



*THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS*

Date Distributed:

NATIONAL BOARD INSPECTION CODE TASK GROUP INTERPRETATIONS

AGENDA

Meeting of July 7, 2025
Cincinnati, OH

The National Board of Boiler & Pressure
Vessel Inspectors 1055 Crupper Avenue
Columbus, Ohio 43229-
1183
Phone: (614)888-8320
FAX: (614)847-1828

1. Call to Order

The Chair will call the meeting to order at 1:00 p.m. Eastern Time in Mt. Adams on the 4th floor of the hotel.

2. Roll call of Members and introduction of Visitors

3. Check for a Quorum

4. Awards/Special Recognition - None

5. Announcements

- This meeting marks the end of Cycle B for the 2027 NBIC edition.
- The National Board will be hosting a reception on Wednesday evening from 5:30 p.m. to 7:30 p.m. at Ault Park, on the 4th floor of the hotel.
- The National Board will be hosting breakfast and lunch on Thursday for those attending the Main Committee meeting. Breakfast will be served from 7:00 a.m. to 8:00 a.m. in Madisonville A/B, and lunch will be served from 11:30 a.m. to 12:30 p.m. in Madisonville A/B.
- Meeting schedules, meeting room layouts, and other helpful information can be found on the National Board website under the **NBIC** tab → NBIC Meeting Information.
- The NBIC Committee has transitioned from NB File Share to SharePoint. Remember to add any attachments that you'd like to show during the meeting (proposals, reference documents, powerpoints, etc.) to the NBIC SharePoint site (nationalboard.sharepoint.com/sites/NBIC) **prior to the meeting.**
 - Note that access to the NBIC SharePoint site is limited to committee members only.
 - ALL powerpoint attachments/presentations must be sent to the NBIC Secretary for approval prior to the meeting.
 - Contact Jonathan Ellis (nbicsecretary@nbbi.org) for any questions regarding NBIC SharePoint access.
- When possible, please submit proposals in Word format showing "strike through/underline." Project Managers: please ensure any proposals containing text from previous NBIC editions are updated with text from the most current edition.
- If you'd like to request a new Interpretation or Action item, do so on the National Board Business Center.
 - Anyone, member or not, can request a new item.
- As a reminder, anyone who would like to be considered for membership of a group or committee:
 - Should attend at least two meetings prior to being put on the agenda for membership consideration. The nominee may be placed on the agenda for voting during their third meeting, pending the Chair's approval.
 - The nominee must submit the formal request along with their resume to the NBIC Secretary **PRIOR TO** the meeting. nbicsecretary@nbbi.org
 - If elected by the membership, the member will serve a term of three years.
- Thank you to everyone who registered online for this meeting. The online registration is very helpful for planning our reception, meals, room setup, etc. It is also a good way to make sure we have the most up-to-date contact information. Please continue to use the online registration for each meeting.

6. Adoption of the Agenda

7. Approval of the Minutes of the January 2025 Meeting

The minutes from the January 2025 meeting can be found on the NBIC Committee information page on the National Board's website, nbbi.org.

8. Review of Rosters

a. Membership Nominations

b. Membership Reappointments

The following memberships are up for reappointment: Mr. Robert Derby.

9. Interpretations

Item Number: I24-36	NBIC Location: Part 3, 3.4	No Attachment
<p>General Description: Alteration of Plate Heat Exchanger</p> <p>Subgroup: Repairs and Alterations</p> <p>Task Group: T. Seime (PM), M. Quisenberry, T. McBee, M. Wadkinson</p> <p>Explanation of Need: This question is asked frequently by Repair firms that want to increase the number of heat transfer plates.</p> <p>INTERP TG Jan. 2025 Meeting Action: T. Seime presented. After much discussion and revisions regarding the limitations of the original code of construction, the pending vote on the proposal failed with only 5 approvals. M. Quisenberry, T. McBee, and M. Wadkinson were added to the TG. This was a PR.</p>		
Item Number: I24-44	NBIC Location: Part 3, 2.5.3	No Attachment
<p>General Description: Alternative weld methods and special services</p> <p>Subgroup: Repairs and Alterations</p> <p>Task Group: R. Derby (PM), P. Gilston</p> <p>Explanation of Need: In section VIII Div.1 construction some special service conditions as described in UW-2 make mandatory PWHT when it is not otherwise required for the actual thickness of material and P-number. This subtlety leads some to believe that the use of the Alternative weld methods is either not allowed or that they can only be conducted as an alteration.</p> <p>INTERP TG Jan. 2025 Meeting Action: R. Derby presented a PR with the intention to submit a proposal for a LB in the near future.</p>		

New Interpretation Requests:

