

ASME B31.5 INTERPRETATIONS NO. 5

Replies to Technical Inquiries
October 1, 1991, Through July 31, 1994
Interpretations 5-1 Through 5-5

It has been agreed to publish interpretations issued by the B31 Committee concerning B31.5 as part of the update service to the Code. The interpretations have been assigned numbers in chronological order. An interpretation applies to the the Edition or Addenda stated in the interpretation or, if none is stated, to the Edition or Addenda in effect on the date of issuance of the interpretation. Subsequent revisions to the Code may have superseded the reply. **These interpretations are not part of the Code or its Addenda.**

These replies are taken verbatim from the original letters, except for a few typographical and editorial corrections made for the purpose of improved clarity. In some instances, a review of the interpretation revealed a need for corrections of a technical nature. In these cases, a revised reply bearing the original interpretation number with the suffix R is presented. In the case where an interpretation is corrected by Errata, the original interpretation number with the suffix E is used.

ASME procedures provide for reconsideration of these interpretations when or if additional information is available which the inquirer believes might affect the interpretation. Further, persons aggrieved by an interpretation may appeal to the cognizant ASME committee or subcommittee. As stated in the Statement of Policy in the Code documents, ASME does not "approve," "certify," "rate," or "endorse" any item, construction, proprietary device, or activity.

For detailed instructions on preparation of technical inquiries to the B31 Committee, refer to Appendix B.

B31.5 Interpretations No. 5

B-1, B-2

Interpretation: B-1

Subject: 527.4.2, Examination of Welds

Date Issued: June 8, 1992

File: B31-91-29

Question (1): Please clarify the reference to the word "cracks." Does this refer to surface and/or visual cracks?

Reply (1): Yes.

Question (2): Does this encompass cracks that are nonvisual, subsurface

Reply (2): No.

Question (3): Is radiographic testing a method used in inspecting ASME/ANSI B31.5 type welding, or is it utilized for inspecting a more stringent welding procedure?

Reply (3): No, B31.5 does not address radiographic testing. See Para. 536(a)(2)

Interpretation: B-2

Subject: 504.3.1, Branch Connection Sections

Date Issued: March 2, 1993

File: B31-92-51

Question (1): Can pipe branches larger than $\frac{1}{4}$ the nominal diameter of run pipe be welded to a piping run as a branch connection without reinforcement?

Reply (1): Yes, when the requirements of paras. 504.3.1 and 527.4.6 are met.

Question (2): Can Class 300 couplings or half couplings, of a nominal size larger than $\frac{1}{4}$ the nominal diameter of a run pipe, be welded to a piping run as a branch connection without reinforcement?

Reply (2): Yes, when supported with calculations per para. 504.3

Question (3): Can an integrally reinforced branch connection, of a nominal size larger than $\frac{1}{4}$ the nominal diameter of a run pipe, be welded to a run pipe as a branch connection?

Reply (3): Yes, when the requirements in para. 504.3.1(e)(3) are met.

5-2, 5-4, 5-5

B31.5 Interpretations No. 5

Interpretation: 5-3

Subject: Radiography

Date Issued: March 2, 1993

File: B31-92-56

Question: To what specification should random radiography be evaluated when used on an ammonia refrigeration piping system?

Reply: As specified in para. 527.4.2(d).

Interpretation: 5-4

Subject: 523.2.2(f)(4) Material Exempted From Impact Test

Date Issued: May 19, 1993

File: B31-93-05

Question (1): What is the allowable stress for ferrous impact tested materials in a refrigerant piping system for metal temperatures between -20°F and -150°F ?

Reply (1): Materials meeting the requirements of para. 523.2.2, Impact Tests, may be used to the allowable stresses in Table 502.3.1 at temperatures not lower than the test specimens.

Question (2): What is the allowable stress for piping material meeting the requirements of SA-333 Grade 6 in a refrigerant piping systems with a metal temperature of -76°F ?

Reply (2): 40% of allowable stresses in Table 502.3.1.

Interpretation: 5-5

Subject: ASME B31.5-1992 Edition, Para. 502.2.6

Date Issued: May 11, 1994

File: B31-94-30

Question: Does para. 502.2.6 permit welding to standards not permitted by para. 527.4.2(d)

Reply: No.