

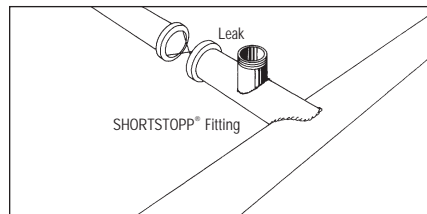


Data Sheet No.

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

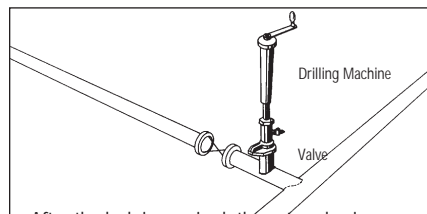
A typical job would involve a leak around the flange connection of a gate valve on a 2" lateral.

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

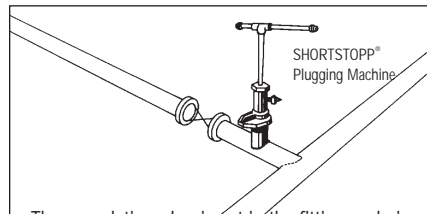


A SHORTCUTT® Valve and drilling machine are installed. The line is tapped.

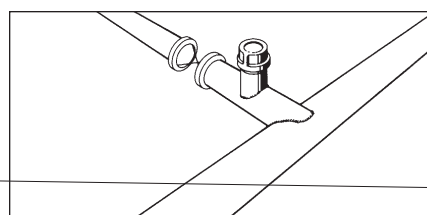
After the tap, a SHORTSTOPP® plugging machine is used in the direction the gate valve is closed, isolating the leak.



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



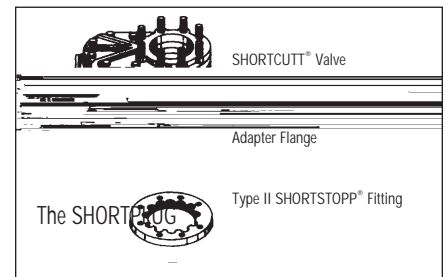
The completion plug is set in the fitting and pipe cap is installed to finish the job.



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

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

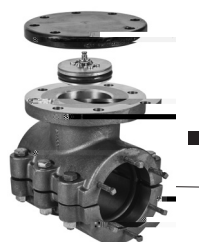
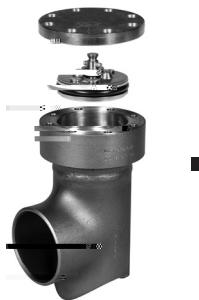
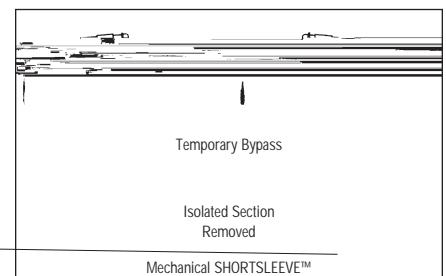
The compact profile makes the Type II easier to install in tight spaces, and its design allows for easy removal of the completion plug.



