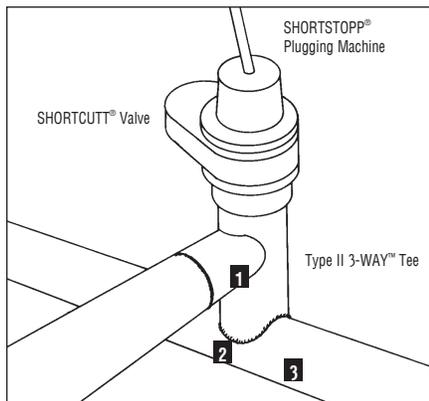
Relocation

An 8-inch natural gas main crossing a new bridge right of way was relocated to accommodate bridge construction. TDW 3-WAY™ Tees were welded to the existing main at points A and B. A new section of line was fabricated and tied into the tees. Hot taps were made, putting the new section on stream. SHORTSTOPP® 60 Plugging Machines isolated the old line while it was cut and capped at points C and D. Equipment was recovered and blind flanges were installed to complete the job without interruption of service.



SHORTSTOPP® II Fittings Application

3-WAY™ Tee and Weld Fittings

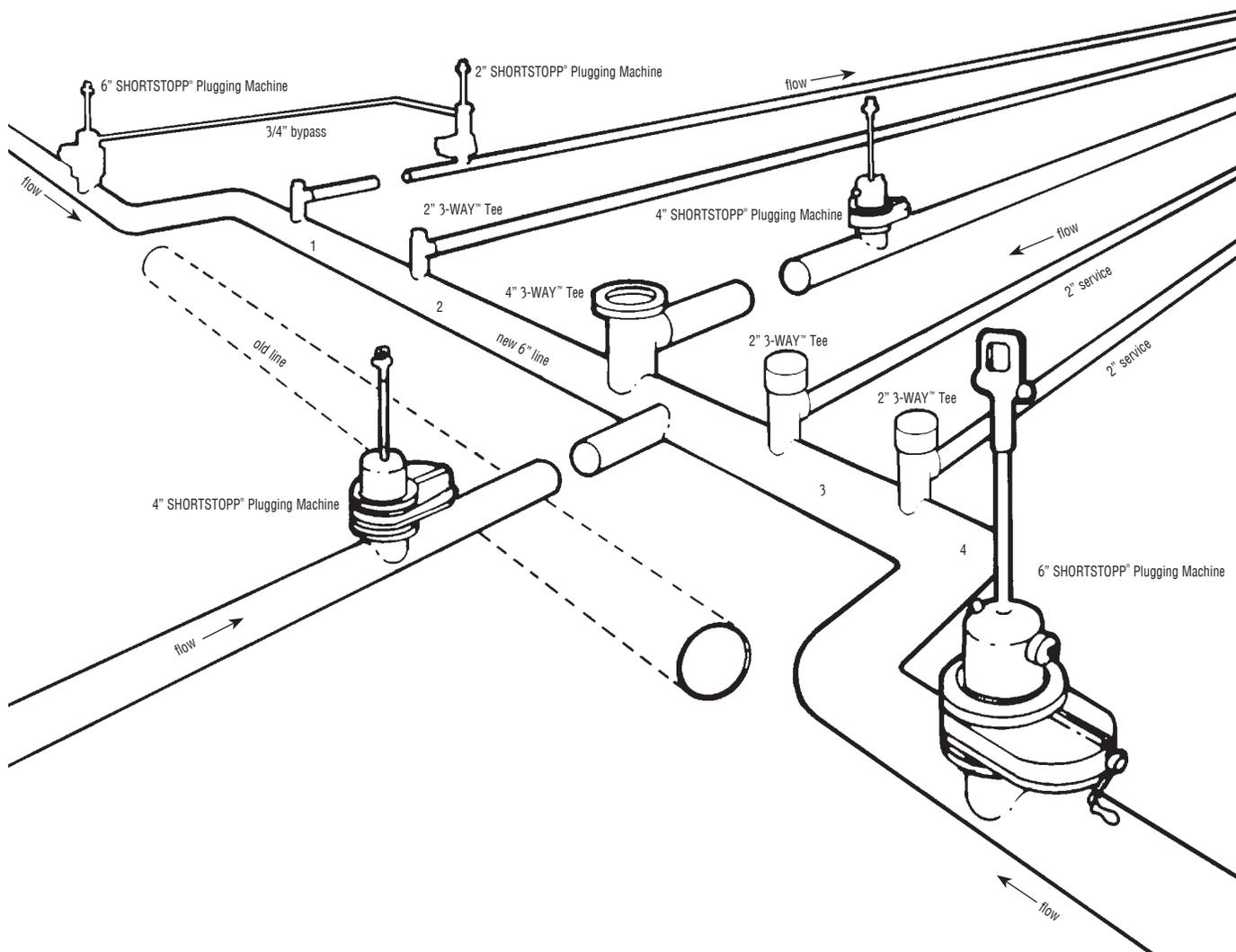


One of the most versatile of the TDW SHORTSTOPP® Fittings is the 3-WAY™ Tee. It is used to relocate mains, tie-in equipment, connect laterals, extend lines and make crossovers all without a temporary bypass and without shutdown. A 3-WAY Tee permits a SHORTSTOPP® 60 Plugging Machine to plug in three different directions.

