

2001 NBIC Interpretations

INTERPRETATION 01-41

Subject: Appendix 2 and Appendix 5
2001 Edition with 2003 Addendum

Question: In the event of an alteration to a boiler in which the boiler heating surface and steaming capacity is increased, is the new heating surface or new steaming capacity of this boiler required to be stamped on the new nameplate, boiler or R-2 form?

Reply: No, however, the exact scope of work must be included in Form R-2, which should include the added heating surface and/or steaming capacity.

INTERPRETATION 01-40

Subject: RC-2051(e), RC-3031(c), RC-2050, RC-3030(c)
2001 Edition with 2003 Addendum

Question: If pressure testing is not practicable and if concurrence of the owner, Inspector and jurisdiction is obtained where applicable, may the Visual Testing (VT) NDE method be used to satisfy the NBIC requirement?

Reply: Yes.

INTERPRETATION 01-39

Subject: RC-3051
2001 Edition with 2003 Addendum

Question: The "R" Certificate Holder with "design only" scope certifies the design of a re-rating when no physical changes are made to the pressure-retaining item and performs and assumes responsibility for the pressure test of the re-rating. Is the Inspector that witnessed the pressure test required to complete and sign the Certificate of Inspection portion of the Form R-2?

Reply: Yes.

INTERPRETATION 01-38

Subject: RD-3022(d) Re-rating
2001 Edition with 2003 Addendum

Question 1: For a re-rating when no physical changes are made to the pressure-retaining item, is the pressure test, if performed, considered to be the construction portion of the alteration requiring construction certification on the Form R-2 by an "R" Certificate Holder?

Reply 1: No.

Question 2: Does the National Board Inspection Code prohibit an "R" Certificate Holder with "design only" scope from performing and assuming responsibility for the pressure test of a re-rating when no physical changes have been made to the pressure-retaining item?

Reply 2: No, provided controls for performing the pressure test are addressed in the QC manual.

INTERPRETATION 01-37

Subject: RC-1140 and RC-3040 Mechanical Stamping
2001 Edition with 2003 Addendum

Question 1: Is application, by mechanical means only, of the stamping or nameplate for a re-rating when no physical changes are made to the pressure-retaining item considered to be the construction portion of the alteration?

Reply 1: No.

Question 2: Is application by welding of the nameplate for a re-rating when no physical changes are made to the pressure-retaining item considered to be the construction portion of the alteration?

Reply 2: Yes.

INTERPRETATION 01-36

Subject: RC-1020(b) Requirement to know code of construction prior to repair
2001 Edition with 2002 Addendum

Question: In order to apply the "R" stamp to a vessel that was repaired or altered, must that vessel first be constructed in accordance with the ASME code or some other recognized code or standard.

Reply: No.

INTERPRETATION 01-35

Subject: RC-1040 Fabrication and installation by "R" Stamp Holder
2001 Edition with 2002 Addendum

Question: During the course of a repair or alteration is the pre-assembly of a part for a pressure retaining item considered fabrication of a replacement part as addressed in RC-1050(c)?

Reply: No.

INTERPRETATION 01-34

Subject: RD-1040 and RD-1060 Alternative welding methods
2001 Edition with 2002 Addendum

Question 1: Does RD-1060(h)(2) require that the buttering layers be deposited only using the SMAW process?

Reply 1: No.

Question 2: Is it the intent of RD-1040(i)(6) that the shielding gas dewpoint temperature be below -60°F?

Reply 2: Yes. This paragraph is worded incorrectly. A revision to correct this requirement has been prepared.

Question 3: Is it the intent of RD-1060 that the temper bead technique be used in welding a test coupon for qualification of the WPS when Alternative Welding Method 4 is to be used for repair welding

Reply 3: Yes. The controlled bead deposition technique in RD-1060 Alternative Welding Method 4, shall be used for the qualification of the procedure in accordance with the changes in the 2004 Edition of the NBIC.