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

### Mechanical SHORTSLEEVE™ Fitting

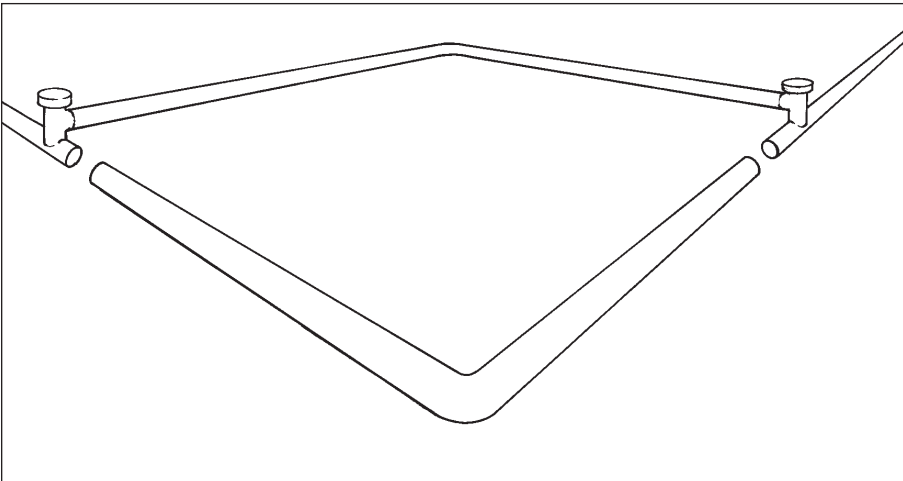
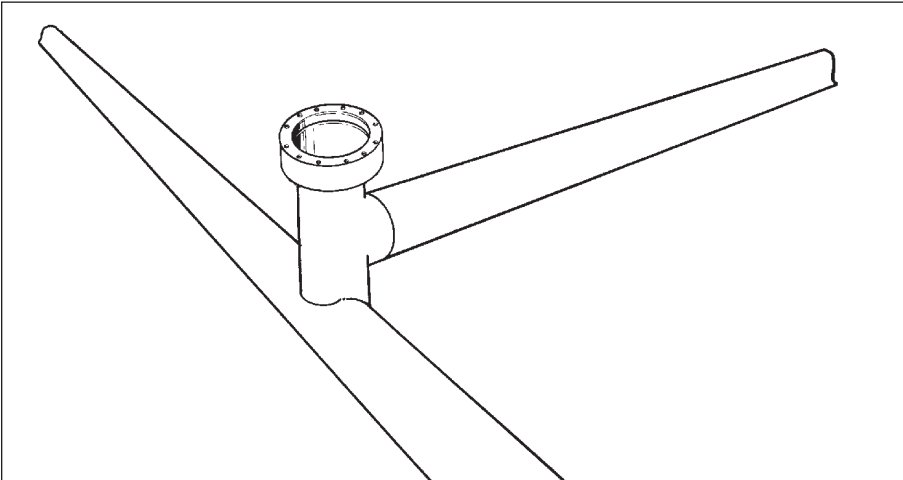
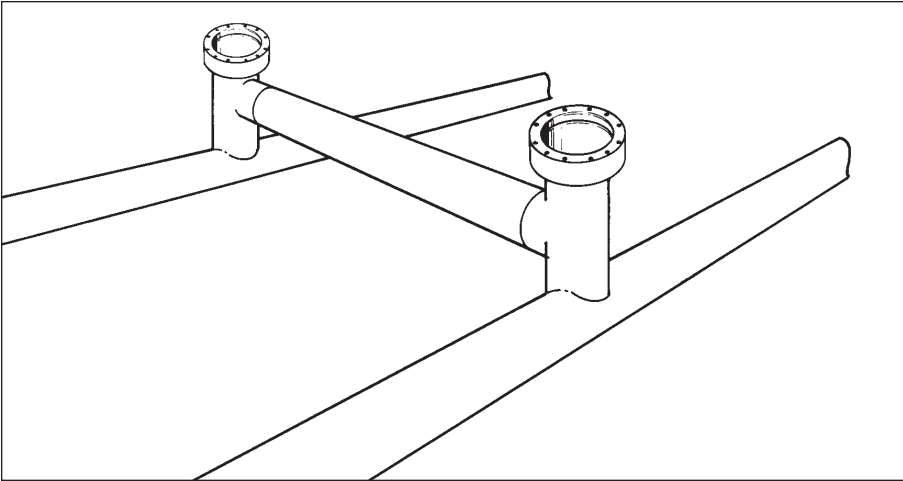
Designed for use with TDW SHORTCUTT® valves and SHORTSTOPP® fittings, the Mechanical SHORTSLEEVE™ fitting allows for easy removal of the completion plug.



