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THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

NATIONAL BOARD INSPECTION CODE COMMITTEE

MAIN SESSION MINUTES

Meeting of July 10, 2025
Cincinnati, OH

These minutes are subject to approval and are for committee use only. They are not to be duplicated or quoted for other than committee use.

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1. **Call to Order**
   The Chair, Mr. George Galanes, called the meeting to order at 9:00 a.m. Eastern Time.

2. **Introduction of Members and Visitors**
   Mr. Galanes asked for those present in the meeting room to introduce themselves, starting with the Main Committee members. He then asked for the online attendees to introduce themselves. A full list of attendees can be found on Attachment Page 1.

3. **Check for a Quorum**
   Nineteen of out twenty-one members were present at the meeting, establishing a quorum.

4. **Awards/Special Recognition**
   Mr. Scribner announced the awards for Mr. Craig Hopkins and Mr. Trevor Seime. Mr. Hopkins was recognized for thirty years of service on Main Committee, and Mr. Seime was recognized for five years of service.

5. **Announcements**
   - This meeting marks the end of Cycle B for the 2027 NBIC edition.
   - As a reminder, anyone who would like to become a member of a group or committee:
     - Should attend at least two meetings prior to being put on the agenda for membership consideration. The nominee will be on the agenda for voting during their third meeting.
     - The nominee must submit the formal request along with their resume to the NBIC Secretary **PRIOR TO** the meeting. *nbicsecretary@nbbi.org*
     - If needed, we can also create a ballot for voting on a new member between meetings.
   - Thank you to everyone who registered online for this meeting. 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.
   - Mr. Galanes announced that Mr. Brian Boseo, Mr. Tim McBee, and Mr. Howard Berny were elected to Main Committee membership. Their membership nominations will be forwarded to the Chair of the Board of Trustees for final review and approval.

6. **Adoption of the Agenda**

   Before adopting the agenda, Mr. Galanes stated that a few items needed to be added to the agenda.
   - Items 25-39 and 25-43 were added to the Subcommittee Inspection report.
   - Items 25-42 and 25-06 were added to the Subcommittee Repairs & Alterations report.
   - Item 25-01 was added to the Subcommittee Pressure Relief Devices report.

   After making those additions, a motion was made and seconded to adopt the amended agenda. This motion was unanimously approved.

7. **Approval of the Minutes of the January 2025 Meeting**
   The minutes are available for review online at https://www.nationalboard.org/Index.aspx?pageID=13&ID=18.

   A motion was made, seconded, and unanimously approved to accept the minutes of the January 2025 meeting.

8. **Items Approved for the 2027 NBIC**
   A list of items approved for the 2027 edition of the NBIC can be found on Attachment Page 5

9. **Presentation on Committee Voting**
   Mr. Marty Toth gave a presentation on voting rules and requirements for NBIC Committee members. These rules can be found in NB-240, *National Board Inspection Code Procedure,* which is located on the NBIC Committee Information page on the National Board's website.

10. Subcommittee Reports

a. Subcommittee Installation

i. Interpretations

Item Number: 25-11	NBIC Location: Part 1, 3.8.2.4	Attachment page 6

General Description: External Low-Water Fuel Cutoff for Hot Water Heating Boilers

Subgroup: SG Installation

Task Group: None assigned.

Explanation of Need: The valves proposed are a means to avoid draining the hot water boiler of its water just to test the low water fuel cutoff, we want to verify that they satisfy the requirements of the code.

July 2025 Meeting Action: Mr. Patten introduced this item and stated that the subgroup and subcommittee both voted to close this item as it can be categorized as consulting. A motion was made and seconded to officially close this item and send a letter to the inquirer stating that their inquiry is considered consulting and cannot be answered by the committee. This motion passed unanimously.

ii. Action Items – Old Business

Item Number: 22-28	NBIC Location: Part 1	No Attachment

General Description: Pool Heater definition and requirements

Subgroup: SG Installation

Task Group: J. Kleiss (PM), R. Spiker, T. Creacy, and M. Byrum

Explanation of Need: The NBIC Installation and Inspection Codes do not have a definition for pool heaters. There is potential for confusion regarding which NBIC requirements, if any, should apply to pool heaters.

July 2025 Meeting Action: Mr. Patten provided a progress report for this item.

Item Number: 23-52	NBIC Location: Part 1, 2.5.3.2 and 3.5.3	Attachment Page 7

General Description: Harmonize electrical requirements for all types of boilers/water heaters

Subgroup: SG Installation

Task Group: T. Clark (PM), S. Konopacki, J. Kleiss, R. Spiker, and John Choitz

Explanation of Need: Electrical requirements for power boilers, heating boilers, and water heaters are inconsistent, particularly regarding remote emergency shutdown switches. In some cases the requirements are the same, but worded or ordered differently. In order to promote better understanding of code requirements and consistency in their application, I propose making sections 2.5.3 and 3.5.5 as uniform as possible.

July 2025 Meeting Action: Mr. Patten announced that the proposal for this item was approved by Main Committee via letter ballot.

Item Number: 24-05	NBIC Location: Part 1, New Supplement	No Attachment

General Description: Add heat pump water heater & heat pump hydronic heater requirements

Subgroup: SG Installation

Task Group: J. Kleiss (PM), B. Ahee

Explanation of Need: Heat pump water heating and hydronic heating are growing in prevalence. Guidance for installation and inspection of these products is needed.

July 2025 Meeting Action: Mr. Patten provided a progress report for this item.

Item Number: 24-26	NBIC Location: Part 1, 3.7.8	No Attachment

General Description: NBIC Requirements for ASME Modular Water Heaters

Subgroup: SG Installation

Task Group: R. Spiker (PM), M. Byrum, J. Kleiss

Explanation of Need: ASME Section IV added requirements in the 2023 Edition for modular water heaters. The NBIC currently includes requirements for modular steam heating and hot-water heating boilers, but not for modular water heaters.

July 2025 Meeting Action: Mr. Patten provided a progress report for this item.

Item Number: 24-56	NBIC Location: Part 1, S3.6.1	No Attachment

General Description: LCDSV Systems: Add Table and Figure

Subgroup: SG Installation

Task Group: M. Byrum (PM), R. Black

Explanation of Need: In accordance with the NBIC Policy For Metrication, metric units need to be shown alongside US customary units. Table S3.6.1 and Figure S3.6.1-b both show only US customary units. I recommend adding Table S3.6.1M and Figure S3.6.1-bM to show metric units. I've also included some additional editorial recommendations.

July 2025 Meeting Action: Mr. Patten provided a progress report for this item.

Item Number: 24-97	NBIC Location: Part 1, 2.7.5	No Attachment

General Description: Anchoring of Threaded Blowdown Piping

Subgroup: SG Installation

Task Group: None assigned.

Explanation of Need: An operator opened a blowdown valve located between a 90-degree elbow and the floor drain. The pressure released caused the piping to rotate at the elbow striking the operator and pressing him to the ground which resulted in his death. This could have been avoided if the piping was anchored at a point between the elbow and the discharge.

July 2025 Meeting Action: Mr. Patten stated that the subgroup and subcommittee both voted to close this item because it is being combined with Item 25-03. A motion was made, seconded, and unanimously approved to close this item.

Item Number: 24-102	NBIC Location: Part 1, 1.6.9	No Attachment

General Description: Strengthen requirements for Carbon monoxide monitoring

Subgroup: SG Installation

Task Group: None assigned.

Explanation of Need: Approximately 50 to 75 percent of the Chief Boiler Inspectors have requested some version of the proposed text above to be included in the NBIC Part 1. Since this has not happened, in many jurisdictions the Chief Inspector has had to include requirements for interlocking Carbon Monoxide detectors with boilers to secure the burners when the detector senses CO. The NBIC is a Health and Safety Code and therefore should provide requirements that prevent the many injuries and deaths the Chief Boiler Inspectors across the U.S. have had to investigate.

July 2025 Meeting Action: Mr. Patten provided a progress report for this item, saying that a proposal will be balloted to Subgroup Installation.

Item Number: 25-03	NBIC Location: Part 1, 1.6.1 & 3.7.7.1	No Attachment
General Description: Create uniformity between sections on requirements for drains and blowoff pipes **Subgroup:** SG Installation **Task Group:** T. Clark (PM), J. Choitz, R. Spiker, R. Adams **Explanation of Need:** Create uniformity between sections on requirements for drains and blowoff pipes		
July 2025 Meeting Action: Mr. Patten provided a progress report for this item.		

iii. Action Items – New Business

Item Number: 25-07	NBIC Location: Part 1, S5.7.6 h)	Attachment Page 10
General Description: Organic fluid relief valves are installed with discharge to 55-gallon drum **Subgroup:** SG Installation **Task Group:** None assigned. **Submitted by:** V. Scarcella **Explanation of Need:** A 55-gallon drum is not designed for the temperatures or pressures of a relief valve discharge		
July 2025 Meeting Action: Mr. Patten presented a proposal for this item. A question was asked regarding the change from "storage" to "catchment". It was stated that this change clarifies that containers in which the thermal fluid was delivered should not be used for discharge. Further discussion was held, and it was determined that Part 4 contains a paragraph covering similar subject matter. This item will be on hold pending further work from Part 4.		

Item Number: 25-12	NBIC Location: Part 1, 2.7.5 and 3.7.7.1	No Attachment

General Description: Requirements for drain and blowoff lines

Subgroup: SG Installation

Task Group: None assigned.

Submitted by: J. Choitz

Explanation of Need: Create uniformity between sections on requirements for drains and blowoff pipes.

July 2025 Meeting Action: A motion was made and seconded to close this item because its scope is covered by Item 25-03. This motion passed unanimously.

Item Number: 25-15	NBIC Location: Part 1, S3.6.1	No Attachment

General Description: LCDSV Systems: Add Table and Figure

Subgroup: SG Installation

Task Group: None assigned.

Submitted by: M. Byrum

Explanation of Need: In accordance with the NBIC Policy For Metrication, metric units need to be shown alongside US customary units. Table S3.6.1 and Figure S3.6.1-b both show only US customary units. I recommend adding a Table S3.6.1M and Figure S3.6.1-bM to show metric units.

July 2025 Meeting Action: Mr. Patten stated that this item should be transferred to Part 2, as it pertains more to Part 2, S12.7.

Item Number: 25-24	NBIC Location: Part 1, 3.8.1.5 and 3.8.2.4	No Attachment

General Description: Clearly state no time delay on the flow switches on a loss of flow.

Subgroup: SG Installation

Task Group: None assigned.

Submitted by: T. Bolden

Explanation of Need: One of the primary causes of boiler failure is a low water condition. Time delays in testing these safety controls can complicate their assessment and will not mitigate the failure rates associated with low water conditions. Note this also needs to apply to flow switches on forced flow units.

July 2025 Meeting Action: Mr. Patten provided a progress report for this item.

Item Number: 25-33	NBIC Location: Glossary	No Attachment

General Description: Revise definition "Field" in the Glossary of Terms

Subgroup: SG Installation

Task Group: None assigned.

Submitted by: J. Kleiss

Explanation of Need: ASME CA-1 Conformity Assessment Requirements is replacing the use of "Temporary Location" with "Secondary Location". The proposed revision is intended to maintain agreement in terminology between NBIC and ASME.

July 2025 Meeting Action: Mr. Patten stated that the original inquirer for this item elected to withdraw their proposed change. A motion was made, seconded, and unanimously approved to close this item with no action.

b. Subcommittee Inspection

i. Interpretations

Item Number: 25-02	**NBIC Location:** 2023 NBIC, Part 2, 4.4.7.3 and 4.5.3 b)	**No Attachment**
General Description: Overriding Part 2 Inspection Requirements with RBI Program **Subgroup:** Inspection **Task Group:** D. Graf (PM), J. Beauregard, J. Sowinski, J. Mangas, L. Burton, B. Ray **Submitted by:** Riley Collins **Explanation of Need:** There needs to be some clarity on whether an RBI program has the ability to override some of the inspection requirements listed in Part 2 as long as all jurisdictional requirements are met.		
July 2025 Meeting Action: Mr. Horbaczewski provided a progress report for this item.		

Item Number: 25-34	**NBIC Location:** 2023 NBIC, Part 2, 2.3.6.2 b) 2) a. 3.	**No Attachment**
General Description: Interpretation request into the NBBI for the NB-23 2023 paragraph 2.3.6.2 **Subgroup:** Inspection **Task Group:** None assigned. **Submitted by:** Ari Ben Swartz **Explanation of Need:** Numerous air receivers are found to be less than the required wall thickness.		
July 2025 Meeting Action: Mr. Horbaczewski stated that work is still being done on this item.		

Item Number: 25-39	**NBIC Location: Part 2, 5.2.1**	**No Attachment**
General Description: Replacement of Stamped Data **Subgroup:** Inspection **Task Group:** None assigned. **Submitted by:** Gary Scribner **Explanation of Need:** ASME Certificate Holders who are successor organizations, are confusing the requirements of ASME CA-1, section 5.4 which allows the original manufacture or an successor organization to reapply the ASME Single Certification Mark and designator to allow them to put the name of the successor organization on the nameplate. **July 2025 Meeting Action:** Mr. Horbaczewski provided a progress report for this item.		

ii. Action Items – Old Business

TG FRP Items:

Item Number: NB16-1402	**NBIC Location: Part 2, New Supplement**	**No Attachment**
General Description: Life extension for high pressure FRP vessels above 20 years **Subgroup:** FRP **Task Group:** M. Gorman (PM) **Background:** In 2016, when this item was first opened, it was assigned as an item for Part 3. Recent discussions with SC R&A and the FRP Task Group have revealed that this item is better suited for Part 2. This item has been approved by the FRP Task Group. **Scope:** The goal of this proposal is to provide a method to evaluate whether the service life of high-pressure fiber reinforced plastic pressure vessels can be extended for an additional lifetime. **July 2025 Meeting Action:** Mr. Horbaczewski stated that a letter ballot for this item will be submitted to Subcommittee Inspection.		

TG Historical Items:

Item Number: 23-85	**NBIC Location: Part 2, S2.14.7**	**No Attachment**
General Description: Review paragraphs to replace with proper verbiage **Subgroup:** SG Historical **Task Group:** M. Wahl (PM), K. Anderson **Explanation of Need:** There is some slang and second person (POV) verbiage throughout these paragraphs. Recommend rewording with proper terminology (such that it could be understood internationally) and changing point of view (e.g., changing "you're pulling water" to "water is being pulled"). Since I don't have the technical knowledge to know what is slang and what isn't, what I have proposed will still need to be reworded.		
July 2025 Meeting Action: Mr. Horbaczewski provided a progress report for this item.		

