

**TITLE 380. DEPARTMENT OF LABOR  
CHAPTER 20. WELDING RULES**

**380:20-1-3. Welding inspectors**

(a) The intent of Title 59 O.S. Section 1627 is that the welding inspector be physically present during the welders fusing of the test materials and that he witness the test fused material from fit up through fusion, preparation of coupons and ultimate destructive test or to the on-site nondestructive examination personnel. Therefore the welding inspectors test report must contain the following statement: "I certify that I personally witnessed all phases of the welding performance test of the above named welder and that the above data reflects a true report of the test results."

(b) The following definitions shall apply to this chapter;

(1) "ASME" means the American Society of Mechanical Engineers, Three Park Avenue, New York, NY, 10016-5990;

(2) "API" means the American Petroleum Institute, 1220 L Street, Northwest, Washington, D.C. 20005-4070;

(3) "ASTM" means American Society of Testing and Materials, 100 Bar Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959;

(4) "AWS" means the American Welding Society, 550 N.W. LeJeune Road, Miami, Florida 33126;

(5) "Certificate," or "Certification Card" means the document issued to an applicant upon successful examination;

(6) "Destructive" means to bend or pull the weld test coupon to see if it cracks or breaks;

(7) "NDE" means a nondestructive examination;

(8) "Welding Inspector" means any person certified as a welding inspector in accordance with Section 1628 of this Act, or any person in possession of one or more of the following certifications issued by the American Welding Society:

(A) Senior Certified Welding Inspector ("SCWI");

(B) Certified Welding Inspector ("CWI")

(C) Certified Associate Welding Inspector ("CAWI")

(9) "Welding Procedure Specification" ("WPS") means a written document providing direction to the welder for making production welds in accordance with Code requirements by identifying all essential, supplemental essential, and non-essential variables.

(10) "Structure" means any commercial or industrial building intended for human occupancy where any part of the building is fabricated, constructed, altered, repaired or enlarged using weldable material found in AWS D1.1 or D1.3 in the welding process.

(11) "Continuity log" means a written record that verifies a welder has maintained their certification in every qualified process by producing sound welds at least every six (6) months as may be required by the applicable ASME, API or AWS code(s).

(c) The welding inspector shall forward all welder test results properly certified showing under which qualified procedure the welder tested (as permitted by this Act) to the Department of Labor. Upon receipt of the completed application affidavit, the test results and the twenty-five dollar (\$25.00) application affidavit fee, pursuant to 380:20-1-2(2)(C), the certification card will be mailed

to the welder.

(d) All welding inspector certifications will specify with which weld-test facility the inspector is associated.

(e) Title 59 O.S. Section 1638 refers to an owner-user inspector and a certified AWS inspector as being exempt from the Act under certain conditions.

(1) For the purpose of clarifying Title 59 O.S. Section 1638, an owner-user is defined as a firm, company or organization which owns the piping which is being constructed, modified or repaired by full time company employees of the firm. This excludes high pressure steam (in excess of 15 P.S.I.) power piping (boiler external piping) falling within the scope of Section I of the Boiler and Pressure Vessel Code of the American Society of Mechanical Engineers and the Oklahoma Boiler and Pressure Vessel Law, Title 40 O.S. Section 141.1, et seq.

(2) For the purpose of clarifying Title 59 O.S. Section 1638, an owner-user inspector is defined as an inspector working as a paid company employee inspecting welds and qualifying welders to weld only those welds on owner piping facilities. The Department of Labor will recognize owner-user inspectors for purposes of certifying their welder's qualifications only. (Any inspection required by virtue of the Oklahoma Boiler Code such as boiler repair and high-pressure steam lines shall be performed in accordance with the provisions of the Boiler and Pressure Vessel Law, Title 40 O.S. Section 141.1 et seq.)

(f) A certified welding inspector may witness welder performance qualification in the field, provided the field testing facility is equipped with the proper test equipment (destructive or NDE devices).

(g) Except for owner-user situations and organizations in possession of a valid Certificate of Authorization issued by the ASME or the National Board of Boiler and Pressure Vessel Inspector, no certified welding inspector or certified testing facility shall be affiliated with any parent or subsidiary company which builds, constructs, erects or repairs piping systems designed in accordance with the provisions of any of the Codes identified in this Act, 40 O.S. 1624, et seq.

