



Description This procedure has been adopted to guide our employees and contractors on the steps necessary to produce threaded steel pipe connections that meet our company standards as well as State and Federal agencies having jurisdiction over these facilities.

Regulatory Applicability

- Regulated Transmission Pipelines
- Regulated Gathering Pipelines (Type A)
- Regulated Gathering Pipelines (Type B)
- Regulated Distribution Pipelines
- Regulated LNG Facilities

Frequency As needed

Reference 49 CFR 192.273 *General*

Forms / Record Retention None

Related Specifications None

OQ Covered Task 0721 *Joining of Pipe – Threaded Joints*

(In order to perform the tasks listed above, personnel must be qualified in accordance with West Texas Gas's Operator Qualification program or directly supervised by a qualified individual.)



Procedure Steps

General

1. Only pipe meeting API 5 L specifications will be used in threaded connections.
2. Steel pipe 2" and larger, used to transport gas in a compressor station, will not be joined by a threaded connection.
3. Screw fittings used to join pipe must meet the same pressure/temperature rating specifications as the pipe.

Field Cut Threads

1. All field cut threaded joints must be joined to a "gas tight joint".
2. The following table will be used to ensure threaded connections meet pressure requirements:

Normal Pipe size	Outside Diameter	Standard (Schedule 40 Wall Thickness)	Min. Wall Thickness After Thread
½	0.840	0.109	0.065
¾	1.050	0.113	0.065
1	1.315	0.133	0.065
1¼	1.660	0.140	0.065
1½	1.900	0.145	0.065
2	2.237	0.154	0.075

3. Inspect the pipe threader before beginning and replace any thread dies or other parts that show signs of wear.
4. Place pipe to be threaded firmly into a pipe vise and tighten until it is firm.
5. Using a pipe cutter, cut the end of the pipe squarely and cleanly.
6. Remove any burrs from the cut end of the pipe using a reamer tool.
7. Select the die head according to the size and type of pipe you will be threading.
8. Place the die head over the pipe on the threader.



9. Maintain pressure on the die head, while also pushing the handle down to start the threader.
10. Maintain constant pressure on the handle throughout the threading process.
11. Apply threading oil generously while threading.
12. Stop threading when the end of the threading die is flat against the end of the pipe.
13. Reverse the ratchet mechanism and begin turning the die head in the opposite direction.
14. Stand the pipe on its end and gently tap to remove any burrs or particles that may be lodged within the pipe.
15. Clean the pipe with a dry cloth, removing all oil. Use wire brush to clean threaded end of pipe.

Joining of Pipe with Threaded Joints

1. Seal the threaded end of the pipe with approved Teflon tape and/or a pipe thread compound beginning one thread back from the end of the fitting.
 - a. If using tape, tightly wrap in the direction of the continuous threads in order to conform the tape to the shape of the threads with four to six wraps.
2. Thread the fitting onto the end of the threaded pipe until hand tight.
3. Tighten fitting about 4 turns past hand tight.
4. Test fittings for leaks using approved method.