



AWS D1.1 Interpretation

Subject: Qualification Requirements
Code Edition: D1.1-84
Code Provision: Figure 5.10.1.3 and Subsections 5.18, 5.19
AWS Log: D1-85-031

Inquiry:

- (1) Does Note 4 in Figure 5.10.1.3F, Reduced Section Tension Specimens, apply to the capacity of the testing machine?
- (2) In Figure 5.10.1.3D, Location of Test Specimens on a Welded Test Plate Over 3/8 in. Thick-Procedure Qualification, is the 20 in. minimum plate width required?
- (3) Is the rolling direction important for test plate validity?
- (4) Is a welder who qualified using groove details of 5.18 or 5.19 qualified to weld other groove details?
- (5) Is it permissible for a welder to qualify using a test plate with thickness larger than 3/8 in. and smaller than 1 in.?
- (6) Must only the standard joint details specified for plate in Figures 5.18 and 5.19 be used for qualifying welders?

Response:

- (1) No. Note 4 applies to specific cases where small diameter tubing is tested.
- (2) Yes.
- (3) Yes.
- (4) Yes, within the limits of Section 5, Part C.
- (5) Yes. Table 5.26.1 permits groove welding qualification on plate with thickness larger than 3/8 in. and smaller than 1 in.

AWS D1.1, Structural Welding Code—Steel, is prepared by the AWS Structural Welding Committee. Because the Code is written in the form of a specification, it cannot present background material or discuss the committee's intent.

Since the publication of the first edition of the Code, the nature of inquiries directed to the American Welding Society and the Structural Welding Committee has indicated that there are some requirements in the Code that are either difficult to understand or not sufficiently specific, and other that appear to be overly conservative.

It should be recognized that the fundamental premise of the Code is to provide general stipulations applicable to any situation and to leave sufficient latitude for the exercise of engineering judgment. Another point to be recognized is that the Code represents the collective experience of the committee; and, while some provisions may seem overly conservative, they have been based on sound engineering practice.