



AWS C3.4M/C3.4:2007 Official Interpretation

- Subject:** Qualification
- Document:** C3.4M/C3.4:2007, *Specification for Torch Brazing* and C3.5M/C3.5:2007, *Specification for Induction Brazing*
- Provision:** C3.4: Page 4, Subclause 5.5 (Qualification)
C3.5: Page 5, Subclause 5.5 (Qualification)
- Inquiry:** An auditor read AWS C3.4M/C3.4:2007, subclause 5.5 (Qualification) and interpreted that it requires approval by the Organization Having Quality Responsibility for all brazing procedures and changes to all brazing procedures. The first sentence requires qualification in accordance with AWS B2.2 or as required by the Organization Having Quality Responsibility. The second and third sentences use the terms “such qualification” and “such procedures” and it is not clear if that refers to all qualifications or only to qualifications that are not in compliance with AWS B2.2. An interpretation of the requirement for approval is requested.
- Response:** Revise the wording of subclause 5.5 in both AWS C3.4M/C3.4:2007 and C3.5M/C3.5:2007 to read as follows
- 5.5 Qualification.** Brazing [Induction] procedures, equipment, and operators shall be qualified in accordance with AWS B2.2, *Standard for Brazing Procedure and Performance Qualification*, by the organization performing the brazing operation or as required by the Organization Having Quality Responsibility. Qualifications not in conformance with AWS B2.2 and any modification of those procedures shall be documented and approved in writing by the Organization Having Quality Responsibility prior to use.

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.