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(305 millimeters) of cover in addition to that prescribed in §195.248.

[Amdt. 195–22, 46 FR 39360, July 27, 1981, as amended by Amdt. 195–63, 63 FR 37506, July 13, 1998]

§ 195.212 Bending of pipe.

(a) Pipe must not have a wrinkle bend.

(b) Each field bend must comply with the following:

(1) A bend must not impair the serviceability of the pipe.

(2) Each bend must have a smooth contour and be free from buckling, cracks, or any other mechanical damage.

(3) On pipe containing a longitudinal weld, the longitudinal weld must be as near as practicable to the neutral axis of the bend unless—

(i) The bend is made with an internal bending mandrel; or

(ii) The pipe is 12¾ in (324 mm) or less nominal outside diameter or has a diameter to wall thickness ratio less than 70.

(c) Each circumferential weld which is located where the stress during bending causes a permanent deformation in the pipe must be nondestructively tested either before or after the bending process.

[Amdt. 195–22, 46 FR 38360, July 27, 1981, as amended by Amdt. 195–52, 59 FR 33396, June 28, 1994; Amdt. 195–63, 63 FR 37506, July 13, 1998]

§ 195.214 Welding procedures.

(a) Welding must be performed by a qualified welder in accordance with welding procedures qualified under Section 5 of API 1104 or Section IX of the ASME Boiler and Pressure Vessel Code (incorporated by reference, *see* §195.3) . The quality of the test welds used to qualify the welding procedure shall be determined by destructive testing.

(b) Each welding procedure must be recorded in detail, including the results of the qualifying tests. This record must be retained and followed whenever the procedure is used.

[Amdt. 195–38, 51 FR 20297, June 4, 1986, as amended at Amdt. 195–81, 69 FR 32897, June 14, 2004]

§ 195.216 Welding: Miter joints.

A miter joint is not permitted (not including deflections up to 3 degrees that are caused by misalignment).

§ 195.222 Welders: Qualification of welders.

(a) Each welder must be qualified in accordance with section 6 of API 1104 (incorporated by reference, *see* §195.3) or section IX of the ASME Boiler and Pressure Vessel Code, (incorporated by reference, *see* §195.3) except that a welder qualified under an earlier edition than listed in §195.3 may weld but may not re-qualify under that earlier edition.

(b) No welder may weld with a welding process unless, within the preceding 6 calendar months, the welder has—

(1) Engaged in welding with that process; and

(2) Had one welded tested and found acceptable under section 9 of API 1104 (incorporated by reference, *see* §195.3).

[Amdt. 195–81, 69 FR 54593, Sept. 9, 2004, as amended by Amdt. 195–86, 71 FR 33409, June 9, 2006]

§ 195.224 Welding: Weather.

Welding must be protected from weather conditions that would impair the quality of the completed weld.

§ 195.226 Welding: Arc burns.

(a) Each arc burn must be repaired.

(b) An arc burn may be repaired by completely removing the notch by grinding, if the grinding does not reduce the remaining wall thickness to less than the minimum thickness required by the tolerances in the specification to which the pipe is manufactured. If a notch is not repairable by grinding, a cylinder of the pipe containing the entire notch must be removed.

(c) A ground may not be welded to the pipe or fitting that is being welded.

§ 195.228 Welds and welding inspection: Standards of acceptability.

(a) Each weld and welding must be inspected to insure compliance with the requirements of this subpart. Visual inspection must be supplemented by nondestructive testing.