LOCATION AND PREPARATION OF TEST SPECIMENS

ASME IX Destructive Test Specimens

Face and Root Bends

Side Bends

Face and Root Bends

Side Bends
Specimen Preparation, Side Bends

(1a) For procedure qualification of materials other than P-No. 1 in CW-422, if the surfaces of the side bend test specimens are gas cut, removal by machining or grinding of not less than 1/8 in. from the surface shall be required.

(1b) Such removal is not required for P-No. 1 materials, but any resulting roughness shall be dressed by machining or grinding.

(2) For performance qualification of all materials in CW-422, if the surfaces of side bend tests are gas cut, any resulting roughness shall be dressed by machining or grinding.

<table>
<thead>
<tr>
<th>T, in.</th>
<th>υ, in.</th>
<th>W (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8 to 1 1/2, incl.</td>
<td>P-No. 23, F-No. 23, or P-No. 35</td>
<td>All other metals</td>
</tr>
<tr>
<td>&gt; 1 1/2</td>
<td>1/8</td>
<td>3/8</td>
</tr>
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</table>

GENERAL NOTE:
Weld reinforcement and backing strip or backing ring, if any, may be removed flush with the surface of the specimen. Thermal cutting, machining, or grinding may be employed. Cold straightening is permitted prior to removal of the reinforcement.

NOTE:
(1) When specimen thickness T exceeds 1 1/2 in., use one of the following:

(a) Cut specimen into multiple test specimens υ of approximately equal dimensions (3/4 in. to 1 1/2 in.).

(b) The specimen may be bent at full width. See requirements on jig width in CW-466.1.
Specimen Preparation, Face and Root Bends
Specimen Preparation Lap Joint, Side Bends

- QB-462 Test Specimens (Cont'd)

  GENERAL NOTES:
  (a) Flange Y may be omitted from Section B when "peeling" is to be accomplished in a suitable tension machine.
  (b) Specimen shall be brazed from side marked Z.

  NOTE:
  [1] Length may vary to fit testing machine.

  $X = 4.7 \text{ min. or as required by design}$

- QB-462.3 Lap Joint Peel Specimen

  GENERAL NOTE:
  Specimen shall be brazed from the side marked Z.
AWS D1.1 Destructive Test Specimens

Test Plate for Unlimited Thickness – Welder Qualification

Notes:
1. When radiography is used for testing, no tack welds shall be in the test area.
2. The backing bar thickness shall be ¼” minimum to ⅜” maximum; backing bar width shall be 3” minimum when not removed for radiography, otherwise 1” minimum.

Test Plate for Limited Thickness – All Position – Welder Qualification
Location of Test Butt-Weld Specimens, API 1104

Notes:
1. At the company’s option, the locations may be rotated, provided they are equally spaced around the pipe; however, specimens shall not include the longitudinal weld.
2. One full-section tensile-strength specimen may be used for pipe with a diameter less than or equal to 1.315 in. 33.4 mm.
Order of Removal, ASME – Tube – Brazing Welds

GENERAL NOTES:
(a) Figure shown is for coupons over 3 in. O. D.
(b) For coupons 3 in. O. D. or less, two coupons are required for peel or section tests. One specimen shall be removed from each coupon. For coupons under 1 in. O. D., the specimen width shall be a one-half section of the test coupon.

NOTE:
(1) Location specimens to be:
Peel or sectioning specimens for lap joints
Sectioning specimens for rabbet joints
Guided Bend Test Jig