Item Number: 25-14	**NBIC Location: Part 2, S2.10.**	**Attachment Page 18**
General Description: UT Inspection of Boilers with Jackets **Subgroup:** SG Historical **Task Group:** M. Wahl (PM) **Explanation of Need:** Currently this information is not in the same location as the other UT requirements and needs to be updated for proper terminology.		
July 2025 Meeting Action: Mr. Horbaczewski presented a proposal for this item. After reviewing the proposal, a motion was made and seconded to approve the proposal. This motion passed unanimously.		

TG Locomotive Items:

Item Number: 24-78	**NBIC Location: Part 2, S1.2.4.22**	**No Attachment**
General Description: Minimum Washout Plug Thread Engagement **Subgroup:** Locomotive **Task Group:** B. Zeigler (PM), E. Armpriester, D. Domitrovich **Explanation of Need:** Text should be changed to clarify how minimum thread engagement is quantified.		
July 2025 Meeting Action: Mr. Horbaczewski stated that Subgroup and Subcommittee Inspection voted to close this item with no action because the Locomotive Task Group felt no changes needed to be made to this section. A motion was made, seconded, and unanimously approved to close this item with no further action.		

Item Number: 25-05	**NBIC Location: Part 2, S1.2.4.22**	**Attachment Page 17**
General Description: Washout plug engagement limits for locomotive boilers. **Subgroup:** Locomotive **Task Group:** L. Moedinger (PM) **Explanation of Need:** There is no current wording for washout plug engagement.		
July 2025 Meeting Action: Mr. Horbaczewski presented a proposal for this item. After reviewing the proposal, Main Committee requested that the proposal be sent out as a letter ballot to allow for additional research on the subject. The proposal will be balloted prior to the January 2026 meeting.		

Item Number: 25-16	**NBIC Location: Part 2, S1.2.4.22**	**No Attachment**
General Description: Washout plug obstructions **Subgroup:** Locomotive **Task Group:** T. Sposato (PM) **Explanation of Need:** Analyze possible issues.		
July 2025 Meeting Action: Mr. Horbaczewski provided a progress report for this item.		

SG Inspection Items:

Item Number: 23-81	NBIC Location: Part 2, 4.4.3 b)	No Attachment
General Description: Evaluate Inspector responsibilities relating to 4.4.3 FFS **Subgroup:** Inspection **Task Group:** M. Horbaczewski (PM), J. Clark, & B. Ray **Submitted by:** R. Underwood **Explanation of Need:** Currently, 4.4.3-b states the Inspector shall review the condition assessment methodology and ensure the inspection data and documentation are in accordance with Section 4. This proposal would redefine the role and responsibility of the Inspector.		
July 2025 Meeting Action: Mr. Horbaczewski provided a progress report for this item.		

Item Number: 24-03	NBIC Location: Part 2, S6	No Attachment
General Description: Wording Updates for Clarity **Subgroup:** Inspection **Task Group:** B. Wilson (PM), R. Kennedy, and J. Smith **Submitted by:** L. Ponce **Explanation of Need:** Part 2 Supplement 6 should be revised to align with Part 3, Suppl 6 and the DOT. A few references are S6.4.2 a), S6.4.2 c), S6.4.4, S6.4.5, S6.4.6, and S6.4.6.1. However, this may not be an all-inclusive list.		
July 2025 Meeting Action: Mr. Horbaczewski provided a progress report for this item.		

Item Number: 24-37	NBIC Location: Part 2, 2.2.10	No Attachment
General Description: Add language in the event boiler can't be secured at the time of inspection **Subgroup:** Inspection **Task Group:** None assigned. **Submitted by:** V. Scarcella **Explanation of Need:** In some circumstances boilers cannot be shut down and a dead man switch is not allowed.		
July 2025 Meeting Action: Mr. Horbaczewski stated that the proposal for this item will be sent to the Subgroup for a vote.		

Item Number: 24-42	NBIC Location: Part 2, 2.4.1 and 2.4.4	No Attachment
General Description: Add language to NBIC Part 2 in regards to piping inspections **Subgroup:** Inspection **Task Group:** None assigned. **Submitted by:** V. Scarcella **Explanation of Need:** Two fatal incidents resultant from radiator failure prompted an ask for these changes.		
July 2025 Meeting Action: Mr. Horbaczewski provided a progress report for this item.		

Item Number: 24-62	NBIC Location: Part 2, Section 2	No Attachment

General Description: Temporary Boiler Inspection

Subgroup: Inspection
Task Group: None assigned.
Submitted by: V. Scarcella

Explanation of Need: No guidance for inspectors for temporary boiler inspections.

July 2025 Meeting Action: Mr. Horbaczewski provided a progress report for this item.

Item Number: 24-75	NBIC Location: Part 2, Table 2.5.8	Attachment Page 12

General Description: NBIC Part II Review table 2.5.8, suggest changes to align with NBIC Part 4

Subgroup: Inspection
Task Group: None assigned.
Submitted by: V. Scarcella

Explanation of Need: Tim Baker and Tim Bolden raised needed changes to NBIC Part II in table 2.5.8, the table needs review and alignment with the table in Part 4 3.2.6

July 2025 Meeting Action: Mr. Horbaczewski presented a proposal for this item. During discussion, it was determined that a duplicate paragraph in Part 4 also should be addressed. The proposal for this item was unanimously approved, and the Chair requested that Part 4 review the duplicate paragraph.

Item Number: 24-76	NBIC Location: Part 2, S7.9	No Attachment

General Description: Revision to Part 2, S7.9

Subgroup: Inspection
Task Group: None assigned.
Submitted by: James Roberts

Explanation of Need: Currently commercially refurbishers can inspect pressure vessels per NBIC S7.8.1 through S7.8.5 and place back into service without any statement this inspection was completed and by who.

July 2025 Meeting Action: Mr. Horbaczewski provided a progress report for this item.

Item Number: 24-84	NBIC Location: Part 2, 2.3.6.10 and 2.3.6.11	No Attachment

General Description: Vessels above 10,000 psi reevaluation of remaining life

Subgroup: Inspection
Task Group: None assigned.
Submitted by: Craig Bierl

Explanation of Need: Inspectors need to be able to have a paper trail of the code integrity of these vessels. Changing the original data (in this case, designed cycle life) should ONLY be completed with the involvement of an authorized inspector and MUST be documented on a National Board form in order to be audited by the inservice inspector.

July 2025 Meeting Action: Mr. Horbaczewski provided a progress report for this item.

Item Number: 24-90	NBIC Location: Part 2, S12.7 d)	No Attachment

General Description: Require means to prevent safety valve discharge piping blockage for LCDSV (Part 2)

Subgroup: Inspection
Task Group: None assigned.
Submitted by: Mark Edwards

Explanation of Need: Adding verbiage to the NBIC Part 1, Part 2 and Part 4 to require a means to prevent foreign material introduction to the safety valve discharge pipe.

July 2025 Meeting Action: Mr. Horbaczewski made a motion to close this item with no action, as it is being addressed by Item 24-91. This motion was seconded and unanimously approved.

Item Number: 24-100	NBIC Location: Part 2, Section 5	Attachment Page 14

General Description: Add field to NB 6 & NB 7 from JRS Team

Subgroup: Inspection
Task Group: None assigned.
Submitted by: V. Scarcella

Explanation of Need: Repeatedly came up in investigations and in discussions that after reviewing an inspection form the reader has no idea if the object was operating.

July 2025 Meeting Action: Mr. Horbaczewski and Mr. Scarcella presented the proposal for this item. A motion was made and seconded to approve the proposal as presented. The motion passed with two disapproval votes. The members who voted Disapprove felt that several editorial revisions should be made to the proposal. After the vote, additional discussion was held regarding opening an additional item to address this subject in more detail.

Item Number: 24-104	NBIC Location: Part 2, 2.1	Attachment Page 15

General Description: Add language clarifying the limitation of inspections presented by design.

Subgroup: Inspection
Task Group: None assigned.
Submitted by: V. Scarcella

Explanation of Need: Currently an inspector could be held responsible for conditions they could not reasonably access.

July 2025 Meeting Action: Mr. Horbaczewski presented a proposal for this item. A motion was made, seconded, and unanimously approved to accept the proposal as presented.

Item Number: 24-105	NBIC Location: Part 2, 1.5.1	No Attachment
General Description: Need to restrict signatures to inspections for which the inspector was present **Subgroup:** Inspection **Task Group:** None assigned. **Submitted by:** V. Scarcella **Explanation of Need:** It has become practice in one jurisdiction for inspectors to sign inspection reports for apprentices.		
July 2025 Meeting Action: Mr. Horbaczewski stated that Subgroup and Subcommittee Inspection voted to close this item with no action because it was determined that this should be handled in RCI-1. A motion was made, seconded, and unanimously approved to close this item with no further action.		

iii. New Items:

Item Number: 24-28	NBIC Location: Part 2, S9.9 b) 4)	Attachment Page 11
General Description: Applying PWHT to previously "as welded" item **Subgroup:** Inspection **Task Group:** Brent Ray, Paul Davis, Phil Gilston **Submitted by:** J. Swezy **Explanation of Need:** The NBIC clearly lists the application of PWHT to a PRI that was not previously PWHT by the original Manufacturer as an example of an alteration. I agree with that statement and believe it is appropriate to consider this to be an alteration. I do not under why the NBIC considers this as an acceptable alteration but does not provide its users with any guidance as to how they should address its implementation. It seems very clear to me that applying PWHT to such welds is rarely detrimental when properly applied and should not reduce their strength or toughness. If anything, it should prove helpful rather than harmful under properly considered application. Good engineering practice mandates that a carbon steel vessel undergoing a change to wet H2S service should receive PWHT to provide an improved resistance to hydrogen cracking corrosion. Failing to do so would be irresponsible. The NBIC rules for a change of service even mention this as a factor to consider in Part 2, Table S-9.4.		
July 2025 Meeting Action: Mr. Horbaczewski presented a proposal for this item. Some discussion was held regarding the wording shown in the proposal, and some changes were made because of the discussion. After discussion concluded, a motion was made and seconded to approve the proposal. This motion passed unanimously.		

Item Number: 25-23	NBIC Location: Part 2, 3.4.8	No Attachment
General Description: Add guidance for tube sag allowance **Subgroup:** Inspection **Task Group:** J. Jessick (PM), B. Ray, J. Sowinski, T. Bolden **Submitted by:** V. Scarcella **Explanation of Need:** Inspectors were asking for clarification and better guidance. Item needs a working group to consider language.		
July 2025 Meeting Action: Mr. Horbaczewski provided a progress report for this item.		

Item Number: 25-27	**NBIC Location: Part 2, 2.3.6.2, 2.3.6.4, 4.4, S7.8**	No Attachment
General Description: Fitness-for-service coordination with API 579-1/ASME FFS-1 **Subgroup:** Inspection **Task Group:** B. Ray (PM), D. Graf, J. Hadley, J. Selensky, C. Moultrie, J. Jessick **Submitted by:** J. Hadley **Explanation of Need:** Alert users about situations where acceptance criteria in Part 2 may be less strict than API 579-1/ASME FFS-1.		
July 2025 Meeting Action: Mr. Horbaczewski provided a progress report for this item.		

Item Number: 25-31	**NBIC Location: Part 2, New Supplement**	**No Attachment**
General Description: Add a supplement that lists the standard boiler and pressure vessel types **Subgroup:** Inspection **Task Group:** J. Safarz (PM), M. Mooney, M. Horbaczewski, M. Whitlock, B. Ross, R. Wallace **Submitted by:** V. Scarcella **Explanation of Need:** This would get states using the standard across the country both from a violation and object type.		
July 2025 Meeting Action: Mr. Horbaczewski provided a progress report for this item.		

Item Number: 25-32	**NBIC Location: Part 2, New Supplement**	**No Attachment**
General Description: Referenced standards added supplement to NBIC Part II **Subgroup:** Inspection **Task Group:** W. Griffith (PM), J. Holland, J. Hadley, D. Fulford, M. Whitlock, J. Smith **Submitted by:** V. Scarcella **Explanation of Need:** Need working group to review and propose appropriate action.		
July 2025 Meeting Action: Mr. Horbaczewski provided a progress report for this item.		

Item Number: 25-36	NBIC Location: Part 2, S8.2	No Attachment

General Description: Relief valve differential percentage conflict.

Subgroup: Inspection
Task Group: None assigned.
Submitted by: I. McGregor

Explanation of Need: Clarification is needed to ensure a correct assessment of the recommended differential pressure percentage between the operating pressure and lifting pressure of the pressure relief valve. When making formal recommendations for corrective action due to high operating pressure differentials observed during inspections, the correct recommended value is needed to guide the adjustments necessary.

July 2025 Meeting Action: Mr. Horbaczewski stated that this item is being transferred to Part 4.

Item Number: 25-37	NBIC Location: Part 2, Forms	Attachment Page 19

General Description: Minor changes to NBIC Part 2 forms

Subgroup: Inspection
Task Group: None assigned.
Submitted by: V. Scarcella

Explanation of Need: Minor changes to NBIC Part 2 forms

July 2025 Meeting Action: Mr. Horbaczewski presented a proposal for this item. A motion was made and seconded to approve the proposal as presented. After spending some time discussing the proposal, the Main Committee requested that the proposal instead be sent out as a ballot to allow for more time to review the proposed changes.

Item Number: 25-43	NBIC Location: Part 2, 5.3.2	No Attachment

General Description: Revise NB-4, NB-6, & NB-7

Subgroup: Inspection
Task Group: B. Ross (PM), B. Steinhart, K. Barkdoll, V. Scarcella, M. Mooney
Submitted by: V. Scarcella

Explanation of Need: Minor changes to NBIC Part 2 forms

July 2025 Meeting Action: Mr. Horbaczewski presented a progress report for this item.

c. Subcommittee Repairs & Alterations

i. Old Interpretation Requests:

Item Number: I24-36	**NBIC Location: Part 3, 3.4**	**Attachment Page 23**

General Description: Alteration of Plate Heat Exchanger

Subgroup: Repairs and Alterations

Task Group: T. Seime (PM)

Explanation of Need: This question is asked frequently by Repair firms that want to increase the number of heat transfer plates.

July 2025 Meeting Action: Mr. Seime presented a proposal for this item. A motion was made, seconded, and unanimously approved to accept the proposal as presented.

Item Number: I24-44	**NBIC Location: Part 3, 2.5.3**	**Attachment Page 26**

General Description: Alternative weld methods and special services

Subgroup: Repairs and Alterations

Task Group: R. Derby (PM), P. Gilston

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.

July 2025 Meeting Action: Mr. Seime presented a proposal for this item. A motion was made, seconded, and unanimously approved to accept the proposal as presented.

ii. New Interpretation Requests:

Item Number: I25-09	NBIC Location: Part 3, 4.4.1 e) and 4.4.2 c)	No Attachment

General Description: NDE in lieu of hydrotest

Subgroup: Repairs and Alterations

Task Group: B. Hrubala (PM)

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.