Item Number: I25-09	NBIC Location: Part 3, 4.4.1 e) and 4.4.2 c)	Attachment Page 1
<p>General Description: NDE in lieu of hydrotest</p> <p>Subgroup: Repairs and Alterations</p> <p>Task Group: B. Hrubala (PM)</p> <p>Explanation of Need: Performing a hydrotest of these "Parts" presents a contamination risk as mentioned in Part 3, paragraph 4.4.2.c. During the installation phase, the authorized inspection agency (AIA) performing the installation inspection determined that the Part was required to have been hydrotested. Despite the clear allowance of NDE per Part 3, paragraphs 4.4.1.e and 4.4.2.c, the AIA stated that the only means to allow NDE is if hydrotest is not practicable. The installation AIA refused to allow the equipment to be installed without a hydrotest prior to installation so the fabricator incurred significant costs performing a hydrotest to meet the demands by the installation AIA. This is a typical repair scenario and clarity as to the requirements is necessary to avoid future instances of this issue.</p> <p>July 2025 Meeting Action:</p>		
Item Number: I25-35	NBIC Location: Part 3, 3.3.4.3 e) 3) m.	Attachment Page 3
<p>General Description: External Weld Metal Buildup - Proximity to Major Structural Discontinuities</p> <p>Subgroup: Repairs and Alterations</p> <p>Task Group: J. Ferreira (PM), K. Derrick</p> <p>Explanation of Need: NBIC Part 3 Section 3.3.4.3 e) 3) m provides clarity on the spacing between adjacent buildups but does not provide clarity on the required spacing between a buildup and other major structural discontinuities which could also interact with the stress concentration created by the buildup.</p> <p>July 2025 Meeting Action:</p>		

Item Number: I25-40	NBIC Location: Part 3, 2.5.3.2	Attachment Page 4
<p>General Description: Fillet welds using alternative welding method #2</p> <p>Subgroup: Repairs and Alterations</p> <p>Task Group: None assigned.</p> <p>Explanation of Need: Welding on non-pressure parts (P11B Pads) to the outside of a VIII Div 1 P11B Pressure Vessel. Welding method #4 speaks specifically about fillet welds, when welding method #2 does not specifically reference fillet welds. Is this a potential oversight and it can be done, or is it written this way to exclude fillet welds using welding method #2?</p> <p>July 2025 Meeting Action:</p>		

Item Number: I25-41	NBIC Location: Part 3, 3.4.1	Attachment Page 5
<p>General Description: Pressure testing for re-rating: waiving requirements</p> <p>Subgroup: Repairs and Alterations</p> <p>Task Group: None assigned.</p> <p>Explanation of Need: Composing an Alteration Plan for future service work. Owner/user would like to increase a drying cylinder MAWP from 150 psi steam pressure to 160 psi.</p> <p>July 2025 Meeting Action:</p>		

10. Future Meetings

- January 12-15, 2026 – New Orleans, LA

11. Adjournment

Respectfully submitted,

Terrence Hellman

Terrence Hellman, TG Interpretations Secretary



**THE NATIONAL BOARD
 OF BOILER AND PRESSURE VESSEL INSPECTORS**

Subject:	NDE in lieu of hydrotest
NBIC Location:	2023 NBIC Part 3, 4.4.1 e) and 4.4.2 c)
Statement of Need:	<p>Performing a hydrotest of these "Parts" presents a contamination risk as mentioned in Part 3, paragraph 4.4.2.c. During the installation phase, the authorized inspection agency (AIA) performing the installation inspection determined that the Part was required to have been hydrotested. Despite the clear allowance of NDE per Part 3, paragraphs 4.4.1.e and 4.4.2.c, the AIA stated that the only means to allow NDE is if hydrotest is not practicable. The installation AIA refused to allow the equipment to be installed without a hydrotest prior to installation so the fabricator incurred significant costs performing a hydrotest to meet the demands by the installation AIA. This is a typical repair scenario and clarity as to the requirements is necessary to avoid future instances of this issue.</p>
Background Information:	<p>Economizers (and Boiler Banks) are fabricated in a manner that allows for shipping by truck, train, boat, etc. These economizers are modularized into portions that are sized properly and are composed of a stack of platens and a portion of the main header that will be welded together at the mill during installation. Historically, fabricators have performed hydro testing on the individual platens before they are assembled into the finished module and before the main header segment is welded in place. This means that feeder tube connections to the main header are subject to RT (volumetric NDE) and are not hydro tested. This is done for several reasons:</p> <ul style="list-style-type: none"> • Draining the water completely and drying the interior is not possible when the complete module is assembled. Drying is necessary as a precursor to blowing in the desiccant for corrosion prevention during shipping and storage prior to installation. <ol style="list-style-type: none"> 1. Shops do not have the crane capacity to lift the module that is half-full of water to an adequate height for complete draining. 2. The nature of these economizers does not allow for safely maneuvering, or manipulating the module to allow the hydro water to access a tube for gravity draining. • If a hydro is performed on a completed module and a leak is detected on an internal platen, repair is not possible without serious amounts of work to remove welds and disassemble the module (lifting lugs, air seal, stitch welds, main header).