(h) For the purpose of welder certification, no welding inspector or testing facility certified by the Department of Labor shall certify any welders in their own employ or any welders in the employment of any parent organization unless done by an employee of an owner-user organization as per 380:20-1-3(e)(2), or an organization in possession of a valid Certificate of Authorization from the ASME or the National Board of Boiler and Pressure Vessel Inspectors.

(I) For the purpose of certifying welders by the Department of Labor, all certified welding inspectors and certified test facilities shall qualify, observe and test welders under one of the procedures and specifications referred to as:

(1) D.P.-1 or;

(2) D.P.-2 or;

(3) Any welding procedure certified in accordance with Section IX of the ASME Boiler and Pressure Vessel Code sanctioned by the welder's employer; or

(4) Any welding procedures certified in accordance with API Standard 1104 sanctioned by the welder's employer; or

(5) Any appropriate AWS standard welding procedure.

(j) The welder must successfully qualify in all respects to the selected procedure and all new test results forwarded to the Department of Labor shall so specify the welding process or processes used, and the position or positions in which welded. Test results shall remain valid for one year from the

date the test weldment was performed.

**380:20-1-14. Welding procedure specifications for butt weld**

(a) **Specifications.**

- (1) Number Okla. D.P.-1 (without backing ring)
- (2) Number Okla. D.P.-2 (with backing ring)

(b) **Process.**

- (1) S.M.A.W.- Shielded Metal–Arc Welding
- (2) G.M.A.W. - Gas Metal-Arc Welding
- (3) G.T.A.W. - Gas Tungsten-Arc Welding
- (4) O.F.G.W. - Oxyfeul Gas Welding

(c) **Base Material.** The base material shall conform to the specifications of the following:

- (1) ASME Boiler & Pressure Vessel Code, (~~ASME Sect. II Part A, Ferrous & Part B, Nonferrous Sect. IX QW 422 P numbers~~) as applicable
- (2) A.P.I. STD 1104-1.4 ~~Materials (1.42 A through E)~~ as applicable
- (3) AWS Part A, ~~10.2 through 10.2.5~~ as conforming to A.S.T.M. requirements as applicable

(d) **Forgings.** Filler metal; The filler metal shall conform to the applicable code requirements of specifications under which the welder is being qualified, and restricted to the particular welding process being utilized. Applicable codes: ASME Section IX, current Edition and addenda, ~~and~~ ASME B31.1, current Edition and addenda, ~~and~~ API 1104, current Edition and addenda, and AWS D1.1, current Edition and addenda.

(e) **Position.** The welding shall be done in test position 2G and 5G or 5G or 6G, as described in Section IX of the ASME Boiler and Pressure Vessel Code or positions described in AWS D1.1 or D1.3.

(f) **Preparation of base material.** The edges or surfaces of the parts to be joined by welding shall be prepared by being machined, ground or gas cut to form groove design joints, as shown on the attached appendices and shall be cleaned of all oil and grease and excessive amounts of scale or rust. Fillet design joints shall not be used for welder certification.

(g) **Nature of electric current.** The current shall be DC, the base metal to be on the negative side of the line.

(h) **Welding technique.** The welding technique, electrode size and mean voltages and currents for each electrode shall be substantially as shown on attached appendices.

(I) **Appearance of welding layers.** The welding current and manner of depositing the weld material shall have the appearance shown on the attached appendices. There shall be practically no undercutting on the side walls or the welding groove or the adjoining material.

(j) **Cleaning.** All slag or flux remaining on any bead of welding shall be removed before laying down the next successive bead.

(k) **Defects.** Any cracks or blow holes that appear on the surface shall be removed by chipping, grinding or gas gouging before depositing the next successive bead of welding.

(l) **Heat treatment.** The heat treating or stress relieving of completed welds, when required, shall be performed in accordance with the requirements of the specific code under which the work is conducted.

**380:20-1-15. Welding procedure specifications for structural steel welding**

The welding procedure specifications for structural steel welding is that which is found in AWS D1.1 and/or D1.3.