July 2025 Meeting Action: Mr. Seime presented the item and made a motion to close the item and send a letter to inquirer explaining that their inquiry is a consulting matter. The motion was seconded and unanimously approved.

Item Number: I25-35	NBIC Location: Part 3, 3.3.4.3 e) 3) m.	Attachment Page 27

General Description: External Weld Metal Buildup - Proximity to Major Structural Discontinuities

Subgroup: Repairs and Alterations

Task Group: None assigned.

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.

July 2025 Meeting Action: Mr. Seime presented a proposal for this item. A motion was made, seconded, and unanimously approved to accept the proposal as presented.

Item Number: I25-40	NBIC Location: Part 3, 2.5.3.2	No Attachment

General Description: Fillet welds using alternative welding method #2

Subgroup: Repairs and Alterations

Task Group: P Becker (PM), J. Siefert

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?

July 2025 Meeting Action: Mr. Seime presented a progress report for this item.

Item Number: I25-41	NBIC Location: Part 3, 3.4.1	No Attachment

General Description: Pressure testing for re-rating: waiving requirements

Subgroup: Repairs and Alterations

Task Group: None assigned.

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.

July 2025 Meeting Action: Mr. Seime presented this item and made a motion to close this item and send a letter to the inquirer stating that their request is a consulting matter. This motion was seconded and unanimously approved.

iii. Action Items

TG Graphite Items:

Item Number: A24-67	NBIC Location: Part 3, S3.3	No Attachment

General Description: Requirement for G-mark when replacing parts

Subgroup: Graphite

Task Group: A Viet, J. Wince, S. Mehrez

Explanation of Need: Clarifying requirements for use of graphite pressure vessel replacement parts for repairs or alterations.

July 2025 Meeting Action: Mr. Viet provided a progress report for the item. PR

TG FRP Items:
There are currently no FRP items open for Part 3.

TG Historical Items:

Item Number: 20-25	**NBIC Location: Part 3, S2.13**	**No Attachment**
General Description: Repair Procedure for Fire Boxes **Subgroup:** SG Historical **Task Group:** M. Wahl (PM), R. Forbes, T. Dillon, L. Moedinger, C. Jowett, F. Johnson **Explanation of Need:** In NBIC Part 3, S2.13.10.3, S2.13.11 do not define what to do at a riveted joint. On the tubesheet, or firedoor sheet, where it is flanged to rivet to the firebox, the repairs are silent on what to do at the riveted joint. **July 2025 Meeting Action:** Mr. Seime stated that work is still being done on this item.		

Item Number: 25-13	**NBIC Location: Part 3, S2.7.1**	**Attachment Page 29**
General Description: Update list to add acceptable materials for rivets and bronze castings and **Subgroup:** SG Historical **Task Group:** M. Wahl (PM) **Explanation of Need:** Update list to add acceptable materials for rivets and bronze castings and clarify the difference between flange bolts and boiler casting bolts.		
July 2025 Meeting Action: Mr. Seime presented a proposal for this item. A motion was made, seconded, and unanimously approved to accept the proposal as presented.		

TG Locomotive Items:

Item Number: 24-77	**NBIC Location: Part 3, S1.2.3k)**	**No Attachment**
General Description: Clarify Alteration for transition from rigid to flexible bolts. **Subgroup:** TG Locomotive **Task Group:** M. Ray (PM), W. Fengler, T. Botti, J. Churchill **Explanation of Need:** This is omission from the code.		
February 2025 TG Locomotive Meeting Action: Mr. Ray discussed this item and stated he had not made a lot of progress with the proposal. The group reviewed section S1.2.3 of Part 3. Mr. Ray then presented a proposal he created to the TG. The TG made changes to the proposal, and a motion was made to accept the revised proposal. The motion was seconded and **unanimously approved**. **July 2025 Meeting Action:** Ms. Moore stated that a proposal will be balloted to Subcommittee R&A prior to the January 2026 meeting.		

Item Number: 24-79	NBIC Location: Part 3, S1.1.1 b)	No Attachment

General Description: Value of Default Tensile Strength

Subgroup: TG Locomotive
Task Group: M. Ray (PM)

Explanation of Need: FRA mandates default of 50,000 psi but boilers built after 1921 have better than 55,000 psi steel.

February 2025 TG Locomotive Meeting Action:
Mr. Ray presented a proposal to the TG. After a short discussion, a motion was made to accept the proposal as presented. The motion was seconded, and then the TG had further discussion on whether the language in the proposal was contradictory to the language in Title 49, Part 230. After further discussion the proposal was revised. The motion and second was revised to accept the revised proposal. The chair called for the vote, and the revised proposal was unanimously approved.

July 2025 Meeting Action: Ms. Moore stated that a proposal will be balloted to Subcommittee R&A prior to the January 2026 meeting.

Item Number: 24-80	NBIC Location: Part 3, S1.2.2	No Attachment

General Description: adding a paragraph l) to Part 3, S1.2.2

Subgroup: TG Locomotive
Task Group: S. Butler (PM), Dervin Lambert

Explanation of Need: It is a past practice used in locomotive boiler repair for stay bolts that could not be accessed from both sides.

February 2025 TG Locomotive Meeting Action:
The TG stated there has not been a lot of movement on this item. After discussion, and review of Part 3, S1.2.2, Mr. Butler will get a proposal together and the TG will come back to this item later in the meeting. The TG came back to this item and Mr. Bulter presented a proposal. The TG had a lot of discussion on the wording and whether or not the wording would be passed through Part 3 Repairs and Alterations since this goes against almost everything Part 3 says about staybolts. A motion was made to **close this item with no action**. The motion was seconded and unanimously approved.

July 2025 Meeting Action: A motion was made, seconded, and unanimously approved to close this item with no action.

Item Number: 24-81	NBIC Location: Part 3, Table S1.1.3.1	No Attachment

General Description: Revise Table S1.1.3.1, Part 3, Section 6

Subgroup: TG Locomotive
Task Group: R. Franzen (PM), T. Botti

Explanation of Need:
Need alternate material for Hollow Cylindrical Pressure Retaining Parts. Propose SA-106-B which is hollow seamless pipe to be used for super heater ball end parts. The new line-item title in the table would be "SH Unit Ball Ends", material options would be SA-106-B, SA-675, SA-696.
Change first line item from Boiler Tubes & Flues, Arch Tubes, Superheater Units, change to Boiler Tubes & Flues, Arch Tubes, Superheater Units & Tubing.
See other changes in table in RED.

February 2025 TG Locomotive Meeting Action:
Ms. Metzmaier reported that this item was omitted from the SC R& A January 2025 agenda. The proposal will be sent to letter ballot to the SC R&A for vote. No action was taken by the TG.

July 2025 Meeting Action: Ms. Moore stated that a proposal will be balloted to Subcommittee R&A prior to the January 2026 meeting.

Item Number: 24-106	NBIC Location: Part 3, S1.2.2	No Attachment

General Description: S1.2.2 Threaded Staybolts, change wording concerning reduced body staybolts

Subgroup: TG Locomotive

Task Group: None Assigned
Submitted by: R. Franzen

Explanation of Need: Clarification on staybolts over 8" long is needed whether they need telltale holes or not in rigid, flexible, radial and crown bolts.

February 2025 TG Locomotive Meeting Action:
Mr. Franzen stated he has not created a proposal for this item. The TG had a lot of discussion over Part 3, S1.2.2. The TG is considering changing the layout of Part 3, S1.2.2 b) so it is more easily understood and easier to follow. Mr. Botti will work on the layout of this section with his restructure of telltale holes & flexible staybolts. The TG put together a proposal for changes to this section. A motion was made to accept the proposal as presented. The motion was seconded and unanimously approved.

July 2025 Meeting Action: Ms. Moore stated that a proposal will be balloted to Subcommittee R&A prior to the January 2026 meeting.

Item Number: 25-06	NBIC Location: Part 3, S1.2.3	No Attachment

General Description: Reinforcing ring under a flexible sleeve to eliminate angularity

Subgroup: TG Locomotive

Task Group: None Assigned
Submitted by: L. Moedinger

Explanation of Need: Inspector questioning this method because it is not specifically addressed in the NBIC.

February 2025 TG Locomotive Meeting Action:
Mr. Moedinger presented the interpretation to the TG. The TG revised the question, and the subject of the interpretation. A proposal was made to accept the interpretation. The motion was seconded and unanimously approved.

July 2025 Meeting Action: Ms. Moore stated that a proposal will be balloted to Subcommittee R&A prior to the January 2026 meeting.

NR Task Group Items:

Item Number: A23-60	NBIC Location: Part 3, 1.6	No Attachment

General Description: Endorsements required for Nuclear Inspectors based on Category of work

Subgroup: NR TG

Task Group: C. Dinic (PM)

Explanation of Need: Endorsements required for Nuclear Inspectors based on Category of work (1, 2, or 3)

July 2025 Meeting Action: Mr. Spuhl stated that the proposal is still in development for this item.

Item Number: A24-09	NBIC Location: Part 3, 1.6.1 – 1.6.5	No Attachment

General Description: Update and revise NR Scope in 1.6.1 - 1.6.5

Subgroup: NR TG

Task Group: R. Spuhl (PM)

Explanation of Need: Scope and update and revision to 1.6.1 - 1.6.5.

July 2025 Meeting Action: Mr. Spuhl reported that work is still being done on this item.

SG Repairs & Alterations Items:

Item Number: 21-45	NBIC Location: Part 3, Supplements	No Attachment

General Description: Add a supplement for engineered repairs and alterations

Subgroup: Repairs and Alterations

Task Group: M. Schaser (PM), B. Boseo, B. Ray, D. Marek, R. Underwood, J. Siefert, P. Becker

Explanation of Need: There has been interest from companies operating with the Oil, Gas and Chemical industries to address certain types of repairs that may exist in ASME PCC-2 or API. NBIC does not have many of these repair methods within the book.

July 2025 Meeting Action: Ms. Moore made a motion to close this item with no action, as it has already been addressed. This motion was seconded and unanimously approved.

Item Number: 21-53	NBIC Location: Part 3, S8.5 a)	No Attachment

General Description: Post Repair Inspection of weld repairs to CSEF steels

Subgroup: Repairs and Alterations

Task Group: P. Gilston (PM), E. Cutlip, A. Triplett

Explanation of Need: The requirement for Inspector involvement in post-repair inspections to CSEF weld repairs is to ensure future safe operation of the boiler. This is a function of the inservice Authorized Inspection Agency, not the Repair Inspector, whose duties end with completion of repair documentation.

July 2025 Meeting Action: Ms. Moore stated that work is still being done on this item.

Item Number: 23-09	NBIC Location: Part 3, New Supplement	Attachment Page 31

General Description: Scope and Rules for use of Additive Manufacturing Pressure Parts

Subgroup: Repairs and Alterations

Task Group: T. Melfi (PM), J. Siefert, B. Schaefer, W. Sperko, J. Ferreira, J. Getter, T. Seime, M. Wadkinson

Explanation of Need: Developing rules for the use of additive manufacturing pressure parts in alterations.

July 2025 Meeting Action: This item will be balloted to Main Committee prior to the January 2026 meeting. Ms. Teresa Melfi gave a presentation to provide background on the item.

Item Number: A23-21	NBIC Location: Part 3, 3.3.4.9	No Attachment

General Description: Boiler tube plug guidelines and inclusion or watertube boilers

Subgroup: Repairs and Alterations

Task Group: E. Cutlip (PM), P. Gilston, K. Moore, A. Triplett, J. Ferreira

Explanation of Need: Currently both firetube and watertube boilers require a boiler tube be plugged when replacement of a tube is not practicable at the time the defective tube is detected.

July 2025 Meeting Action: Ms. Moore stated that the task group is still working on a proposal for this item.

Item Number: A23-24	NBIC Location: Part 3	Attachment Page 37

General Description: Repairs to quick actuating closures

Subgroup: Repairs and Alterations

Task Group: T. McBee (PM), C. Becker, M. Schaser, A. Khssassi, R. Smith

Explanation of Need: Put safe guidelines for repairs to quick actuating closures.

July 2025 Meeting Action: Ms. Moore stated that a proposal will be balloted to Main Committee prior to the January 2026 meeting.

Item Number: A23-35	NBIC Location: All Parts, 9.1	No Attachment

General Description: Definition of "non-load bearing attachment" (All Parts)

Subgroup: Repairs and Alterations

Task Group: T. White (PM), A. Khssassi, J. Walker, P. Lentzer

Explanation of Need: The term "nonload bearing attachment" is used as a basis for determining a routine repair but is not defined in the NBIC.

July 2025 Meeting Action: Ms. Moore stated that the task group is still working on a proposal for this item.

Item Number: A23-61 **NBIC Location: Part 3, S9.3** **No Attachment**

General Description: Revise NBIC R-2 Report and guide

Subgroup: Repairs and Alterations

Task Group: B. Schaefer (PM), T. LeBeau

Explanation of Need: Updates to the R-2 Report and the guide for completing R Report.

July 2025 Meeting Action: Ms. Moore stated that the task group is still working on this item.

Item Number: A23-68 **NBIC Location: Part 3, 3.4.4 c) and d)** **No Attachment**

General Description: Changes to Examples of Alterations

Subgroup: Repairs and Alterations

Task Group: M. Schaser (PM), T. McBee, P. Becker, L. Baker

Explanation of Need: The current wording of 3.4.4.d (2023) is open ended and may result in allowing significant design changes to a pressure vessel under the guise of a repair when an alteration is a more appropriate classification. Rewording is required to limit the scope of potential design changes.

July 2025 Meeting Action: Ms. Moore made a motion to close the item with no action because it would be better to modify the definition of Alteration instead of revising the list of examples. This motion was seconded and unanimously approved.

Item Number: A23-77 **NBIC Location: Part 3, 4.2 a)** **No Attachment**

General Description: Performance of Original NDE During Repairs and Alterations

Subgroup: Repairs and Alterations

Task Group: A. Triplett (PM), S. Frazier, J. Walker, R. Collins, P. Becker

Explanation of Need: The existing language in Part 3, Section 4, Paragraph 4.2.a does not provide enough guidance or flexibility for Repair Organizations and owners to prescribe appropriate NDE for repairs/alterations to existing welds. Based on the limited, often non-specific documentation typically available to these entities during NBIC repairs and alterations, additional allowances and direction should be provided.

July 2025 Meeting Action: Ms. Moore informed the Committee that the task group is still working on this item.

Item Number: A24-11	NBIC Location: Part 3, S9	No Attachment

General Description: Addition of a section on the R-1 Form for "Unresolved Issues"

Subgroup: Repairs and Alterations

Task Group: M. Quisenberry (PM), T. Seime, T. McBee

Explanation of Need: There have been multiple instances discussed during NBIC meetings of Certificate Holders having to leave known defects unrepaired because of the owner/user not wanting to make the repair. This field would allow AIA and Jurisdictional Authorities to be made aware of known and identified issues with a pressure retaining item that were not corrected. Additionally, this provides cover for the Certificate Holder that they identified the defect, brought it to everyone's attention, and the owner/user decided to leave it.