INTERPRETATION 01-33

Subject: Requirement of UG-45
2001 Edition with 2002 Addendum

Question: In evaluating a corroded nozzle on an inservice pressure vessel, do the requirements of UG-45 have to be met?

Reply: Yes, unless another industry accepted method adopted by the jurisdiction is approved.

INTERPRETATION 01-32

Subject: Introduction
2001 Edition with 2002 Addendum

Question: Does reference of a code or standard in the Introduction to the *National Board Inspection Code* (NBIC) imply it is always acceptable for use?

Reply: No. The jurisdiction retains the responsibility to decide which codes or standards to adopt for use.

INTERPRETATION 01-31

Subject: RB-3238 Applicability of remaining life evaluation
2001 Edition with 2002 Addendum

Question: Is it the intent of the NBIC that the procedure for determining remaining life contained in RB-3238 be applicable to both boilers and pressure vessels?

Reply: No.

INTERPRETATION 01-30

Subject: RC-1050(c) Fabrication and Installation by R Stamp Holder
2001 Edition with 2002 Addendum

Question 1: When ASME is the original code of construction, does RC-1050(c) permit an owner holding an R Stamp to fabricate replacement parts and have the parts installed in the owner's boiler by another R Stamp holder?

Reply 1: No. RC-1050(c) requires these replacement parts to be fabricated by an ASME Certificate Holder.

Question 2: When ASME is the original code of construction, does RC-1050(c) permit an owner holding an "R" stamp to fabricate replacements parts and

document those parts by stamping with the owner's "R" symbol, a unique serial number, and complete a Form R-3?

Reply 2: No. RC-1050(c) requires replacement parts to be documented on an ASME Manufacturer's Partial Data Report by an ASME Certificate Holder.

INTERPRETATION 01-29

Subject: RC-2070 Installation of Replacement Parts
2001 Edition with 2002 Addendum

Question: When a replacement part is fabricated by welding and documentation is required by RC-1050, but does not require welding in order to install, must the repair be documented on a Form R-1?

Reply: No, the NBIC neither requires nor prohibits documenting this installation on a Form R-1.

INTERPRETATION 01-28

Subject: RC-1040 Materials
2001 Edition with 2002 Addendum

Question: Is it prohibited to use material that has been previously in service for replacement material for a repair if that material otherwise conforms to the requirements of the original Code of Construction?

Reply: No, provided the use of the material has the concurrence of the Jurisdiction and Authorized Inspection Agency.

INTERPRETATION 01-27

Subject: RC-1090 Welding
2001 Edition with 2002 Addendum

Question: May an R Certificate Holder perform welding using the services of individual welders not in his employ when it is allowed by the original Code of Construction governing the work and when the R Certificate Holder satisfies all of the applicable conditions established by the original Code of Construction to control the use of such welders?

Reply: Yes, provided the controls are described in the R Certificate Holder's Quality System manual.

INTERPRETATION 01-26

Subject: RB-3238(f) Criteria for determining actual thickness and maximum deterioration
2001 Edition with 2002 Addendum

Question 1: Does RB-3238(f)(1) to (f)(3) apply to all vessels and not just vessels in interrupted service?

Reply 1: No.

Question 2: The tolerance criteria in RB-3238(f)(1) is used to determine the appropriate NDE. Does this tolerance criteria apply to periodic thickness measurements?

Reply 2: No.

Question 3: Is the tolerance criteria referenced in RB-3238(f)(1) either a plus or minus value?

Reply 3: Yes.

INTERPRETATION 01-25

Subject: RC-3050 Documenting Alterations Performed by Two R Certificate Organizations
2001 Edition with 2001 Addendum

Question: An R Certificate organization performs the design portion of an alteration. Another R Certificate organization performs the necessary construction work on the alteration. Is it the intent of RC-3050 that the R Certificate Holder performing the design initiate the Form R-2 used to record and register the alteration?

Reply: Yes.