Illustrations depict fitting applications only. Refer to TDW Instruction Manual for correct technical procedures.

TDW SHORTSTOPP® Fittings and 3-WAY Tees were used in conjunction with SHORTSTOPP® Plugging Machines to complete a relocation project undertaken by a midwestern gas distribution company. Special SHORTSTOPP® Fittings were used when connections called for other than size-on-size applications.

Service points 2, 3, and 4 were tied in using 3-WAY Tees. This provided a means of isolating these laterals at a future date without the need of installing block valves.



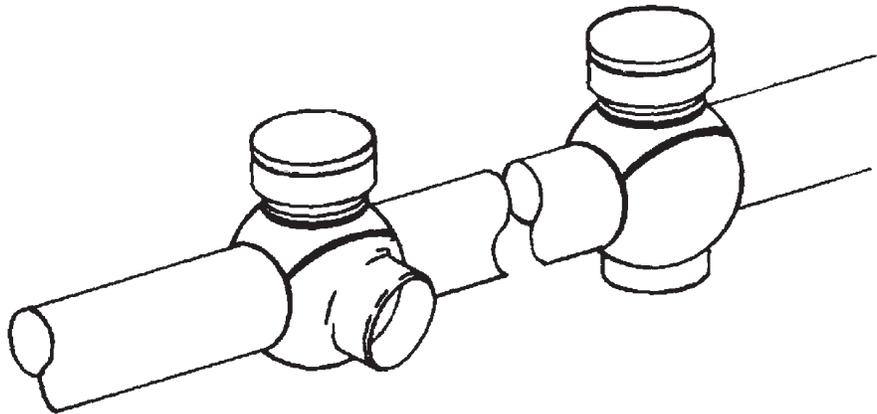


SHORTSTOPP® II Fittings Application

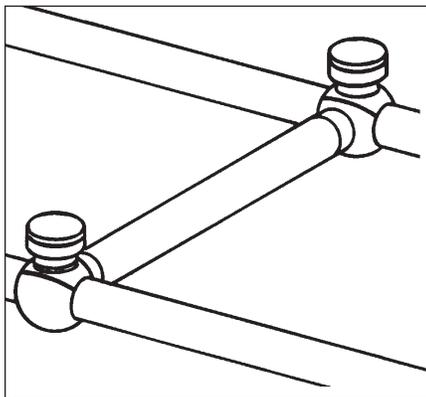
Spherical 3-WAY™ Tee

The Spherical 3-WAY™ Tee, like the standard 3-WAY Tee, is used to extend lines, relocate mains, make crossovers, connect laterals and tie-in equipment all without a temporary bypass or shutdown.

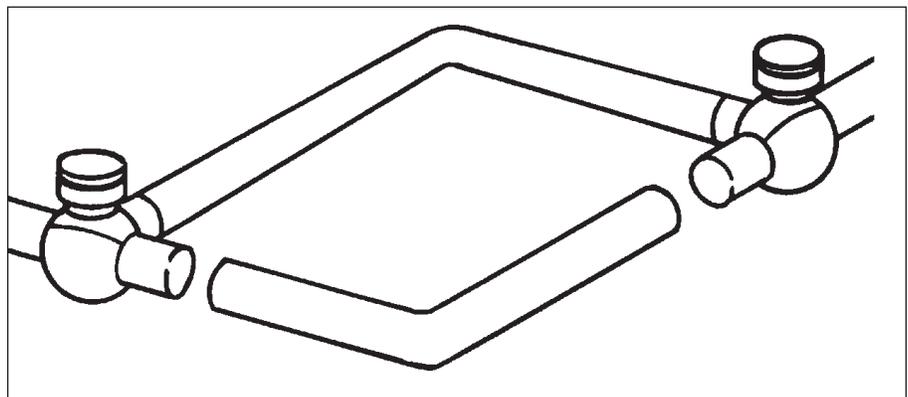
An advantage of this fitting is its low profile. Branch connections are on the same level as the main. The tee can be used with a side outlet or can be turned for a bottom outlet.



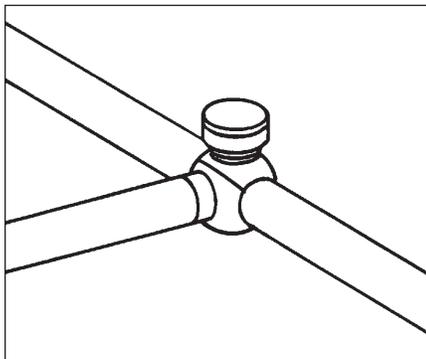
Crossovers



Relocate Mains



Lateral Connections



Equipment Tie-Ins

