



American Welding Society

550 NW LeJeune Road

Miami, Florida 33126

AWS D1.1 Interpretation

Subject: Base Metal Qualifications

Code Edition: D1.1-90

Code Provision: Table 4.1 and Subsection 5.5.1.3

AWS Log: ID1-90-027-03

- Inquiry:**
- (1) A Group V to Group V metal of Table 4.1 weld qualification is made. Is the procedure and/or the welder qualified to weld a Group V metal to any other Group V metal listed in Table 4.1?
 - (2) A Group V steel to a nonlisted metal weld qualification is made. Is the procedure and/or welder qualified to weld the nonlisted metal to any other Group metal listed in Table 4.1?

- Response:**
- (1) No. Subsection 5.5.1.3 covers welding Group V to Group V base metals. However, the procedure applies only to welds made [using] the specific ASTM material specification and minimum specified yield strength as the base metal [for running] the procedure, without regard for Group number. See the example cited in 5.5.1.3. However, the welder is qualified to weld all steels in Table 4.1 by virtue of the fact that the material grouping of the steel is not a welder variable.
 - (2) No. Steels that are not listed in Table 4.1 require procedure qualification and the procedure only qualifies on the combination of materials tested (see 1.2.2). The welder in this situation again is qualified to weld on any Table 4.1 material by virtue of the answer given to Inquiry (1) above.

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.