

PROCEDURES

STEEL PIPE SERVICE TEES

7.0 STEEL TAPPING TEES

The purpose of this section is to identify tapping tees approved for use in the Operator's gas system.

7.1 MUELLER SERVICE TEE

This procedure presents the method used for the installation of the Mueller service tee on a steel main.

A. Installation - Tee on Main:

1. Clean the main of all coatings, rust, scale, dirt, etc., in the area where the service tee is to be welded to the main.
2. Remove completion plug and place these parts in an area where they will remain clean.
3. Replace cap. Attach the tee body to the main utilizing approved welding procedures.

B. Installation - Steel Service Piping and/or transition fitting:

1. Attach service piping to the tee utilizing approved welding procedures.
2. Let the weld and the tee cool naturally to the ambient temperature.
3. Pressure test the installation in accordance with CS H-3.

C. Tapping:

1. Attach the proper valve or control chamber. Check the operation of the valve by cycling fully and counting the turns.
2. Measure and record the travel distance for the tap.
3. Install the proper drill, attachments and fittings to the drilling machine. Coat the drill thoroughly with Mueller cutting grease.
4. Retract the boring bar to its uppermost position and install the drilling

PROCEDURES

STEEL PIPE SERVICE TEES

machine on the valve. Fully open the valve while supporting the boring bar to prevent damage to the valve.

5. Drill the main:
 - (a) Slowly advance the boring bar until the point of the drill contacts the main.
 - (b) Adjust the feed tube and the yoke so the yoke engages the collar on the boring bar. Tighten the clamping collar against the feed yoke.
 - (c) Drill the hole by operating the ratchet handle clockwise and turning the handle clockwise a little at a time. Continue drilling until the main is perforated by the drill. Do not exceed the marked, predetermined travel distance.
 - (d) When the drilling operation is complete, retract the boring bar to its uppermost position and fully close the valve.
 - (e) Purge the drilling machine and connect jumper cables prior to removing the machine from the valve.

D. Completion:

1. Install the proper attachments and fittings on the drilling machine (the drilling machine serves as the completion unit).
2. Attach the completion plug to the drilling machine.
3. Retract the boring bar to its uppermost position and install the drilling machine on the valve using jumper cables.
4. Advance the boring bar until the plug contacts the first thread in the tee body. Hold the boring down with the yoke if desired. Rotate the boring bar clockwise until the plug seats firmly in the tee body.
5. Once the plug has seated, release it by rotating the boring bar counter-clockwise until the inserting tool is free from the EZ release adapter. To release the plug, it may require a sharp blow with the hand in a counter-

PROCEDURES

STEEL PIPE SERVICE TEES

clockwise direction to break the EZ release adapter free.

6. Purge the drilling machine to verify that the plug has seated properly. If gas is escaping from the valve, it will be necessary to rotate the boring bar back in a clockwise direction to seat the plug tighter.
7. After the plug is properly seated and released, the drilling machine and valve may be removed.
 - (a) The EZ adapter will prevent the valve from being closed at this point.
 - (b) Use grounding cables when removing the drilling machine.
8. Lubricate the “o”- ring if applicable.
10. Install the completion cap per the manufacturer’s procedure.