



AWS D1.1 Interpretation

Subject: Code Thickness Limitation
Code Edition: D1.1-90
Code Provision: Subsection 1.2.3
AWS Log: I-91-01-03

Inquiry:

- (1) Does D1.1-90 place a minimum thickness of ½ in. on the materials welded within the scope?
- (2) Does D1.1-90 specify a tolerance below 1/8 in. for base metal thickness that can be welded within the scope?
- (3) If the answer to Inquiry 2 is no, may material of thickness 0.105 in. be welded using prequalified welding procedures?

Response:

- (1) Subsection 1.2.3 states, “The provisions of this Code are not intended to apply to welding base metals less than 1/8 in. (3.2 mm) thick.”
- (2) Subsection 1.2.3 does not address a tolerance for base metal thickness. Tolerances for base material thickness are addressed by other recognized industry standards or practices, such as ASTM, which may be used in conjunction with the D1.1 Code.
- (3) The Code does not prohibit the use of prequalified procedures on 0.105-in. thick material.

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.