July 2025 Meeting Action: Ms. Moore made a motion to close this item because it was determined that the change is not needed. This motion was seconded and passed unanimously.

Item Number: A24-17	NBIC Location: Part 3, 5.7.5 b)	Attachment Page 41

General Description: Specific Requirements For Stamping And Nameplates

Subgroup: Repairs and Alterations

Task Group: E. Cutlip (PM), B. Schaefer, A. Khssassi

Explanation of Need: 2023 ASME Section VIII-Div 1 UG-119(c)(5) has been revised to allow for the use of mechanical etching or laser annealing on nameplates.

July 2025 Meeting Action: Ms. Moore and Mr. Schaefer presented the proposal for this item. After discussion, it was decided that the proposal would sent out as a ballot.

Item Number: A24-18	NBIC Location: Part 3, 9.1	No Attachment

General Description: Definition of Controlled Fill

Subgroup: Repairs and Alterations

Task Group: P. Gilston (PM), A. Triplett, R. Collins, F. Johnson

Explanation of Need: Interpretation item I 23-79 addresses the use of the term ‘controlled fill’ in relation to welding method 6. The term is used in 2.5.3 d in relation to welding method 6 and more specifically in Supplement 8. Supplement 8 gives a lot of detail in schematics about a controlled fill in terms of weld bead placement, its use in controlling heat input etc., but in Welding Method 6 the term is not specifically used, but direction for welding is given, typically preheats are specified, electrode size for SMAW, and the use of stringer beads only.

July 2025 Meeting Action: Ms. Moore stated that a proposal will be sent out for a Subgroup letter ballot prior to the January 2026 meeting.

Item Number: A24-20	NBIC Location: Part 3, 9.1	No Attachment

General Description: Define "Engineered Repairs" and "Engineered Alterations"

Subgroup: Repairs and Alterations

Task Group: M. Schaser (PM), B. Ray, R. Underwood, B. Boseo, D. Marek, J. Siefert, P. Becker

Explanation of Need: The new supplement dealing with "Engineered Repairs and Alterations" (A21-45) will impact Part 3 Section 1, the NB-415, QRRs, the application process for Certificate Holders, and other documents to be determined. Defining "Engineered Repairs" and "Engineered Alterations" clarify the intent for these new scopes.

July 2025 Meeting Action: Ms. Moore gave a progress report for this item.

Item Number: A24-21	NBIC Location: Part 3, 9.1	No Attachment

General Description: Engineered Repairs and Alterations - Section 1 Scope and Manual reqs

Subgroup: Repairs and Alterations

Task Group: M. Schaser (PM), B. Ray, R. Underwood, B. Boseo, D. Marek, J. Siefert, P. Becker

Explanation of Need: The scope of "Engineered Repairs and Alterations" (A21-45)needs to be clarified in 1.4.1 d) and reflected in the scope statement requirements for manuals in 1.5.1 a).

July 2025 Meeting Action: Ms. Moore stated that the task group is still working on a proposal for this item.

Item Number: A24-96	NBIC Location: Part 3, 5.5 a)	No Attachment

General Description: Add examples of repairs and alterations specific to Electrochemical Stacks

Subgroup: Repairs and Alterations

Task Group: A. Triplett (PM)

Explanation of Need: With inclusion and initial deployments of electrochemical stacks as U Stamped pressure vessels under ASME BPVC Section VIII Division 1 and Code Case 3078, these stacks are starting to be shipped and registered with the National Board. Some basic examples of allowed repairs are needed to help guide an understanding of limitations for electrochemical stacks.

July 2025 Meeting Action: Ms. Moore stated that work is still being done on this item.

Item Number: A24-98	NBIC Location: Part 3, 2.5.2	No Attachment

General Description: Review and revise the PWHT Requirements in 2.5.2

Subgroup: Repairs and Alterations

Task Group: P. Gilston (PM)

Explanation of Need: Simplify PWHT requirements in 2.5.2.

July 2025 Meeting Action: Ms. Moore informed the committee that the task group is still working on this item.

iv. New Items:

Item Number: A25-04	NBIC Location: Part 3, 2.5.3	Attachment Page 44

General Description: Part 3, 2.5.3 Special Service Equipment

Subgroup: Repairs and Alterations

Task Group: R. Derby (PM), P. Gilston

Explanation of Need: An interpretation request was received regarding the use of alternate welding methods for pressure equipment identified as Special Service. Comments received in the initial R&C indicated that the current words did not support the proposed Q&A. The proposal had been presented as an intent interpretation, and the comment was made if this was the desire, then to have a separate action item.

July 2025 Meeting Action: Ms. Moore presented a proposal for this item. A motion was made and seconded to approve the proposal as presented. This motion passed unanimously.

Item Number: A25-18	NBIC Location: Part 3, 5.7.5	No Attachment

General Description: Requirements for Stamping and Nameplates

Subgroup: Repairs and Alterations

Task Group: B. McGuire (PM), Lane Baker

Explanation of Need: which contains critical identification information. However, HRSG boilers differ in that they have multiple master nameplates for different sections (e.g., HP, LP, economizer), all located on the outer casing of the boiler. Currently, NBIC repair nameplates do not provide a way to indicate which specific section was repaired. This limitation creates confusion for future inspections and maintenance, as there is no clear indication of which section underwent repairs. Adding a requirement for repair nameplates to include the specific HRSG boiler section being repaired will enhance clarity and traceability.

July 2025 Meeting Action: Ms. Moore informed the committee that the task group is still working on this item.

Item Number: A25-20	NBIC Location: Part 3, 3.3.4.6	No Attachment

General Description: Adoption of reinforcement/fillet welded patches from PCC-2

Subgroup: Repairs and Alterations

Task Group: M. Schaser (PM)

Explanation of Need: Oil refineries are scant on shutdown opportunities and vital to the fuel needs of the community. At times inspection departments will detect corrosion on an in-service piece of equipment and be unable to clean it up for internal entry without a planned outage. Fillet welded patches are a safer alternative to external weld metal build up, or fitness for service.

July 2025 Meeting Action: Ms. Moore provided a progress report for this item.

Item Number: A25-21	NBIC Location: Part 3, S11.2.3 and S11.3.2	No Attachment

General Description: Synchronize/Revise Repairs & Alterations of VIII-2, VIII-3 PRIs

Subgroup: Repairs and Alterations

Task Group: R. Collins (PM)

Explanation of Need: Mr. Tim Gardner, NBBI Senior Staff Engineer/Training Instructor, plans to create an online course for repairs of ASME Sect VIII-2 and VIII-3 PRIs but the current requirements in S11.2.3 and S11.3.2 (formerly 3.3.5 and 3.4.5) do not seem to be in agreement.

July 2025 Meeting Action: Ms. Moore provided a progress report for this item.

Item Number: A25-22	NBIC Location: Part 3, Table 2.5.1	No Attachment

General Description: Revise Part 3, Table 2.5.1

Subgroup: Repairs and Alterations

Task Group: L. Dutra (PM), G. Galanes

Explanation of Need: There have been changes to materials in the ASME Code that have made a review/revision of Table 2.5.1 necessary. If anything, the obsolete group numbers should be deleted. It will be up to the committee to decide whether to add the missing P/group numbers and the associated temperatures.

July 2025 Meeting Action: Ms. Moore provided a progress report for this item.

Item Number: A25-25	NBIC Location: Part 3, S11.2.2	No Attachment

General Description: Repair of PRIs Without Complete Removal of Defect

Subgroup: Repairs and Alterations

Task Group: T. LeBeau (PM), M. Schaser, R. Collins, J. Hayes, K. Derrick

Explanation of Need: To clarify this repair activity can be used for welded or non-welded repairs. This proposal will remove reference to welded repairs in S11.2.2 and only refer to "repair."

July 2025 Meeting Action: Ms. Moore provided a progress report for this item.

Item Number: A25-26	NBIC Location: Part 3, 3.2.2 and 5.7.4	No Attachment

General Description: Stamping of non-ASME Parts and Distribution of Form R-3

Subgroup: Repairs and Alterations

Task Group: P. Gilston (PM)

Explanation of Need: Part 3 does not address the distribution of the R-3 and provides no specific details on how to stamp non-ASME parts fabricated by the R Certificate Holder.

July 2025 Meeting Action: Ms. Moore stated that a proposal for this item will be ready to be balloted to Main Committee prior to January 2026.

Item Number: A25-28	NBIC Location: Part 3, 1.3 b) and 9.1	Attachment Page 46

General Description: Remove references to FIA's throughout - This is now a scope under OUIO

Subgroup: Repairs and Alterations

Task Group: A. Khssassi (PM)

Explanation of Need: FIA's are to be a scope under OUIO. Definitions have been removed from RCI-1. This will remove references in the: Introduction; 1.3 b); and in the definition of an Inservice AIA.

July 2025 Meeting Action: Ms. Moore presented a proposal for this item. A motion was made and seconded to approve the proposal as presented. This motion passed unanimously.

Item Number: A25-29	NBIC Location: Part 3, 2.5.3 and 3.3	No Attachment

General Description: Referencing for Weld Metal, Filler Metal etc.

Subgroup: Repairs and Alterations

Task Group: P. Gilston (PM), T. Melfi, J. Siefert, W. Sperko

Explanation of Need: Within Part 3, welding consumables are referred to in several different ways e.g., filler metal, weld metal etc. This item is to review these references and identify if a single reference description is beneficial for users of the Code.

July 2025 Meeting Action: Ms. Moore provided a progress report for this item.

Item Number: A25-42	NBIC Location: Part 3, S11	Attachment Page 47

General Description: Renaming Supplement 11

Subgroup: Repairs and Alterations

Task Group: M. Schaser (PM)

Explanation of Need: Removing "Engineered" from the title so as not to suggest that the work would require direct involvement from an engineer or engineering certification. The purpose of the supplement is to provide repairs activities that have been developed with sound engineering judgment backed up with technical references. In some cases, an engineering evaluation will be recommended.

July 2025 Meeting Action: Ms. Moore presented a proposal for this item. A motion was made and seconded to approve the proposal as presented. This motion passed unanimously.

d. Subcommittee Pressure Relief Devices

i. Interpretations

Item Number: 24-38	NBIC Location: Part 4, 2.5.4.2 & Part 1, 3.9.1.6 c)	No Attachment

General Description: T&P relief device installation on modular HWH supply header

Task Group: None assigned.

Explanation of Need: The NBIC does not address the installation or location of a common T&P valve for modular HWH's. Clarification is needed on whether the common supply header can be considered part of the HWH, and whether T&P valves can be installed in the horizontal position with the outlet pointed down, if installed directly to the header with no more than 4 in. maximum interconnecting piping.

July 2025 Meeting Action: Mr. Renaldo gave a progress report for this item.

Item Number: 24-46	NBIC Location: Part 4, 4.3.1 a)	No Attachment

General Description: Replacement of Bodies and Transfer of Nameplates During Repair

Task Group: None assigned.

Explanation of Need: Clarity on what defines "the valve". Is "the valve" the nameplate solely or the nameplate and serialized base; and subsequent ability to divorce the nameplate and base during repair when the base requires replacement.

July 2025 Meeting Action: Mr. Renaldo gave a progress report for this item.

Item Number: 24-87	NBIC Location: Part 4, 4.7.3 a) and b)	Attachment Page 48

General Description: Changes to the original pressure relief device nameplate.

Task Group: None assigned.

Explanation of Need: Clarification is needed on the correct way to communicate changes to a relief device through nameplate stamping.

July 2025 Meeting Action: Mr. Renaldo presented a proposal for this item and for Item 25-01, which is the action item tied to Item 24-87. A motion was made, seconded, and unanimously approved to accept the proposal for Item 25-01. Another motion was then made and seconded to approve the proposal for Item 24-87. This motion passed unanimously.

New Interpretation Requests:

Item Number: 25-10	NBIC Location: Part 4, 2.6	Attachment Page 49

General Description: Is a Pressure Relief Device the only Relief Method for Pressure Vessels?

Task Group: None assigned.

Explanation of Need: The jurisdiction is claiming the NBIC implies that a pressure relief device is the only acceptable relief method for a pressure vessel since Part 4 Section 2.6 only addresses pressure relief devices.

July 2025 Meeting Action: Mr. Renaldo presented a proposal for this item. A motion was made and seconded to approve the proposal. This motion passed unanimously.

ii. Action Items – Old Business

Item Number: NB15-0305	NBIC Location: Part 4	No Attachment
General Description: Create Guidelines to address Overpressure Protection by System Design. **Task Group:** B. Nutter, A. Renaldo, D. Marek (PM), D. DeMichael, J. Wolf, D. Schirmer **July 2025 Meeting Action:** Mr. Renaldo stated that this item was closed by Part 4 with the recommendation that an item be opened in Part 2 to address this topic. A motion was made and seconded to close this item and open a new item in Part 2. This motion passed unanimously.		

Item Number: NB15-0315	NBIC Location: Part 4, 2.5.6 and 2.6.6 and Part 1, 4.5.6 and 5.3.6	No Attachment
General Description: Review isolation Valve Requirements, and reword to allow installation of pressure relief devices in upstream piping. **Task Group:** D. DeMichael (PM), B. Nutter, A. Renaldo, D. Marek **July 2025 Meeting Action:** Mr. Renaldo gave a progress report for this item.		

Item Number: 19-83	NBIC Location: Part 4, 4.7.5	No Attachment
General Description: Address Alternate Pressure Relief Valve Mounting Permitted by ASME CC2887-1 **Task Group:** D. Marek (PM), T. Patel, J. Ball, R. Ceccarelli **Explanation of Need:** ASME Code Case 2887-1 permits the installation of pressure relief valves below a low mass water tube boiler or water heater under certain conditions. This set of conditions and alternate location should be addressed in the NBIC as the use of low mass water tube boilers and water heaters becomes more widespread. **July 2025 Meeting Action:** Mr. Renaldo gave a progress report for this item.		

Item Number: 21-08	NBIC Location: Part 4, S4.4	No Attachment
General Description: Additional guidance for tank vent repairs **Subgroup:** PRD **Task Group:** D. DeMichael, H. Cornett, B. Nutter (PM), K. Beise, J. Grace **Explanation of Need:** The recently approved S4.4, "Weight Loaded Vents," provided new guidance for tank vent repairs. Several additional topics need to be addressed to enhance the guidance. These topics include: 1) Suggested test equipment and configuration for the prescribed tank vent testing. 2) Minimum requirements for replacement parts, 3) Guidance for painting tank vent components. **July 2025 Meeting Action:** Mr. Renaldo gave a progress report for this item.		