# SHORTSTOPP® II Fittings Application

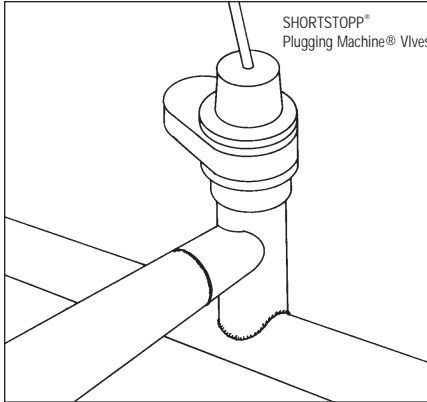
## 3-WAY™ Tee

Interconnection



# SHORTSTOPP® II Fittings Application

## 3-WAY™ Tee and Weld Fittings

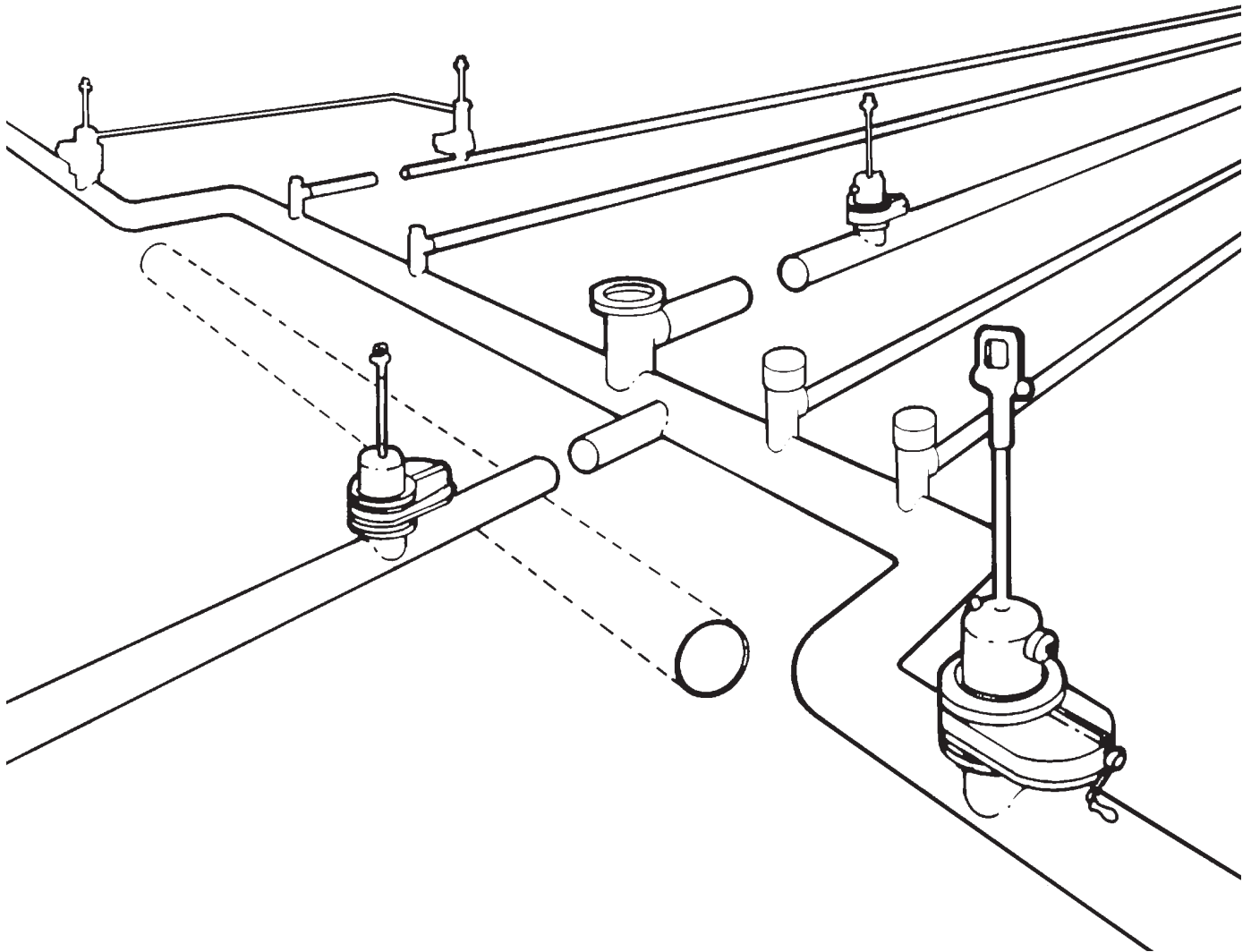


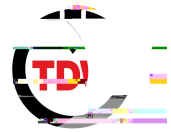
One of the most versatile of the TDW SHORTSTOPP® Fittings is the 3-WAY™ Tee. It is used to relocate mains, tie-in equipment, connect laterals, extend lines and make crossovers all without a temporary bypass and without shutdown. A 3-WAY Tee permits a SHORTSTOPP® 60 Plugging Machine to plug in three different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