INTERPRETATION 01-24

Subject: RC-1110(a) Nondestructive Examinations
2001 Edition with 2001 Addendum

Question 1: When not prohibited by the original Code of Construction rules for NDE personnel qualification, does the NBIC prohibit the use of welders or welding operators qualified to Section IX to visually examine tack welds made by another qualified welder within the same organization that are to be left in place and incorporated into a final weld?

Reply 1: No.

Question 2: When not prohibited by the original Code of Construction, may qualified welders or welding operators making tack welds that will be incorporated into a final weld visually examine their own tack welds?

Reply 2: Yes, when described in the Quality System.

Question 3: In lieu of identifying welders or welding operators making tack welds that become part of a final pressure retaining weld or structural attachment weld, may the R Certificate Holder provide a procedure in the Quality System that permits the Inspector to verify that such tack welds were made by qualified welders or welding operators?

Reply 3: Yes.

INTERPRETATION 01-23

Subject: RC-2031(a)(1) Routine Repairs
2001 Edition with 2001 Addendum

Question: Is the repair or replacement of a fitting or valve, five (5) NPS in diameter and under considered a routine repair?

Reply: No.

INTERPRETATION 01-22

Subject: RC-2031 Routine Repairs
2001 Edition with 2001 Addendum

Question: When a repair conforms to the requirements of RC-2031(a)(1) and post weld heat treatment is required by the original Code of Construction, may the repair be considered routine?

Reply: Yes, subject to acceptance of the jurisdiction.

INTERPRETATION 01-21

Subject: Appendix 6, Part B Examples of Repairs
2001 Edition with 2001 Addendum

Question: A pressure retaining item was originally fabricated with post weld heat treatment. The post weld heat treatment was noted on its Manufacturers Data Report. Welding (such as that listed in Appendix 6, Part B) was performed on this pressure retaining item using one of the alternative welding methods (as described in RD-1000) in lieu of post weld heat treatment. Is this welding considered to be a repair?

Reply: Yes.

INTERPRETATION 01-20

Subject: RC-2031(a)(1) Routine Repairs
2001 Edition with 2001 Addendum

Question: May the replacement of a partial section of piping (internal or external) that includes a welded fitting, such as a flange, forged elbow, or sockolet, be considered a routine repair in accordance with RC-2031?

Reply: No. RC-2031(a)(1) does not address fittings.

INTERPRETATION 01-19

Subject: RC-2031(a)(1) Routine Repairs
2001 Edition with 2001 Addendum

Question: Does the phrase replacement of tubes or pipes, or sections thereof (5) NPS in diameter and under include the removal and replacement of a section of tube or pipe with like material?

Reply: Yes, provided the replacement material conforms to the requirements of the original Code of Construction.

INTERPRETATION 01-18

Subject: 8-5000(b)Repairs
2001 Edition with 2001 Addendum

Question: In Appendix 8-5000(b), does the phrase specification most applicable to the work include standards or specifications other than those originally used to construct the vessel?

Reply: No.

INTERPRETATION 01-17

Subject: RC-3021 Calculations
2001 Edition

Question 1: Do published standard values for the pressure rating of pipe along with the design pressure satisfy the calculation requirements of RC-3021?

Reply 1: No.

Question 2: Do published standard values for the pressure temperature ratings of fittings along with the design pressure satisfy the calculation requirements of RC-3021?

Reply 2: Yes, when permitted by the original code of construction.

INTERPRETATION 01-16

Subject: RC-3000 Alterations to ASME Section VIII, Div. 2 Pressure Vessels
2001 Edition

Question 1: Does the absence of reference to pressure vessels built in accordance with ASME Section VIII, Div. 2 in RC-3000 prohibit them from being altered by a company with an appropriate Certificate of Authorization to use the R stamp?

Reply 1: No.

Question 2: For alterations to ASME Section VIII, Div. 2 vessels, is the approving Inspector required to be employed by the R stamp holder's inspection agency?

Reply 2: No, the Inspector may be employed by any of the organizations listed in RC-1070.