Item Number: 22-09	NBIC Location: Part 4, 4.6.1	No Attachment

General Description: Add language to NBIC Part for valves manufactured to Code Case 2787

Subgroup: PRD

Task Group: A. Donaldson (PM), H. Cornett, B. Nutter, T. Tarbay, J. Simms, T. Patel

Explanation of Need: There are no requirements to address valve repairs that were manufactured or assembled to Code Case 2787 (use of more than one certified capacity on the pressure relief valve or the nameplate).

July 2025 Meeting Action: Mr. Renaldo gave a progress report for this item.

Item Number: 22-20	NBIC Location: Part 4, 4.7.4	No Attachment

General Description: Inspection and testing of PRV's located above isolation valves.

Subgroup: PRD

Task Group: D. Marek (PM), K. Beise, J. Ball, E. Creaser, H. Cornett, A. Renaldo

Explanation of Need: Add requirement to make sure the internals of a PRV inlet and outlet are inspected when it is tested, and require tests to be done with a pressure vessel with volume.

July 2025 Meeting Action: Mr. Renaldo gave a progress report for this item.

Item Number: 23-32	NBIC Location: Part 4, 3.3 and Supp. 6	No Attachment

General Description: Rules for T/O activities related to Nuclear Class Valves

Subgroup: PRD

Task Group: E. Creaser (PM), P. Dhobi, D. McHugh, J. Simms

Explanation of Need: Nuclear facilities that perform repair and T/O activities would by allowing them to use T/O for nuclear class valves that were serviced but not in need of repair but need to be set and sealed again.

July 2025 Meeting Action: Mr. Renaldo gave a progress report for this item.

Item Number: 24-35	NBIC Location: Part 4, 4.6.2	No Attachment

General Description: Update Testing of UV-Designated Steam valves on Air to match ASME XIII

Subgroup: PRD

Task Group: T. Beirne (PM)

Explanation of Need: ASME Section XIII Table 3.6.3.1-1 Note 3 permits UV-designated steam valves to be tested using air when the valve is beyond the testing capabilities due to set pressure or capacity. The NBIC only permits steam valves to be tested on air by the owner/user. This should be permitted by any VR shop that has steam test equipment since it is permitted under the rules for new construction.

July 2025 Meeting Action: Mr. Renaldo gave a progress report for this item.

Item Number: 24-72	NBIC Location: Part 4, 4.3.1	No Attachment

General Description: Add Language to Address Replacement of Valve Bodies and Bases

Subgroup: PRD

Task Group: A. Donaldson (PM), G. Salwan, E. Creaser, H. Cornett, B. Nutter, P. Dhobi, T. Tarbay, T. Patel

Explanation of Need: Under the current text of 4.3.1 there are no guidelines for the replacement of valve components to which the original nameplate is attached.

July 2025 Meeting Action: Mr. Renaldo stated that a proposal would be balloted to Subgroup PRD prior to the January 2026 meeting.

Item Number: 24-91	NBIC Location: Part 4, 3.2.3	No Attachment

General Description: Require means to prevent safety valve discharge piping blockage for LCDSV (Part 4)

Subgroup: PRD

Task Group: A. Renaldo (PM), J. Simms, D. Schirmer, D. Sullivan, R. Ceccarelli

Explanation of Need: Adding verbiage to the NBIC Part 1, Part 2 and Part 4 to require a means to prevent foreign material introduction to the safety valve discharge pipe.

July 2025 Meeting Action: Mr. Renaldo stated that a proposal would be balloted to Subgroup PRD prior to the January 2026 meeting.

Item Number: 24-101	NBIC Location: Part 4, Sections 3 and 4	No Attachment

General Description: Revise NBIC to expand VR and T/O programs beyond ASME Certified Valves

Subgroup: PRD

Task Group: E. Creaser (PM), D. Marek, T. Beirne, H. Cornett, K. Beise, R. Viers, N. Bailey, A. Donaldson

Explanation of Need: The National Board upper management and Board of Trustees have decided to expand the VR and T/O programs to valves that are constructed to standards other than ASME. The proposal file contains changes that would accomplish this goal. Changes to NB-514 and NB-528 will follow.

July 2025 Meeting Action: Mr. Renaldo stated that a proposal would be balloted to Subgroup PRD prior to the January 2026 meeting.

Item Number: 25-01	NBIC Location: Part 4, 4.7.3	Attachment Page 50

General Description: Revise NBIC to expand VR and T/O programs beyond ASME Certified Valves

Subgroup: PRD

Task Group: J. Simms (PM), E. Heck, C. Turner, N. Bailey, P. Dhobi, D. Mosley, B. Nutter, D. Schirmer

Explanation of Need: The current NBIC language lacks sufficient detail and instruction for modification of original nameplate information following conversion.

July 2025 Meeting Action: This item was unanimously approved during discussion of Item 24-87.

iii. New Items:

Item Number: 25-08	NBIC Location: Part 4, 4.6.1	No Attachment

General Description: Add Requirements for Qualification of Mobile Test Equipment

Subgroup: PRD

Task Group: None assigned.

Explanation of Need: The current working in 4.6.1 only addresses performance test equipment. We do not address mobile test equipment. I believe we need to add a new paragraph 4.6.1 c) that addresses test equipment other than just the performance test equipment.

Background Information: Per T. Tarbay:
The reason I think we need to address test equipment is I am finding shops that are using low volume tests stands for field testing (i.e. nitrogen bottle with an air hose). As you know, using these low volume stands, you cannot "pop" a valve.

July 2025 Meeting Action: Mr. Renaldo made a motion to close this with no action because the existing wording is sufficient. The motion was seconded and unanimously approved.

Item Number: 25-19	NBIC Location: Part 4, Supplement 4	No Attachment

General Description: Spring slackness with time in the HP steam for more than 5 years

Subgroup: PRD

Task Group: None assigned.

Explanation of Need: The current NBIC guidelines do not explicitly address the time-dependent degradation of safety valve springs in high-temperature steam services. We have observed premature opening of safety valves in our HP steam headers, which has been attributed to spring relaxation over time. Without specific guidance on inspection frequency and replacement intervals, there is a risk of undetected spring degradation leading to operational disruptions, potential overpressure events, and increased maintenance costs. This amendment will provide clear and practical recommendations to mitigate these risks.

Background Information: To ensure the continued reliability and integrity of high-pressure steam safety valves, it is proposed that the NBIC guidelines be amended to include:
1- Mandatory spring inspection during each scheduled safety valve inspection. This inspection should include, but not be limited to, assessing spring relaxation, free height, and visual inspection for signs of fatigue or damage.
2- A recommended spring replacement interval of five years for safety valves operating in high-temperature steam services. This interval is based on observed spring relaxation and the potential for thermal/mechanical fatigue over time.

This amendment aims to proactively address the issue of premature safety valve operation and potential spring failures, enhancing safety and operational reliability.

July 2025 Meeting Action: Mr. Renaldo made a motion to close this item and send a letter to the inquirer recommending they consult the original code of construction for guidance. This motion was seconded and unanimously approved.

Item Number: 25-30	NBIC Location: Part 4, 4.7.2 b) 3)	No Attachment

General Description: Association of Repair for Pilots and Main Valves

Subgroup: PRD

Task Group: N. Bailey, J. Simms, D. Marek, D. Mosley, P. Dhobi, C. Turner, K. Beise, I. Flynn, B. Nutter, B. DeKeyzer, H. Cornett, A. Renaldo (PM)

Explanation of Need: There is currently not language tying the pilot and main valve of a pilot-operated pressure relief valve to one another following repair.

Background Information: ASME Section XIII 3.9 (f) (1) mandates that the pilot and main valve of a pilot-operated pressure relief valve each be marked with the same unique identifier to establish association of both components. This would create a similar requirement in NBIC to establish association of the pilot and main valve of pilot-operated pressure relief valves as being part of a single VR repair.

July 2025 Meeting Action: Mr. Renaldo presented a progress report for this item.

Item Number: 25-38	NBIC Location: Part 4, 3.2.5.1 and 4.6.1	No Attachment

General Description: Address Testing of Pilot Valves as Complete Assembly

Subgroup: PRD

Task Group: N. Bailey, J. Simms, D. Marek, D. Mosley, P. Dhobi, C. Turner, K. Beise, I. Flynn, B. Nutter, T. Patel, H. Cornett, B. DeKeyzer, A. Renaldo (PM)

Explanation of Need: ASME CC 3057 requires that pilot operated valves be tested at least once as a complete assembly to verify all components are properly connected, leak tight, and that the pilot actuates the main valve. This also verifies freedom of operation of the main valve.

Background Information: Pilot operated valves in service have been field tested by checking pilot set point without verification that the main valve will open.

July 2025 Meeting Action: Mr. Renaldo presented a progress report for this item.

11. Liaison Activities

i. **American Society of Mechanical Engineers BPV Code (ASME BPV)**

- **a.** Mr. Gary Scribner will provide updates on ASME activities.
  - **i.** Mr. Scribner stated that the BCA met in April. During that meeting, they approved a CAP-21 change to allow an AI, NB IS inspector, or certified individual to reapply a certification mark. See Attachment Page 51 for the approved proposal.
- **b.** Mr. Brent Ray will provide updates on PCC activities.
  - **i.** PCC will be republished next year. There will be six new articles in PCC-2. Developed a training class for PCC-2. ASME Section V subsection C covers NDE and was published this year.
- **c.** Mr. Galanes spoke on ASME and ASTM discussions.

ii. **American Welding Society (AWS)**

- **a.** See Attachment Page 52 for Mr. Sekely's report.

iii. **American Petroleum Institute (API)**

- **a.** Mr. Brent Ray to provide an update on recent API activities.
- **b.** API-510 has been republished with an addendum this year. Mr. Ray is the new Chair for API-573, which is looking to make some changes for the next edition.

12. Future Meetings

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

13. Adjournment

Mr. Galanes adjourned the meeting at 1:23pm Eastern Time.

Respectfully submitted,

Jonathan Ellis

Jonathan Ellis
NBIC Secretary

THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

NATIONAL BOARD INSPECTION CODE COMMITTEE

ATTACHMENTS

July 2025 Main Committee Attendance - Members

Last, First	Email	Company Name	In-Person	Remote	Did Not Attend
Galanes, George	ggalanes@diamondtechnicalservices.com	DTS Inc.	x		
Wadkinson, Melissa	melissa.wadkinson@fulton.com	Fulton Thermal Corp	x		
Ellis, Jonathan	jellis@nbbi.org	NBBI	x		
Beise, Kim	kbeise@dowcovalve.com	Dowco Valve Company Inc			x
HOPKINS, CRAIG	CHOPKINS@SEATTLEBOILER.COM	Seattle Boiler Works, Inc.		x	
Clark, Tom	thomas.g.clark@dcbs.oregon.gov	State of Oregon		x	
Moore, Kathy	kathymoore@joemoorecompany.com	Joe Moore & Company, Inc.	x		
Morelock, Brian	Poppymorelock@gmail.com	Eastman Chemical Company			x
Newton, Venus	venus.newton@bpcllcga.com	BPC/XLIA	x		
Patel, Thakor	thakorpatel1@gmail.com	Consultant		x	
Patten, Donald	dpatten@baycityboiler.com	Bay City Boiler Co., Inc.	x		
Polick, Pat	patrick.polick@illinois.gov	State of Illinois	x		
Ray, Brent	bdray@marathonpetroleum.com	Marathon Petroleum Corporation	x		
Renaldo, Adam	ADAM.RENALDO@LINDE.COM	Linde	x		
Richards, H. Michael	Hmichaelrichards.pe@gmail.com	Southern Company	x		
Schaefer, Ben	bschaefer@aep.com	AEP	x		
Seime, Trevor	tsseime@nd.gov	State of ND	x		
Sekely, Jim	jsekely@comcast.net	Welding Services, Inc.		x	
Simmons, Tim	tsimmons@boilermakers.org	International Brotherhood of Boilermakers	x		
Toth, Marty	mtoth@boiscotraininggroup.com	ECS Consulting & the Boisco Training Group	x		
Underwood, Bob	robert_underwood@hsb.com	HSB	x		
Burpee, John	john.h.burpee@maine.gov	State of Maine	x		

Jul 2025 Main Committee Meeting Attendance - Visitors

Last, First	Email	Company Name	In-Person	Remote	Did Not Attend
Adams, Rodger	rodger.adams@zurichna.com	Zurich	x		
Ahee, Bryan	bahee@bradfordwhite.com	Bradford White Corporation		x	
Amato, Joel	jamato@nationalboard.org	NBBI	x		
Baker, Lane	LBaker@us.tuv.com	TUV Rheinland AIA services LLC	x		
Barbato, William	bbarbato@travelers.com	Travelers	x		
Barr, Larry	lbarr@propanetank.com	Quality Steel Corporation		x	
Bates, Johnathon	bates@ibb026.org	Boilermakers	x		
Beauregard, Joseph	joeducati@hotmail.com	Los Alamos National Laboratory	x		
Becker, Chuck	hggbecker@yahoo.com	Bureau Veritas	x		
Becker, Pat	pbecker@epri.com	EPRI	x		
Beirne, Thomas	tbeirne@nationalboard.org	NBBI	x		
Berny, Howard	howard.j.berny@state.mn.us	State of MN	x		

Last, First	Email	Company Name	In-Person	Remote	Did Not Attend
Black, Robert	kblackjbc@aol.com	American Boiler Manufacturers Association (ABMA)	x		
Boseo, Brian	bmboseo@burnsmcd.com	Burns & McDonnell Construction			
Brockman, Joe	Ronald.Brockman@FMGlobal.com	FM Insurance			
Burton, Lee	BURTONDL@AIRPRODUCTS.COM	Air Products & Chemicals	x		
Byrum, Marvin "Jim"	marvin.byrum@tuvsud.com	Arise Boiler Inspection and Insurance Co	x		
Carlson, Michael	camx235@lni.wa.gov	State of Washington	x		
Ceccarelli, Ray	raymond.ceccarelli@fmglobal.com	FM	x		
Chatham, Everett	echatham@becht.com	Becht	x		
Cheng, Alex	kinwai.cheng@dot.gov	US DOT PHMSA	x		
Choitz, Jon	jon_choitz@hsb.com	HSB	x		
Collins, Riley	rileycollins@eastman.com	Eastman Chemical Company	x		
Creaser, Eben	eben.creaser@gmail.com	NB Justice and Public Safety	x		
Crockewell, Kristi	kristic@isbservices.com	ISB		x	
Dacanay, Julius	julius.j.dacanay@hawaii.gov	State of Hawaii		x	
Davis, Paul	paul.davis22@woodplc.com	Wood Group USA, Inc.	x		
Derby, Bob	rderby@uanet.org	UA Education and Training Department	x		
Derrick, Kiwi	kiwi.derrick@chevron.com	Chevron	x		
Dutra, Louis	Ldutra@baycityboiler.com	Bay City Boiler	x		
FERREIRA, Jon	jonathan_ferreira@hsb.com	The Harford Steam Boiler Inspection and Insurance Company	x		
Frazier, Steve	steve.frazier@seattle.gov	City of Seattle		x	
Fulford, Daniel	daniel.fulford@inl.gov	Battelle Energy Alliance, LLC	x		
Gilston, Philip	philip_gilston@hsb.com	Hartford Steam Boiler	x		
Goossens, Greg	ggoossens@nbbi.org	National Board of Boiler and Pressure Vessel Inspectors	x		
Graf, Darrell	darrellgraf@bellsouth.net	Retired from APCI	x		
Haney, Clifford	clifford.haney@tuvsud.com	Arise		x	
Hellman, Terrence	thellman@nationalboard.org	National Board	x		
Henson, Adam	adam.henson@csb.gov	U.S. Chemical Safety and Hazard Investigation Board		x	
Horbaczewski, Mark	mhorbaczewski@diamondtechnicalservices.com	Diamond Technical Services	x		