3/25/2025

	<ul style="list-style-type: none"> The main header segment is not hydro tested either due to the large number of plugs that are required to be welded into place and removed. Properly beveling the feeder tubes for butt weld is difficult/impossible when installed to the main header segment.
Proposed Question:	<p>In the scenario where a Part is fabricated under the “S” certificate of authorization and not hydro tested (indicated on the P-4 as “hydro test by others”) and that same company has the “R” certificate of authorization and is signing the Design portion of the R-2, could the Part then be NDE tested in the shop under the provisions of the NBIC by that company prior to the Part being sent to the client for “Field Construction” by another “R” certificate holder? Further, in the event of a disagreement between AIA's as to what testing is required and permitted, who determines what is and is not "practicable" per Part 3, paragraph 4.4.2.c?</p>
Proposed Reply:	<p>Yes, per the requirements of Section 4, regardless of if it is a Repair or an alteration, NDE is permissible in lieu of a hydrostatic test. The determination of what is "practicable" is not in the purview of the installation AIA to determine if a signed and certified data report has been supplied with the equipment.</p>
Committee's Question:	<p><Question(s) the committee will interpret. Can be the same wording as the proposed question></p>
Committee's Reply:	<p><Yes or no response></p>
Rationale:	<p><Additional clarification for response></p>



**THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS**

Subject:	External Weld Metal Buildup - Proximity to Major Structural Discontinuities
NBIC Location:	2025 NBIC Part 3, 3.3.4.3 e) 3) m.
Statement of Need:	NBIC Part 3 Section 3.3.4.3 e) 3) m provides clarity on the spacing between adjacent buildups but does not provide clarity on the required spacing between a buildup and other major structural discontinuities which could also interact with the stress concentration created by the buildup.
Background Information:	NBIC Part 3 Section 3.3.4.3 e) 3) m limits the proximity between adjacent external buildup sites as a repair. This makes sense as the buildups introduces a change in the normal hoop stress profile and if they are too close to each other then these stress concentrations will interact. However, there is no restriction between the spacing of a buildup and other major discontinuities such as nozzles or integral tubesheets, which also have significant stress concentrations associated with them and which could interact with the buildup if spaced too close. If the spacing proximity is too close then it should be treated as an alteration and not a repair.
Proposed Question:	Does the minimum distance between the weld toes of external weld metal buildup in 3.3.4.3 e) 3) m also apply to the distance between the toe of the weld buildup and other major structural discontinuities?
Proposed Reply:	Yes.
Committee's Question:	<Question(s) the committee will interpret. Can be the same wording as the proposed question>
Committee's Reply:	<Yes or no response>
Rationale:	<Additional clarification for response>



**THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS**

Subject:	Fillet welds using alternative welding method #2
NBIC Location:	2023 NBIC, Part 3, 2.5.3.2
Statement of Need:	Welding on non-pressure parts (P11B Pads) to the outside of a VIII Div 1 P11B Pressure Vessel.
Background Information:	Welding method #4 speaks specifically about fillet welds, when welding method #2 does not specifically reference fillet welds. Is this a potential oversight and it can be done, or is it written this way to exclude fillet welds using welding method #2.
Proposed Question:	Can you perform fillet welds using Welding method #2?
Proposed Reply:	Yes or no. If yes, consider including verbiage in 2.5.3.2 I) that references fillet welds. Similar to how paragraph 2.5.3.4 g)5) is written regarding welding method #4.
Committee's Question:	<Question(s) the committee will interpret. Can be the same wording as the proposed question>
Committee's Reply:	<Yes or no response>
Rationale:	<Additional clarification for response>



**THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS**

Subject:	Pressure testing for re-rating: waiving requirements
NBIC Location:	2023 NBIC, Part 3, 3.4.1
Statement of Need:	Composing an Alteration Plan for future service work.
Background Information:	Owner/user would like to increase a drying cylinder MAWP from 150 psi steam pressure to 160 psi.
Proposed Question:	<p>I have a scenario with a cast iron paper machine dryer certified to 150 psi and hydrotested by the manufacturer to 300 psi. The owner/user would like this dryer re-rated for 160 psi. Due to the in-service environment conditions, a pneumatic pressure test is to be performed to 1.1x desired MAWP, or 176 psi, per ASME VIII Div 1 UG-100.</p> <p>Since the required re-rate air pressure test is less than the original water pressure test, could this be grounds for waiving pressure testing so long as vessel physical condition, NDE results and engineering data are deemed favorable?</p>
Proposed Reply:	Yes.
Committee's Question:	<Question(s) the committee will interpret. Can be the same wording as the proposed question>
Committee's Reply:	<Yes or no response>
Rationale:	<Additional clarification for response>