

SECTION IX

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Interpretation: IX-10-08

Subject: QW-407.2

Date Issued: February 17, 2010

File: 09-513

Question: May a procedure qualification subject to the variable QW-407.2, for P-No. 8 material with solution annealing PWHT at 1,940°F (1 060°C) for 1 hr and impact tested, support a WPS for production with both solution annealing at 1,940°F (1 060°C) and stabilization heat treatment at 1,742°F (950°C) for 2 hr?

Reply: No.

Interpretation: IX-10-09

Subject: QB-451.3 and QB-451.5, Workmanship Coupons

Date Issued: February 17, 2010

File: 09-883

Question: For components such as valve bodies and seats, in which materials of suitable geometry and thickness are not normally available to make up lap joint test coupons as required by QB-451.3, is it the intent of the Committee that the materials to be brazed shall be qualified using any convenient thickness and geometry suitable for performing the tension and section tests required by QB-451.3, and that a greater range of base metal thickness may be qualified using workmanship test coupons in accordance with QB-451.5?

Reply: Yes.

Interpretation: IX-10-10

Subject: QW-163 and QW-466.1, Guided Bend Test Specimen Dimensions

Date Issued: February 17, 2010

File: 09-2140

Background: A welding procedure was qualified for welding on thick base metals. Due to the thickness of the test coupon required, the width of the face of the weld is 5 in. Per QW-163, the weld and heat-affected zone (HAZ) shall be completely within the bent portion of the bend specimen. For a material with 20% or greater elongation, the standard $\frac{3}{8}$ in. thick bend specimen provides a bent portion that is 3.53 in. long on the O.D. of the specimen.

Question (1): Does it meet the requirements of ASME Section IX, if the bend radius and bend test specimen thickness are increased, such that 20% outer fiber elongation is achieved, and the O.D. of the specimen contains the entire width of the weld and HAZ?

Reply (1): Yes.

Question (2): Does it meet the requirements of ASME Section IX, if a set of multiple specimens having the standard $\frac{3}{8}$ in. thickness and representing the entire width of the weld and both HAZs are removed and tested to meet the requirements for testing the entire width of the weld?

Reply (2): Yes.

Question (3): Assuming that both of the base metals in the test coupon are of the same P-No., does it meet the requirements of ASME Section IX, to use standard $\frac{3}{8}$ in. thick bend specimens representing at least one HAZ and as much weld metal as possible, when performing the required bend test?

Reply (3): No.

Interpretation: IX-10-11

Subject: QW-453, Minimum Qualified Thickness for Corrosion Overlay

Date Issued: February 17, 2010

File: 09-2141

Question: For corrosion resistant overlay welding procedure qualifications, where a chemical analysis is not required, is there a minimum qualified deposit thickness?

Reply: No.

Interpretation: IX-10-12

Subject: QW-181.1 and QW-424.1, Procedure Qualification Using Production Assembly Mockup

Date Issued: February 17, 2010

File: 10-13

Question: Does ASME Section IX allow the use of materials having the same P-No. as the actual production materials, to produce a test specimen for fillet welding procedure qualification, using a production assembly mockup?

Reply: Yes.

Interpretation: IX-10-13

Subject: QW-404.5(b), Change in Trade Designation of Filler Metal

Date Issued: June 25, 2010

File: 09-1368

Background: A PQR using GTAW process was qualified using filler metal classified in accordance with ASME Section II Part C, SFA 5.28, ER80S-G classification, with chemistry meeting A-No. 2. A footnote was used in the PQR to document the filler metal trade name used in the qualification.

Question: A WPS supported by the above PQR using the same filler metal classification ER80S-G and A-No. 2, but with a different trade name was specified. When notch toughness (QW-404.12) does not apply, does a change in the filler trade name specified on the WPS require requalification?

Reply: No.

Interpretation: IX-10-14

Subject: QW-200.4

Date Issued: June 25, 2010

File: 09-2144

Background: A production weld joint was made using a qualified welding procedure, welding P3 to P8 using an unassigned filler metal. In order to perform a repair to this joint, a second welding procedure was qualified using an assigned filler metal.

Question (1): If the second procedure is qualified by welding P3 to P8, is this procedure qualified to repair the production weld between the P3 and P8 material made with an unassigned filler metal?

Reply (1): Yes. However, see QW-431.

Question (2): For the same situation as Question (1), is this procedure qualified to repair the production weld between the P3 and P8 material if the repair is entirely within the previously deposited weld metal?

Reply (2): Yes. However, see QW-431.

Question (3): If the second procedure is made by welding P-number material that nominally matches the composition of the unassigned filler metal similar to QW-293.4, is the second procedure qualified to make a repair to the production weld between the P3 and P8 material provided that the repair is entirely within the previously deposited weld metal?

Reply (3): Yes. However, see QW-431.