Last, First	Email	Company Name	In-Person	Remote	Did Not Attend
Huntington, John	jhuntington@mwvalve.com	Midwest Valve Services		x	
Kamboj, Rajesh	Rajesh.Kamboj@technicalsafetybc.ca	Technical Safety BC		x	
Khssassi, Aziz	aziz.khssassi@rbq.gouv.qc.ca	Régie du bâtiment du Québec	x		
King, John	johnking@chubb.com	Chubb Insurance	x		
Kleiss, Jeff	jkleiss@lochinvar.com	A.O. Smith/Lochinvar		x	
Konopacki, Stan	STANLEY.KONOPACKI@NRG.COM	NRG	x		
LeBeau, Tim	tclebeau@southernco.com	Southern Company Services	x		
Lombardo, Steven	steven.lombardo@ge.com	GE Vernova		x	
Lynch, Daniel	danl@isbservices.com	Industrial Steel & Boiler Services, Inc.		x	
Maher, Thomas	thomas.maher@cityofchicago.org	City of Chicago		x	
Marek, Dan	daniel.t.marek@nasa.gov	Mainthia Technologies Inc	x		
McBee, Timothy	Timothy.McBee@tuvsud.com	ARISE Boiler Inspection and Insurance Company RRG	x		
McGuire, Robert	robert.b.mcguire@ge.com	GE Vernova		x	
McHugh, David	dpmbstrg@outlook.com	D McHugh	x		
Melfi, Teresa	teresa_melfi@lincolnelectric.com	Lincoln Electric	x		
Metzmaier, Jodi	jmetzmaier@nbbi.org	NBBI	x		
Mirjalali, John	jmirjalali@intellihot.com	Intellihot inc.	x		
Moedinger, Linn	linnwm@supernet.com	Strasburg RR		x	
Mooney, Mark	mmooney@nbbi.org	NBBI	x		
Mosley, Darris	Darris_Mosley@oxy.com	Occidental Petroleum	x		
Petersen, Jeff	petejc@inl.gov	Idaho National Laboratory (Battelle Energy Alliance)	x		
Ponce, Luis	lponce@nationalboard.org	National Board of Boiler and Pressure Vessel Inspectors	x		
Quisenberry, Michael	michael@spartan-mech.com	Spartan Boiler	x		
Roberts, James	james.roberts@triarccorp.com	TriArc Tank	x		
Rogers, Christa	crogers@nationalboard.org	NBBI	x		
Ross, William	Wross@pa.gov	Commonwealth of Pennsylvania	x		
Scarcella, Vincent	vincent.scarcella@cna.com	CNA	x		
Schaser, Matt	mschaser@e2g.com	The Equity Engineering Group, Inc.	x		
Schirmer, Del	Del.Schirmer@bpcllcga.com	XL Insurance America	x		

Last, First	Email	Company Name	In-Person	Remote	Did Not Attend
Schneeberger, Steve	steve.schneeberger@cna.com	CNA	x		
Scribner, Gary	gscribner@nationalboard.org	NBBI	x		
Shah, M. A.	boilersandpressurevessels9@gmail.com	AIS		x	
Shanks, Paul	paul.shanks@tuvsud.com	ARISE	x		
Siefert, John	jsiefert@epri.com	EPRI	x		
Simms, Jay	jack.simms@bakerhughes.com	Baker Hughes	x		
Speck-Kern, Edward	edward.speck-kern@fpl.com	Florida Power & Light Co.		x	
Spiker, Ronald	ronndj@gmail.com	State of South Carolina	x		
Spuhl, Raymond	raymond_spuhl@hsb.com	The Hartford Steam Boiler Inspection and Insurance Company	x		
Stimson II, Robert	rob.stimson@ks.gov	Kansas / Office of the State Fire Marshal	x		
Sweetland, Matthew	msweetland@plugpower.com	Plug Power, Inc.	x		
Triplett, Andrew	triplettal@ornl.gov	UT-Battelle, LLC		x	
Vandini, Thomas	tvandini@propanetank.com	Quality Steel Corporation	x		
Viers, Robert	rviers@nationalboard.org	National Board of Boiler & Pressure Vessel Inspectors	x		
Viet, Aaron	aaronv@cgthermal.com	CG THERMAL LLC		x	
White, Thomas	thomas.white@nrg.com	NRG Energy	x		
White, Wendy	wwhite@nbbi.org	The National Board of BPVI	x		
Zuberi, Asif	asif.zuberi@technicalsafetybc.ca	BC Safety Authority		x	

Title	Item Number	Cycle	NBICEdition	Assigned Subgroup	Assigned Committee
Addition of requirement for Inspector to be present for inspections.	23-27	A	2027	Subgroup Inspection	Subcommittee Inspection
Part 2, 2.3.6.8 ASME PVHO Forms call out the 2016 Edition.	24-94	A	2027	Subgroup Inspection	Subcommittee Inspection
High pressure limit control requirements for fired jacketed steam kettles	22-32	A	2027	Subgroup Installation	Subcommittee Installation
Create Guidelines for Repair of Pin Devices	NB15-0307	A	2027	Subgroup Pressure Relief Devices	Subcommittee Pressure Relief Devices
Revise the repair and alteration Sect VIII Div 2 and 3 paragraphs	24-60	A	2027	Subgroup Repairs/Alterations	Subcommittee Repairs/Alterations
Strengthening Prevention of Defect Recurrence	23-39	A	2027	Subgroup Repairs/Alterations	Subcommittee Repairs/Alterations
Changing Part 3 supplement 8's title for clarity	24-93	A	2027	Subgroup Repairs/Alterations	Subcommittee Repairs/Alterations
Increase nozzle routine repair limit for graphite nozzles	24-86	A	2027	Task Group Graphite	Subcommittee Repairs/Alterations
Rewrite Part 3, S1.1.4	24-82	A	2027	Task Group Locomotive Boilers	Subcommittee Repairs/Alterations
NR Inspector and Agency Qualification Reqs in 1.3 - TIED TO A23-60	24-92	A	2027	Task Group NR	Subcommittee Repairs/Alterations
Registration of NR Forms within 30 Days	24-95	A	2027	Task Group NR	Subcommittee Repairs/Alterations
Change Part 3, 1.6.4 d) (or elsewhere) to require audits to be performed by Supervisor	24-83	A	2027	Task Group NR	Subcommittee Repairs/Alterations
NBIC Part II Review table 2.5.8, suggest changes to align with NBIC Part 4	24-75	B	2027	Subgroup Inspection	Subcommittee Inspection
Applying PWHT to previously "as welded" item	24-28	B	2027	Subgroup Inspection	Subcommittee Inspection
Add language clarifying the limitation of inspections presented by design.	24-104	B	2027	Subgroup Inspection	Subcommittee Inspection
To provide better guidance as it relates to carbon monoxide	21-47	B	2027	Subgroup Inspection	Subcommittee Inspection
Harmonize electrical requirements for all types of boilers/water heaters	23-52	B	2027	Subgroup Installation	Subcommittee Installation
Testing and Acceptance: Boiling-out Procedure	20-86	B	2027	Subgroup Installation	Subcommittee Installation
Review and Clarify Guidelines for Nameplate Stamping Following Conversion	25-01	B	2027	Subgroup Pressure Relief Devices	Subcommittee Pressure Relief Devices
Remove references to FIA's throughout - This is now a scope under OUIO	25-28	B	2027	Subgroup Repairs/Alterations	Subcommittee Repairs/Alterations
Special Service Equipment	25-04	B	2027	Subgroup Repairs/Alterations	Subcommittee Repairs/Alterations
Renaming Supplement 11	25-42	B	2027	Subgroup Repairs/Alterations	Subcommittee Repairs/Alterations
UT Inspection of Boilers with Jackets	25-14	B	2027	Task Group Historical Boilers	Subcommittee Inspection
Update list to add acceptable materials for rivets and bronze castings and	25-13	B	2027	Task Group Historical Boilers	Subcommittee Repairs/Alterations

NBIC Interpretation Item I25-11
Submitted by Christian Hobbs (chobbs@gov.nl.ca)
4/8/2025

THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

Subject:	External Low-Water Fuel Cutoff for Hot Water Heating Boilers
NBIC Location:	2023 NBIC, Part 1, 3.8.2.4 d)
Statement of Need:	The valves proposed are a means to avoid draining the hot water boiler of its water just to test the low water fuel cutoff, we want to verify that they satisfy the requirements of the code.
Background Information:	A client has proposed using these "Test-N-Check" valves that are intended to be installed at the cross in the external piping above and below the low water cutoff device. We are concerned about the longevity and verification of the spring-loaded action to return the valves to normal position after testing the device and are curious if these valves satisfy the automatic return requirement. I will provide an info sheet of the valves in question.
Proposed Question:	Would a spring-loaded flapper "check" valve be considered as a temporary means to isolate the device that will automatically return to its normal position?
Proposed Reply:	Yes - a spring-loaded flap would be considered automatic No - a different method of returning to normal position is considered automatic
Committee's Question:	<Question(s) the committee will interpret. Can be the same wording as the proposed question>
Committee's Reply:	The committee has determined that responding to the question would be considered consulting. Interpretation was closed.
Rationale:	<Additional clarification for response>

2.5.3 ELECTRICAL

A disconnecting means capable of being locked in the open position shall be installed at an accessible location at the boiler so that the boiler can be disconnected from all sources of potential energy. This disconnecting means shall be an integral part of the boiler or adjacent to it.

2.5.3.1 WIRING

All wiring for controls, heat generating apparatus, and other appurtenances necessary for the operation of the boiler or boilers should be installed in accordance with the provisions of national or international standards and comply with the applicable local electrical codes.

2.5.3.2 REMOTE EMERGENCY SHUTDOWN SWITCHES

A manually operated remote emergency shutdown switch or circuit breaker shall be provided and marked for easy identification.

a) The default location for the switch or circuit breaker shall be just outside the boiler room door, though the following factors must be considered when determining the appropriate location and number of switches to be installed:

1) If the equipment room door is on the building exterior, the switch should be located just inside the door.

2) For equipment rooms exceeding 500 $ft.^2$ (46 m_2) floor area or containing one or more boilers having a combined fuel capacity of 1,000,000 Btu/hr. (293 kW) or more, additional manually operated remote emergency shutdown switches shall be located at suitably identified points of egress acceptable to the Jurisdiction.

3) Where a boiler is located indoors in a facility and not in an equipment room, a remote emergency shutdown switch shall be located within 50 ft. (15 m) of the boiler along the primary egress route from the boiler area.

4) Additional consideration should be given to the type and location of the switch(es) in order to facilitate proper operation and safeguard against tampering. Where approved by the Jurisdiction, alternate locations of remote emergency shutdown switch(es) may be provided.

5) For utility boilers or other large scale units operated from a control room, the switch should be installed in a location immediately accessible to the operator.

b)For atmospheric-gas burners and for oil burners where a fan is on the common shaft with the oil pump, the remote emergency shutdown switch or circuit breaker must disconnect all power to the burner controls.

c)For power burners with detached auxiliaries, the remote emergency shutdown switch or circuit breaker need only shut off the fuel input to the burner.

3.5.3 ELECTRICAL

A disconnecting means capable of being locked in the open position shall be installed at an accessible location at the boiler or water heater so that the boiler or water heater can be disconnected from all sources of potential energy. This disconnecting means shall be an integral part of the boiler or water heater or adjacent to it.

3.5.3.1 WIRING

All wiring for controls, heat generating apparatus, and other appurtenances necessary for the operation of the boiler(s) or water heater(s) should be installed in accordance with the provisions of national or international standards and comply with the applicable local electrical codes.

3.5.3.2 REMOTE EMERGENCY SHUTDOWN SWITCHES

A manually operated remote emergency shutdown switch or circuit breaker shall be provided and marked for easy identification.

a) The default location for the switch or circuit breaker shall be just outside the boiler room door, though the following factors must be considered when determining the appropriate location and number of switches to be installed:

1) If the equipment room door is on the building exterior, the switch should be located just inside the door.

2) For equipment rooms exceeding 500 ft.^{2} (46 m^2) floor area or containing one or more boilers and/or water heaters having a combined fuel capacity greater than or equal to 1,000,000 Btu/hr. (293 kW), additional manually operated remote emergency shutdown switches shall be located at suitably identified points of egress acceptable to the Jurisdiction.

3) Where a boiler or water heater is located indoors in a facility and not in an equipment room, a remote emergency shutdown switch shall be located within 50 ft. (15 m) of the boiler along the primary egress route from the equipment area.

4) Additional consideration should be given to the type and location of the switch(es) in order to facilitate proper operation and safeguard against tampering. Where approved by the Jurisdiction, alternate locations of remote emergency shutdown switch(es) may be provided.

b)For atmospheric-gas burners, and oil burners where a fan is on a common shaft with the oil pump, the remote emergency shutdown switch or circuit breaker must disconnect all power to the burner controls.

c)For power burners with detached auxiliaries, the remote emergency shutdown switch or circuit breaker need only shut off the fuel input to the burner.

NBIC Action Item A25-07
Submitted by Vincent Scarcella (Vincent.scarcella@cna.com)
7/8/2025

THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS

Subject:	Organic fluid relief valves are installed with discharge to 55 gallon drum
NBIC Location:	2023, Part 1, S5.7.6 h)
Statement of Need:	A 55-gallon drum is not designed for the temperatures or pressures of a relief valve discharge.
Background Information:	We are finding installations with relief valves discharging to 55 Gallon drums.