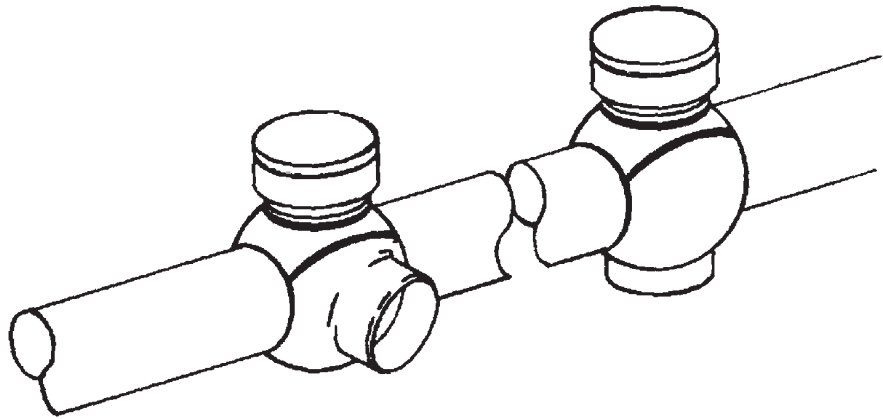
Data Sheet No.

# SHORTSTOPP® II Fittings Application

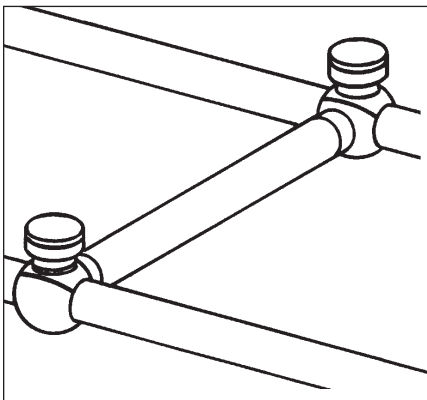
## Spherical 3-WAY™ Tee

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.

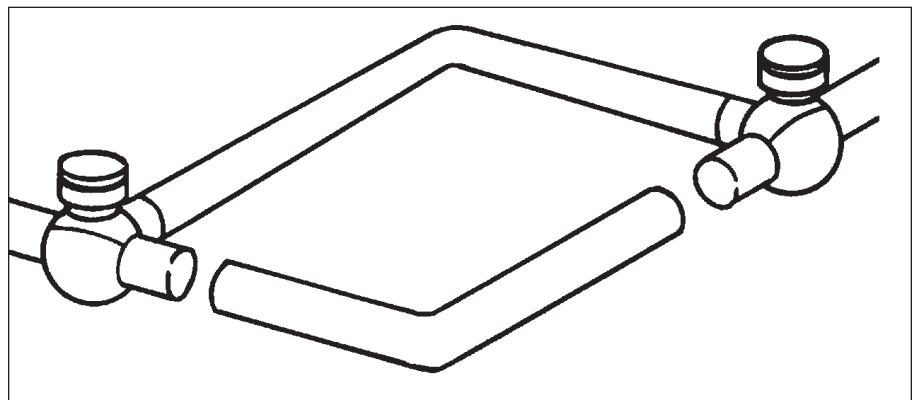
An advantage of this fitting is its low profile. Branch connections are on the same level as the main. The tee can be used with a side outlet or can be turned for a bottom outlet.



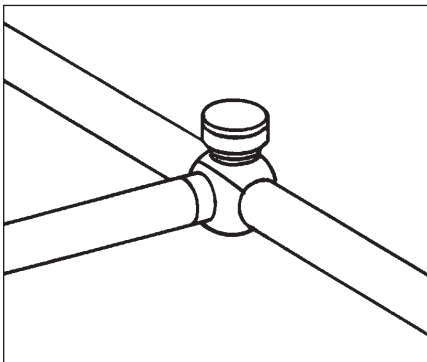
### Crossovers



### Relocate Mains



### Lateral Connections



### Equipment Tie-Ins