INTERPRETATION 01-15

Subject: RC-2051 Pressure Testing Repairs and Alterations by Isolating the Repaired Portion of a Pressure-Retaining Item
2001 Edition

Question 1: When performing a pressure test of a repair, is it permissible to isolate and pressure test the repaired area of a pressure retaining item such that the remaining parts of the pressure retaining item are not subjected to the pressure test?

Reply 1: Yes.

Question 2: When performing a pressure test of an alteration where there has not been an increase in temperature or maximum allowable working pressure, is it permissible to isolate and pressure test the altered area of a pressure-retaining item such that the remaining parts of the pressure-retaining item are not subjected to the pressure test?

Reply 2: Yes.

INTERPRETATION 01-14

Subject: RC-2082(b) Repair Plan (Sec. VIII, Div. 2) AIA Acceptance
2001 Edition

Question: Is it the intent of paragraph RC-2082(b) to prohibit the Owner-User Inspection Organization from performing the required acceptance inspection and signing of the Form R-1?

Reply: No, when all requirements of RA-3050 are met.

INTERPRETATION 01-13

Subject: RB-4010 Replacement of Stamped Data
2001 Edition

Question 1: May the traceability of a pressure vessel be determined by its comparison to inspection records, drawings and the original data report matching its physical dimensions without the presence of permanent markings on the vessel when replacing a missing nameplate?

Reply 1: Yes, when such information is sufficient to conclusively establish identification of the item, such as for a one-of-a-kind item or item unique to a plant or system.

Question 2: When a jurisdictional authority does not exist, is permission to replace stamped data required by any other authority other than an Inspector from the original Authorized Inspection Agency that certified the item?

Reply 2: No.

Question 3: When the original manufacturer of a pressure vessel replaces a missing nameplate, must the manufacturer and or owner/user prove that the vessel still meets the design criteria on the replacement nameplate?

Reply 3: No.

INTERPRETATION 01-12

Subject: RA-2274 Use of owner/user Personnel During Repairs of Pressure Relief Valves
2001 Edition

Question 1: Are owner/user personnel considered to be assisting and working under the direct supervision and control of the VR Certificate Holder technician(s) in accordance with RA-2274(c) if the Certificate Holder's personnel leave the repair site during any stage of the repair?

Reply 1: No.

Question 2: Is the VR Certificate Holder responsible in accordance with para. RA-2256(h) for ensuring that only those owner/user parts accepted by the VR Certificate Holder are installed into the repaired valve?

Reply 2: Yes.

Question 3: Are the owner/user personnel performing repair activities required to sign-off at each operation on the document required by para. RA-2256(i).

Reply 3: No, sign-offs shall be in accordance with the VR Certificate Holder's quality control system.

Question 4: Under RA-2274, may a VR Certificate Holder establish a permanent shop facility at an owner/user's premises, using the field repair scope of their VR certificate of authorization.

Reply 4: No, see para. RA-2234.

INTERPRETATION 01-11

Subject: RC-3022 Re-rating Based on Joint Efficiency
2001 Edition

Question: Is it the intent of the NBIC to prohibit the rerating of a pressure retaining item to a higher MAWP by performing radiography in accordance with all the relevant requirements of the edition/addenda of the code of construction and recalculating the MAWP to verify that the item can be satisfactorily operated at the new service conditions?

Reply: Yes. These requirements have been clarified in the 2002 Addendum.

INTERPRETATION 01-10

Subject: RD-1000 Alternative Postweld Heat Treatment Methods
1998 Edition with 2000 Addenda

Question: Are the methods described in Part RD-1000 applicable when Postweld Heat Treatment is a mandatory requirement by the original Code of Construction due to service requirements [for example, lethal service as described by ASME Section VIII, Division I UW-2(a)]?

Reply: Yes.

INTERPRETATION 01-09

Subject: RC-2031(a)(1) Routine Repairs
1998 Edition with 2000 Addenda

Question: Is the seal welding of tubes which are five NPS in diameter and less considered a routine repair?

Reply: Yes.