Proposed Text:

S5.7.6 INSTALLATION

h) The pressure relief valve discharge shall be connected to a closed, steel vented catchment tank with solid piping (no drip pan elbow or other air gap). The catchment tank should be located as close to the system as possible, but away from flammable surfaces. Overflow or high level protection should be considered. The capacity and design of the catchment tank shall consider the volume and temperature of fluid which may be relieved or sized in accordance with the heater manufacturer's recommendation. Catchment tanks located outdoors shall be located such that water cannot collect in it. The following shall be considered for discharge piping hazards:

1) Both thermal and chemical reactions (personnel hazard);
2) Combustible materials (fire hazard);
3) Surface drains (pollution and fire hazard); and
4) Heat tracing for systems using high freeze point fluids (prevent blockage).

Item 24-28
Submitted by G. Galanes

Background
The intent of this code revision is to address concerns related to the application of PWHT when no PWHT was originally performed/required. We identified it as an alteration with no guidance on how to address post construction application of PWHT.:

Proposed Revisions: Add text (red underlined is new text) to Part 2, Supplement 9, paragraph S9.3(b), as a new subparagraph S9.3(b)(4) to Supplement 9 Change of Service;

S9.3 FACTORS TO CONSIDER

b) Material Consideration:

1) Chemical and mechanical properties of existing material or any new material to be added or replaced to ensure it has the required strength and toughness to withstand the pressure and temperature effects of the new environment.

2) Effects of erosion or corrosion.

3) Time-dependent effects on service life: Creep, fatigue, or both effects combined.

4) Prior to application of post weld heat treatment (PWHT) to a pressure retaining item when no PWHT had been performed based on the original code of construction, the following shall be met:

   a. determine that the application of PWHT will not adversely affect the performance of the pressure retaining item for the intended service conditions; and

   b. determine the PWHT holding temperature and holding time.

REFERENCE: Add a statement in Part 3, paragraph 3.4.4(k) referring the user to this new subparagraph, by revising it to read:

k) Performing post weld heat treatment (PWHT) where no PWHT was originally performed on the pressure retaining item. [See NBIC Part 2, S9.3b)4)].

Submitted By: George Galanes, P.E.

NBIC PART 2

TABLE 2.5.8

Service	Recommended Inspection Type/Frequency (See Note 4)
Power boilers less than 400 psig (2.76 MPa)	Lift lever test every six months; set pressure test annually or prior to planned boiler shutdown
Power boilers 400 psig (2.76 MPa) or greater	Set pressure test every three years or prior to planned boiler shutdown
High-temperature hot water boilers (See Note 1)	Set pressure test annually
Low-pressure steam heating boilers	Lift lever test quarterly; set pressure test annually prior to heating season
Organic fluid vaporizers	Remove, inspect, and set pressure test annually
Thermal fluid heaters	Remove, inspect, and set test pressure annually
Hot-water-heating boilers (See Note 2)	Lift lever test quarterly; set pressure test annually prior to heating season
Water heaters (See Note 3)	Lift lever test every two months; every three years, remove and inspect temperature probe for damage, buildup, or corrosion
Pressure vessels / piping-steam service	Set pressure test annually
Pressure vessels / piping-air/clean, dry gas	Set pressure test every three years
Pressure vessels /piping-propane/refrigerant	Set pressure test every five years
Pressure relief valves in combination with rupture disks	Set pressure test every five years
All others	Per inspection history

Note 1:
For safety reasons, removal of the valve and testing on a steam test bench is recommended. Such test- ing will avoid damaging the pressure relief valve by discharge of a steam-water mixture, which could occur if the valve is tested in place.

Note 2:

The frequencies specified for the testing of pressure relief valves on boilers are primarily based on dif- ferences between high-pressure boilers that are continuously monitored, and lower pressure, automat- ically controlled boilers that are not monitored at all times by an operator. When any boiler experiences an overpressure condition such that the pressure relief valves actuate, the valves should be inspected for seat leakage and other damage as soon as possible, and any deficiencies should be corrected.

Note 3:
The temperature probe shall be checked for the condition of the coating material and freedom of move- ment without the probe becoming detached. If the valve is damaged or fails the testing described in Table 2.5.8 above, it shall be repaired or replaced.

Note 4:
Where the jurisdiction has adopted other standards for specific applications, those standards shall be used.

2.5 PRESSURE RELIEF DEVICES

2.5.1 SCOPE

a) The most important appurtenances on any pressurized system are the pressure relief devices (PRDs) provided for overpressure protection of that system. These are devices such as pressure relief valves, rupture disks, and other non-reclosing devices that are called upon to operate and reduce an overpressure condition.

2.5.5.1 POWER BOILERS

2.5.5.2 HOT-WATER HEATING BOILERS, HOT WATER SUPPLY BOILERS, AND POTABLE WATER HEATERS

2.5.5.4 NON-RECLOSING PRESSURE RELIEF DEVICES

g) For rupture disks and other non-reclosing devices, the following additional items should be considered during inspections.

9) Since rupture disks are non-reclosing devices , a visual inspection is the only inspection that can be performed. A rupture disk that is removed from its holder shall not be reinstalled unless recommended by the manufacturer. A rupture disk contained in an assembly that can be removed from a system without releasing the force maintaining the contact between the disk and the holder, such as pre-torqued, welded, soldered, and some threaded assemblies, may be suitable for reinstallation after visual inspection. The manufacturer should be consulted for specific recommendations.

2.5.8.1 ESTABLISHMENT OF INSPECTION AND TEST INTERVALS

Where a recommended test frequency is not listed, the valve user and Inspector must determine and agree on a suitable interval for inspection and test. Some items to be considered in making this determination are:

a) Jurisdictional requirements;

b) Records of test data and inspections from similar processes and similar devices in operation at that facility;

c) Recommendations from the device manufacturer. In particular, when the valve includes non-metallic parts such as a diaphragm or soft seat, periodic replacement of those parts may be specified;

24-100
V. Scarcella

Wording to add to the bottom of NB-6 & NB-7:

The owner user is responsible for the proper operation, care and maintenance of all jurisdictional objects and compliance with all applicable codes and regulations. The inspection is a point in time and conditions can change often and suddenly. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage, or loss of any kind arising from or connected with this inspection.

NBIC Action Item A24-104
Submitted by Vinny Scarcella (Vincent.Scarcella@cna.com)
Submitted on: November 25, 2024

THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

Subject:	Add language clarifying the limitation of inspections presented by design.
NBIC Location:	Part 2, 2.1
Statement of Need:	Currently an inspector could be held responsible for conditions they could not reasonably access.
Background Information:	Without a statement explaining the limitations persons not familiar with code construction may erroneously believe and inspector can access all surfaces of a boiler.

Proposed Text:

Inspectors are not always able to see all parts of the boiler during an inspection. The construction of the boiler can limit the scope of inspection. Boilers without handholes and manholes limit visual access to water and steam side surfaces.

PART 2, SECTION 2
INSPECTION — DETAILED REQUIREMENTS FOR
INSERVICE INSPECTION OF PRESSURE-RETAINING ITEMS

2.1 SCOPE

This section provides general and detailed inspection requirements and guidelines for pressure-retaining items to determine corrosion deterioration and possible prevention of failures for boilers, pressure vessels, piping, and pressure relief devices.

Visual inspections of pressure-retaining items that are inherently limited by physical design features may not allow for viewing every part of an object. Insulation and other obstructions can impede the inspection, and some flaws may not be visible. An inspector should make every reasonable effort to safely access and inspect all areas physically possible. The Inspector shall not be responsible for any defects, damage, or issues that were not visible or accessible at the time of the inspection.

Materials to be inspected shall be suitably prepared so that surface irregularities will not be confused with or mask any defects. Material conditioning such as cleaning, buffing, wire

brushing, or grinding may be required by procedure or, if requested, by the Inspector. The Inspector may require insulation or component parts to be removed.

NBIC Action Item 25-05
Submitted by <NAME> (Email)
Submitted on

THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

Subject:	Washout plug engagement limits for locomotive boilers.
NBIC Location:	Part 2, S1.4.2.22
Statement of Need:	There is no current wording for washout plug engagement.
Background Information:	Steam locomotive industry has experienced some issues/failures related to washout plug engagement

Proposed Text:

S1.4.2.22 SCREW-TYPE WASHOUT PLUGS, HOLES, AND SLEEVES

Screw-type washout plugs, holes, and sleeves, especially those having square or Acme thread, shall be inspected for:

a) Damaged or cracked threads on the plug, hole, or sleeve;

b) Corrosion;

c) Cracks;

d) Distortion;

e) Looseness;

f) Leakage;

g) Steam cuts to threads and sealing surfaces; and

h) Twisting of the plug head or body.

Note: When washout plugs are threaded using fine threads such as, but not limited to USF or NPT thread, the minimum number of threads in good condition in the threaded hole shall be adequate for the service.

i) Tapered washout plugs using fine threads such as, but not limited to USF and NPT threads, shall completely engage all threads in the sheet so that no sheet threads are exposed to steam or water or are visible on the outside of the boiler. A minimum of one thread on the plug shall be visible on the exterior of the boiler at any point measured on the circumference of the plug. A minimum of one thread shall protrude into the water/steam space measured on any point of the circumference of the plug. A maximum of 12 threads shall protrude into the water/steam space measured on any point of the circumference of the plug.

NBIC Action Item 25-14
Submitted by Mike Wahl (mikew.steam@gmail.com)
Submitted on 1/16/25

THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

Subject:	**Update location, title and terminology for UT requirements on boilers with Insulation and Jackets**
NBIC Location:	Part 2, Supplement 2
Statement of Need:	Currently this information is not in the same location as the other UT requirements in Part 2 Supplement. The terminology for which areas can be used is vague and general.
Background Information:	The firebox is a general term used on a historical boiler. Only the outside of the firebox (wrapper sheet, throat sheet and backhead) are covered with insulation and jacketing. The inside (rear tube sheet, door sheet, side sheets and crown sheet) are not cover and can be inspected in their entirety.
Changes	1. Move from Part 2, Supplement 2, S2.10.8 to Part 2, Supplement 2, S2.6.2.1. 2. Update Title to "UT EXAMINATION OF BOILER WITH INSULATION AND JACKETING 3. Update a) to state wrapper sheet, throat sheet, and backhead instead of firebox.

S2.6.2.1 ULTRASONIC THICKNESS TESTING OF BOILER WITH INSULATION AND JACKETING

a) The pressure retaining item shall be subjected to ultrasonic thickness testing (UT) per S2.6.2 to establish a baseline thickness for all of the boiler components. The original Manufacturer's Data Report may be used to establish baseline thickness. Recurring UT inspections per S2.6.2 f) may be taken at the bottom of the barrel and around the bottom of the wrapper sheet, throat sheet, and backhead.

b) Should removal of the insulation and jacket be requested by the Inspector, agreement should be obtained by the owner or user, Inspector, and jurisdiction if required.

THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS

NB-6, Rev.7, (03/14/23)

FORM NB-6 BOILER-FIRED PRESSURE VESSEL REPORT OF INSPECTION

Standard Form for Jurisdictions Operating Under the ASME Code

1. DATE INSPECTED: _____ (Month/Day/Year) CERTIFICATE EXPIRATION DATE: _____ (Month/Day/Year) CERTIFICATE POSTED: ☐ YES ☐ NO

   USER NUMBER: _____ NAT'L BD NUMBER ☐ OR SERIAL # (IF CAST IRON) ☐ _____

   FIRST INSPECTION: YES ☐ NO ☐ JURISDICTION NUMBER: _____

   NATIONAL BOARD NUMBER: _____ OTHER NUMBER: _____

2. EQUIPMENT LOCATION NAME: _____

   EQUIPMENT LOCATION ADDRESS: _____ (Equipment Location Street) _____ (Equipment Location City)

   _____ (Equipment Location State) _____ (Equipment Location Zip Code)

   NATURE OF BUSINESS: _____

   KIND OF INSPECTION: ☐ INTERNAL ☐ EXTERNAL CERTIFICATE RENEWAL: ☐ YES ☐ NO

3. CERTIFICATE BUSINESS NAME: _____

   CERTIFICATE CONTACT: _____ (NAME) _____ (Email)

   CERTIFICATE MAILING ADDRESS: _____ (Certificate Mailing Street) _____ (Certificate Mailing City)

   _____ (Certificate Mailing State) _____ (Certificate Mailing Zip Code)

4. INVOICE BUSINESS: _____ (Name)

   CERTIFICATE INVOICE CONTACT: _____ (Name) _____ (Email)

   INVOICE ADDRESS: _____ (Invoice Address Street) _____ (Invoice Address City)

   _____ (Invoice Address State) _____ (Certificate Mailing Zip Code)

5. TYPE: ☐ FT ☐ WT ☐ CI ☐ OTHER: _____ ASME/OTHER CODE: _____

   MANUFACTURER: _____ YEAR BUILT: _____

   MANHOLE ☐ HANDHOLE ☐ NEITHER ☐ CERTIFICATE DURATION (MONTHS): _____

6. USE: ☐ POWER ☐ PROCESS ☐ STEAM HEATING ☐ HWH ☐ HWS ☐ OTHER

   FUEL TYPE: _____ METHOD OF FIRING: _____

   LOCATION IN PLANT: _____

THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS

NB-6, Rev.7, (03/14/23)

7. LOW WATER CUTOFF INSTALLED: YES ☐ NO ☐ TESTED: YES ☐ NO ☐

HIGH LIMIT TEMP/PRESSURE INSTALLED: YES ☐ NO ☐ WAS BOILER FIRED: YES ☐ NO ☐

COMBUSTION CONTROLS: CSD-1 ☐ NFPA ☐ OTHER ☐ _____

COMBUSTION AIR VERIFIED: YES ☐ NO ☐

8. ARE THERE ANY KNOWN OUTSTANDING (OPEN) VIOLATIONS FOR THIS EQUIPMENT? ☐ YES ☐ NO (IF YES, EXPLAIN FULLY UNDER ADVERSE CONDITIONS FOUND)

LOG/RECORD REVIEW: YES ☐ NO ☐

PRESSURE TEST: ☐ YES PSI: _____ DATE: _____ ☐ NO

9. STAMPED MAWP: _____ MINIMUM PRD REQUIRED CAPACITY: _____

NUMBER OF PRD'S: _____ TOTAL CAPACITY: _____

Verify relief valve has been tested ☐ yes ☐ no

SET PRESSURE: _____ CAPACITY: _____

SET PRESSURE: _____ CAPACITY: _____

SET PRESSURE: _____ CAPACITY: _____

10. INSPECTORS COMMENTS: (Verify any repairs were completed by a qualified repair company, and when applicable, the proper repair/alterations forms are completed.)

_____

_____

_____

_____

_____

_____

11. ADVERSE CONDITIONS FOUND: _____

_____

_____

_____

_____

_____

_____

12. REQUIREMENTS: _____

_____

_____

_____

_____

13. PERSON TO WHOM REQUIREMENTS WERE EXPLAINED: _____ _____

(Name) (Title)

_____ _____

(Email) (Phone Number)

14. I HEREBY CERTIFY THIS IS A TRUE REPORT OF MY INSPECTION:

NB COMMISSION NUMBER: _____ EMPLOYED BY: _____

IDENTIFICATION NUMBER: _____ SIGNATURE OF INSPECTOR: _____

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors • 1055 Crupper Avenue, Columbus, Ohio 43229-1183

Page 2 of 2

THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS

NB-7, Rev.8, (03/14/23)

FORM NB-7 PRESSURE VESSELS
REPORT OF INSPECTION

Standard Form for Jurisdictions Operating Under the ASME Code

1. DATE INSPECTED: _____ (Month/Day/Year) CERTIFICATE EXPIRATION DATE: _____ (Month/Day/Year) CERTIFICATE POSTED: ☐ YES ☐ NO

   USER NUMBER: _____ JURISDICTION NUMBER: _____

   NATIONAL BOARD NUMBER: ☐ OR SERIAL NUMBER: (IF CAST IRON) ☐ _____

   FIRST INSPECTION: YES ☐ NO ☐

2. EQUIPMENT LOCATION NAME: _____

   NATURE OF BUSINESS: _____

   KIND OF INSPECTION: ☐ INTERNAL ☐ EXTERNAL CERTIFICATE RENEWAL: ☐ YES ☐ NO

3. EQUIPMENT LOCATION ADDRESS: _____ (Equipment Location Street) _____ (Equipment Location City)

   _____ (Equipment Location State) _____ (Equipment Location Zip Code)

4. CERTIFICATE BUSINESS NAME: _____

   CERTIFICATE CONTACT: _____ (NAME) _____ (Email)

5. CERTIFICATE MAILING ADDRESS: _____ (Certificate Mailing Street) _____ (Certificate Mailing City)

   _____ (Certificate Mailing State) _____ (Certificate Mailing Zip Code)

6. INVOICE BUSINESS: _____ (Name)

   CERTIFICATE INVOICE CONTACT: _____ (Name) _____ (Email)

7. INVOICE ADDRESS: _____ (Invoice Address Street) _____ (Invoice Address City)

   _____ (Invoice Address State) _____ (Certificate Mailing Zip Code)

8. TYPE: AIRTANK ☐ WATER TANK ☐ OTHER: ☐ _____ ASME/OTHER CODE: _____

   MANUFACTURER: _____ YEAR BUILT: _____

   MANHOLE ☐ HANDHOLE ☐ NEITHER ☐ CERTIFICATE DURATION (MONTHS): _____

9. USE: ☐ STORAGE ☐ PROCESS ☐ HEAT EXCHANGE ☐ OTHER: _____

   HORIZONTAL ☐ VERTICAL ☐ LENGTH: _____ DIAMETER: _____

THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS

NB-7, Rev.8, (03/14/23)

10. STAMPED MAWP: _____ MINIMUM PRD REQUIRED CAPACITY: _____

NUMBER OF PRD'S: _____ TOTAL CAPACITY: _____ Verify relief valve has been tested ☐ yes ☐ no

SET PRESSURE: _____ CAPACITY: _____

SET PRESSURE: _____ CAPACITY: _____

SET PRESSURE: _____ CAPACITY: _____

OVERPRESSURE PROTECTION BY SYSTEM DESIGN: ☐ SIZE (ft^3 or Gallons): _____

11. ARE THERE ANY KNOWN OUTSTANDING (OPEN) VIOLATIONS FOR THIS EQUIPMENT? ☐ YES ☐ NO (IF YES, EXPLAIN FULLY UNDER ADVERSE CONDITIONS FOUND)

PRESSURE TEST: YES ☐ PSI _____ Date _____ NO ☐

12. INSPECTORS COMMENTS: (Verify any repairs were completed by a qualified repair company, and when applicable, the proper repair/alterations forms are completed.)

13. ADVERSE CONDITIONS FOUND: _____

14. REQUIREMENTS: _____

15. PERSON TO WHOM REQUIREMENTS WERE EXPLAINED: _____ (Name) _____ (Title)

_____ (Email) _____ (Phone Number)

16. I HEREBY CERTIFY THIS IS A TRUE REPORT OF MY INSPECTION:

NB COMMISSION NUMBER: _____ EMPLOYED BY: _____

IDENTIFICATION NUMBER: _____ SIGNATURE OF INSPECTOR: _____

PROPOSED INTERPRETATION

Item No.

24-36

THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS

Subject/Title

Alteration of Plate Heat Exchanger

Project Manager and Task Group

Trevor Seime

Source (Name/Email)

Monte Bost / monte_bost@hsb.com

Statement of Need

This question is asked frequently by Repair firms that want to increase the number of heat transfer plates.

Background Information

An "UM" stamped vessel has no Authorized Inspector involvement. A "U" stamped vessel requires Authorized Inspector involvement.

Proposed Question

A plate heat exchanger (PHE) is altered by increasing the number of heat transfer plates. The PHE was originally constructed to ASME Boiler and Pressure Vessel Code, Section VIII, Division 1 with the “UM” Designator. The increase in heat transfer plates causes the volume to exceed the 5 ft3 (0.14 m3) limit in ASME Code Section VIII, Division 1, paragraph U-1(j)(1). Is reclassification of the PHE from “UM” to “U” permitted?

Proposed Reply

No

Committee's Question 1

Per NBIC Part 3, Section 3, may a pressure retaining item be altered beyond the scope of the original code of construction?

Committee's Reply 1

No

Rationale

If a jurisdiction chooses to allow this, then the pri becomes a “state special” and is outside the NBIC.

Committee's Question 2

Committee's Reply 2

Rationale

	VOTE:						
COMMITTEE	Approved	Disapproved	Abstained	Not Voting	Passed	Failed	Date

CODE INTERPRETATIONS

Requests for code Interpretations shall provide the following:

a) Inquiry
Provide a condensed and precise question, omitting superfluous background information and, when possible, composed in such a way that a "yes" or a "no" reply, with brief provisos if needed, is acceptable. The question should be technically and editorially correct.

b) Reply
Provide a proposed reply that clearly and concisely answer the inquiry question. Preferably the reply should be "yes" or "no" with brief provisos, if needed.

c) Background Information
Provide any background information that will assist the committee in understanding the proposed Inquiry and Reply Requests for Code Interpretations must be limited to an interpretation of the particular requirement in the code. The Committee cannot consider consulting type requests such as:

A review of calculations, design drawings, welding qualifications, or descriptions of equipment or Parts to determine compliance with code requirements;

A request for assistance in performing any code-prescribed functions relating to, but not limited to, material selection, designs, calculations, fabrication, inspection, pressure testing, or installation; or

A request seeking the rationale for code requirements.

THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS

PROPOSED INTERPRETATION

Item No.

I24-44 Rev 03

Subject/Title

Part 3, Section 2, 2.5.3

Project Manager and Task Group

Robert Derby (PM), Phil Gilston

Source (Name/email)

Paul Shanks / paul.shanks@bureauveritas.com (now with Arise Boiler Inspection & Insurance Company)

Statement of Need

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Background Information

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.

Proposed Question

Does NBIC Part 3 prohibit the use of the alternative welding methods in lieu of conventional PWHT for a repair activity conducted on an ASME pressure vessel that per UG-118 is marked with a Special Service letter?

Proposed Reply

No

Committee's Question 1

May alternative welding methods be used for the repair of lethal service vessels, provided competent technical advice has been obtained in accordance with 2.5.3 (b)?

Committee's Reply 1

Yes.

Rationale

There are no words in the NBIC Code that prohibit the use of alternative welding methods for the repair of special service vessels.

	VOTE						
COMMITTEE	**Approved**	**Disapproved**	**Abstained**	**Not Voting**	**Passed**	**Failed**	**Date**

NBIC Interpretation Item 25-35
Submitted by Hugh-Jean Nel (hugh-jean.nel@sasol.com)
June 12, 2025

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:	Does the required minimum distance between the weld toes of external weld metal buildup, as specified in 3.3.4.3 e) 3) m, also apply to the distance between the weld buildup toe and adjacent components, such as nozzles or structural attachments?
Committee's Reply:	No
Rationale:	3.3.4.3 e) 3) m is only applicable to multiple areas of external weld metal build up. Structural components or nozzles are not identified in 3.3.4.3 e) 3) m

NBIC Interpretation Item 25-35
Submitted by Hugh-Jean Nel (hugh-jean.nel@sasol.com)
June 12, 2025

NBIC Action Item 25-13
Submitted by Mike Wahl (mikew.steam@gmail.com)
Submitted on 1/16/25

THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

Subject:	**Update Table S2.7.1**
NBIC Location:	Part 3, Supplement 2
Statement of Need:	Update the table to add acceptable materials for bronze casting and washout plugs, rivets and clarify the difference between flange bolts and boiler casting studs.
Background Information:	1. NBIC Supplement 1, Table S1.1.3.1 currently allows or the use of SB-148 for the same application of bronze castings and washout plugs. 2. ASME added SA-36 as an acceptable rivet material in the 2004 addition. ASME Section 1, PG-14 calls out the material and requirements when being used. The test requirements are the same as the test requirements for SA-31 rivets. 3. The current table doesn't include any materials for studs that attach components to the boiler.
Changes	1. Add SB-148 to Bronze Casting and Washout Plugs 2. Add A-36 to Rivets 3. Add * behind A-36 Rivets 4. Add * note at bottom of table. "SA-36 Rivets must comply with the requirements ASME Section 1, PG-14" 5. Add "Boiler Studs for Component Attachment" to Application List with SA-675 Grade 70 and SA-36 for the Specification.

NBIC Action Item 25-13
Submitted by Mike Wahl (mikew.steam@gmail.com)
Submitted on 1/16/25

TABLE S2.7.1
MATERIALS LIST FOR HISTORIC BOILERS

Application	Specification
Boiler Tubes & Flues	SA-178 Grade A, SA-192, SA-210
Boiler & Firebox	Plate SA-285 Grade C, SA-515, SA-516
Staybolts & Patch Bolts	SA-675, SA-36, ASTM A-31
Boiler Braces	SA-675, SA-36
Rivets	SA-675, SA-31, SA-36*
Forged Parts & Fittings	SA-105, SA-217
Hollow Cylindrical Pressure Retaining Parts	SA-105 Forgings SA-675 Bar Stock
Pipe Flanges	SA-181, SA-105
Flange Bolts, Studs & Nuts	SA-193-B7, SA-194-2H
Bronze Castings & Washout Plugs	SB-61, SB-62, SB-148
Boiler Studs for Component Attachment	SA-675 Grade 70, SA-36

* SA-36 Rivets must comply with the requirements ASME Section I, PG-14

Clean Version as final proposal

NB23-09 Rev 14b

SUPPLEMENT XX

PRESSURE RETAINING PARTS FABRICATED FROM ADDITIVELY MANUFACTURED (AM) MATERIAL

SXX.1 SCOPE

Additively Manufactured pressure parts (AM parts) addressed in this supplement are those that have been fabricated from weld metal deposited by direct energy deposition (DED) using the automatic gas metal arc welding (GMAW) process. The AM part shall conform to the rules most applicable to the original code of construction for the pressure retaining part. The requirements listed under Section XX.2 for installation of AM parts are based on references to existing rules for AM fabrication in other known international Codes and Standards. AM pressure parts that are installed shall be limited to service temperatures below the creep range (i.e., where time independent properties govern).

SXX.2 INSTALLATION AND DOCUMENTATION OF AM PRESSURE RETAINING PARTS

The use of AM parts that are being installed by a National Board R-Certificate Holder shall be considered an alteration and be documented on a Form R-2. If production of AM parts is performed by a National Board R-Certificate Holder or if it is subcontracted by the R-Certificate holder, the activity shall be documented on a Form R-3.

In addition to the requirements for an alteration, the following information shall be provided for the AM part and attached to the applicable NBIC Form(s) referenced above:

a) A copy of the Additive Manufacturing Specification (AMS) shall be provided by the Additive Manufacturer to the R-Certificate Holder and Inspector for review and acceptance. As a minimum, the following information shall be included in the AMS:

   1) The original code of construction for the part being replaced by an AM part.

   2) File names with current revision for all model data describing the geometry and build strategy needed to fabricate the AM part.

   3) The applicable Material Specification listed in the original code of construction for the AM part.

   4) The applicable Filler Metal Specification and AWS Classification.

   5) A list of all welding procedures and qualification records used to produce the AM part. Welding procedures shall be qualified in accordance with ASME Section IX or other international welding standard with allowable ranges of process variables from Section IX Article VI “Material Manufacturing using Wire Additive Welding.”

   6) The nondestructive evaluation and testing requirements being applied to the AM part from the original code of construction and from the Material Specification requirements for the original part being replaced.

7) Supplemental examination requirements identified by the Additive Manufacturer, the R-Certificate holder, User or in contract specification requirements.

8) Post-processing requirements identified by the Additive Manufacturer, the R-Certificate holder, User or in contract specification requirements.

9) Thermal treatment requirements for the AM pressure part identified by the Additive Manufacturer, the R-Certificate holder, User or in contract specification requirements.

10) Supplemental requirements identified by the Additive Manufacturer, the User, or R-Certificate holder or in contract specification requirements (e.g., corrosion testing).

11) Documentation that shows the AMS has been reviewed and accepted by the Additive Manufacturer, the R-Certificate Holder, Inspector, AIA, and the Jurisdiction, if required.

b) A copy of the design calculations for the AM pressure part which shall be based on the applicable original code of construction requirements. If the original code of construction required a specific product form for design, the replacement AM pressure part shall be shown to have met the minimum mechanical properties and be similar in chemical composition to the original pressure part product form.

c) Welding Operator qualification record(s).

d) A copy of the Material Test Report. The data recorded on the Material Test Report shall reflect the test results from the witness specimen(s). The following criteria are applicable to, and shall be addressed in, the Material Test Report:

1) At least one witness specimen shall be manufactured and tested from each AM production build. When a production component requires the use of multiple heats of filler metal, AM product witness specimens for chemical composition, tension and other required testing shall be manufactured and tested from each heat of filler metal.

2) The witness specimen(s) shall be manufactured either immediately before, during, or immediately after each production build. The witness specimen may be a prolongation of the production build.

3) The witness specimens shall be produced using bounding heat inputs and interpass temperature as determined by the Additive Manufacturer that provide limiting values for tensile and toughness properties.

4) All mechanical testing shall be performed on specimens in the thermal-treated condition identified in the AMS.

5) At least one tension test specimen shall be manufactured and tested from each witness specimen.

6) At least one chemical composition test specimen shall be extracted and tested from each witness specimen.

7) When toughness testing is required by the original code of construction, at least one set of toughness test specimens shall be extracted and tested from each witness specimen.

8) All chemical composition, hardness, tension and toughness testing shall be performed in accordance with the requirements of Sections e), f), g), h) and i) below.

9) