



AWS D1.1 Interpretation

Subject: Ceramic Backing
Code Edition: D1.1-96
Code Provision: Subsection 2.27.2
AWS Log: D1-259

Inquiry: For one-sided groove welds, 2.27.2 of D1.1-96 prohibits the use of backing, other than steel, without qualification of the Welding Procedure Specification (WPS). The subsection specifically requires qualification in accordance with Section 4 of the Code. However, subsection 3.6, by reference of Table 4.5, indicates that addition of backing does not affect the prequalification status of a WPS. For a WPS with ceramic backing, subsection 3.6 allows prequalification while subsection 2.27.2 prohibits prequalification.

Response: Yes. Ceramic backing is not prequalified under this Code. A change from steel backing to ceramic backing will require a new WPS to be qualified in accordance with Section 4 of the Code.

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.