INTERPRETATION 01-08

Subject: RB-3853 Manually Operated Locking Devices
1998 Edition with 2000 Addenda

Question: In accordance with RB-3853, is a locking device operated by a manually controlled electric hydraulic pump, which exercises a hydraulic ram, which in turn holds the locking device in position, considered a manually operated mechanism?

Reply: Yes. If the action taken to engage and disengage a locking device of a quick acting closure requires manual operation, then it is a manual device. The need for operator action to start the motor is considered manual operation.

INTERPRETATION 01-07

Subject: RA-2030(a) Owner-User Inspection Organization
1998 Edition with 2000 Addendum

Question: Is it a requirement that a user of pressure-retaining items (having legal responsibility for the safe operation of those pressure retaining items also having and maintaining an established inspection program meeting the requirements of the National Board rules with National Board commissioned O/U inspectors who are continuously employed by the user) also be the owner?

Reply: No. Provided the user's established inspection program is acceptable to the jurisdiction or jurisdictional authority where the user is located.

INTERPRETATION 01-06

Subject: RA-2010 Accreditation of Repair Organizations
1998 Edition with 2000 Addenda

Question 1: Is it a requirement of the NBIC that an organization performing repairs to pressure relief valves be accredited in accordance with RA-2200?

Reply 1: Yes, per RA-2010(d).

Question 2: Must the VR symbol be applied to the repair tag on the valve to satisfy RA-2010(d)?

Reply 2: Yes, per RA-2262(a)(2).

INTERPRETATION 01-05

Subject: RA-2330(n) NR Program Audits
1998 Edition with 2000 Addenda

Question 1: Is it required that the annual audit of the NR Certificate Holder, as addressed by RA-2330(n), be conducted if there has been no repair, modification, or replacement activity performed under the program during the previous year?

Reply 1: Yes.

Question 2: Is the Authorized Nuclear Inspector required to be present during the annual audit of the NR Certificate Holder required by RA-2330(n)?

Reply 2: No, the NBIC does not specify the make-up of the audit team.

INTERPRETATION 01-04

Subject: RC-2050, RC-3030, RA-2151(m) Calibration of Pressure Gages
1998 Edition with 2000 Addenda

Question 1: Does the NBIC require a pressure gage to be calibrated in accordance with the R Certificate Holder's Quality System Manual for pressure tests conducted in accordance with RC-2050 and RC-3030?

Reply 1: Yes.

Question 2: May the operational pressure gage be used for pressure tests performed to the requirements of RC-2050 or RC-3030?

Reply 2: Yes, provided accuracy of the pressure gage can be assured in accordance with the R Certificate Holder's Quality System as required by RA-2151(m).

INTERPRETATION 01-03

Subject: Appendix 4, Pressure-Retaining Item
1998 Edition with 2000 Addenda

Question 1: When heat exchangers consisting of tubes and tube sheets (e.g., feedwater heaters) are manufactured and certified in accordance with an original code of construction, are repairs to the tubes and tubesheets within the scope of the NBIC?

Reply 1: Yes.

Question 2: Is the determination of primary and secondary pressure parts, for the purposes of repairs, within the scope of the NBIC?

Reply 2: No.

INTERPRETATION 01-02

Subject: RC-2031(a)(3)Weld Metal Build-Up
1998 Edition with 1999 Addenda

Question: If a pressure-retaining item has multiple areas requiring a weld metal build-up, does the 100 sq. in. limit described in RC-2031(a)(3) apply to the sum of the areas to be repaired?

Reply: Yes.

INTERPRETATION 01-01

Subject: RA-2330(g)Demonstration for an NR Certificate of Authorization
1998 Edition with 1999 Addenda

Question 1: Does Part RA-2300 require an implementation demonstration of an applicant's quality program for issue of an NR Certificate of Authorization?

Reply 1: Yes.

Question 2: If an applicant for an NR Certificate of Authorization holds an ASME N-

type Certificate of Authorization, has demonstrated implementation of their quality program within the previous 12 months, and can verify by documentation that they are capable of implementing their quality program in compliance with Part RA-2300, is it required that further implementation verification be performed for issue of the NR Certificate?

Reply 2: No.