Interpretation: IX-04-11

 Subject:
 QW-451.1, Procedure Qualification Thickness Limits and Test Specimens and QW-202.4, Dissimilar Base Metal Thicknesses

 Date Issued: December 22, 2004
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 04-599

Background: A procedure qualification test coupon using the same P-Number material and consisting of two plates of different thicknesses are welded together, where the thicker of the two plates ($T_2 = 1-1/2$ ° thick) has been tapered on a 4:1 taper down to the thinner plate thickness ($T_1 = 1$ ° thick).

Question (1): Does this test coupon qualify the WPS for a base metal thickness range of 3/16" to 8"?

Reply (1): See Interpretation IX-86-43, Question (2).

Background: A procedure qualification test coupon using the same or different P-Number materials and consisting of two plates of different thicknesses, $T_2 = 1-1/2$ " thick and $T_1 = 1$ " thick welded with a single process. The thicknesses meet on the same plane with neither plate being tapered. The joint is welded in accordance with the sketch below.



Question (2): Does this test coupon qualify the WPS for both base metals for a thickness range of 3/16" to 8" on both sides of the weld joint?

Reply (2): Yes.

Question (3): Does this test coupon qualify the WPS for both base metals of different P Numbers for a thickness range of 3/16" to 8"?

Reply (3): No. QW-202.4 requires both base metal thicknesses be in accordance with QW-451.1. Base metal T₁ is qualified 3/16" to 2" and base metal T₂ is qualified 3/16" to 8", except as permitted by QW-202.4(b)(1).