

STANDARDS AND INSPECTION PROCEDURES FOR TEXLINE STEEL FABRICATED FITTINGS

- A. This specification covers the standards and inspection procedures to be followed when manufacturing and inspecting Texline fabricated fittings.
- B. Applicable specifications and standards.
1. Base Metal: ASTM A53, A135, A106, A795, A105, A35, A36, A312-TP304-TP304L-TP316-TP316L, A240-TP304-TP304L-TP316-TP316L, A403-WP304-WP304L-WP316-WP316L, and A182-TP304-TP304L-TP316-TP316L carbon and stainless steel specifications.
 2. Texline grooved fabricated steel fitting drawing TMC001.
 3. Texline cut grooved fabricated steel fitting drawing TMC002.
 4. Texline CIPS coupler drawings TMC003 and TMC004.
 5. ANSI/ASME Standard B1.20.1 for pipe threading on schedule 40 and threadable thinwall pipe.
 6. Texline fabricated steel fittings shall comply with all FM and UL specifications.
 7. Texline full flow fittings are manufactured from weld fittings meeting ASTM 234WPB/ASA B16.9 and ASTM A312.
 8. Texline flanged fittings are manufactured meeting ASME/ANSI B16.5 specifications.
 9. Texline fittings are manufacture by qualified welders to Texas Manufacturing Company welding procedures S-101, S-102, S103 and ASME SECTION IX, B31.1-B31.3.
- C. Material specifications for TEXLINE schedule 7 or nonthreadable thinwall.
1. Fittings 1 1/4" have a nominal wall thickness of .065.
 2. Fittings 1 1/2" and 2" have a nominal wall thickness of .080.
 3. Fittings 2 1/2" have a nominal wall thickness of .088.
 4. Fittings 3" have a nominal wall thickness of .096.
 5. Fittings 4" have a nominal wall thickness of .098
 6. Fittings 6" have a nominal wall thickness of .120.
- D. Material specifications for TEXLINE schedule 10 fittings.
1. Fittings 3/4" have a nominal wall thickness of .083.
 1. Fittings 1" through 2" have a nominal wall thickness of .109.
 2. Fittings 2 1/2" through 4" have a nominal wall thickness of .120.
 3. Fittings 5" through 6" have a nominal wall thickness of .134.
 4. Fittings 8" through 12" have a nominal wall thickness for .188.
- E. Material specifications for TEXLINE schedule 40 and standard wall fittings.
1. Fittings 1" have a nominal wall thickness of .133.
 2. Fittings 1 1/4" have a nominal wall thickness of .140.
 3. Fittings 1 1/2" have a nominal wall thickness of .145.
 4. Fittings 2" have a nominal wall thickness of .154.
 5. Fittings 2 1/2" have a nominal wall thickness of .203.
 6. Fittings 3" have a nominal wall thickness of .216.
 7. Fittings 3 1/2" have a nominal wall thickness of .226.
 8. Fittings 4" have a nominal wall thickness of .237.
 9. Fittings 5" have a nominal wall thickness of .258.
 10. Fittings 6" have a nominal wall thickness of .280.
 11. Fittings 8" have a nominal wall thickness of .322.
 12. Fittings 10" have a nominal wall thickness of .365.
 13. Fittings 12" through 36" have a nominal wall thickness of .375.

F. End cap thickness specifications.

1. 8" through 12" schedule 10 and schedule 40 crosses, tees, reducers, and caps shall have an end cap nominal thickness for .3125
2. 6" schedule 7, schedule 10 and schedule 40 crosses, tees, reducers, and caps shall have an end cap nominal thickness of .250.
3. 4" schedule 7, schedule 10 and schedule 40 crosses, tees, reducers, and caps shall have an end cap nominal thickness of .1875.
4. 3" and smaller schedule 7, schedule 10, and schedule 40 crosses, tees, reducers, and caps shall have an end cap nominal thickness of .1345.

G. Quality Control

1. Material Control

- a. All material will be ordered to meet necessary specifications listed in Section B.
- b. Each incoming pipe shipment will be checked for the correct quantity, pipe size, and mill markings.
- c. One piece of each size of pipe will be checked with micrometers to insure the correct wall thickness and outside diameter.

2. Groove Specifications

- a. Grooving machines shall be set and verified to produce the required groove for each production pipe size.
- b. Production grooves shall be randomly checked to verify groove dimensions.
- c. PiTapes shall be used to check groove dimensions.

3. Welding Specifications

- a. Material preparation, fit-up and welding shall be in accordance with Texas Manufacturing Company Standard Procedure S-100, S-101, S-102 and S-103.
- b. Welders shall be qualified to ASME SECTION IX B31.1 and B31.3.
- c. To maintain correct dimensional geometry, component pieces for welded fittings shall be placed in a welding jig.

4. Final Inspection

- a. Welds shall be visually inspected to insure they are free of pinholes, slag inclusions and lack of penetration.
- b. Fittings shall be visually inspected to insure they are free of laminations and other defects.
- c. Approximately 5% of all fittings shall be checked dimensionally by using jigs.

H. Approvals

1. All fittings are made domestically in the United States of America.
2. Specified fittings are approved or listed by Underwriters Laboratories Inc, Factory Mutual and Underwriters Laboratories of Canada.