



AWS D1.3 Interpretation

Subject: Low-Hydrogen Electrodes and Welding Sheet Steel to Structural Steel
Code Edition: D1.3/D1.3M:2008
Code Provision: Subclause 1.1.1, Table 1.1, and Annex A
AWS Log: D1.3-08-I11

Inquiry: (1) When using SMAW, are low-hydrogen electrodes required when welding sheet steel to structural Group II or higher steels?

(2) When using FCAW, is E71T-GS (exempted in AWS D1.1 Table 3.1) acceptable when welding sheet steel to structural steel?

Response: (1) Yes. See AWS D1.3:2008 Table 1.2, Note 1 which states “Low hydrogen electrodes shall be used when required by AWS D1.1.” There is an exception for arc spot, arc seam, and arc plug welds used to attach “decking” permitted by Annex A, Note 1.

(2) No. See AWS D1.3:2008 Table 1.2, Note 4.

AWS standards are prepared by AWS technical committees. Because many AWS standards are written in the form of codes or specification, they cannot present background material or discuss the committee’s intent.

The nature of inquiries directed to the American Welding Society and their technical committees have indicated that there are some requirements in AWS standards that are either difficult to understand or not sufficiently specific.

It should be recognized that the fundamental premise of AWS standards are 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 AWS standards represent the collective experience of AWS technical committees; and, while some provisions may seem overly conservative, they have been based on sound engineering practice.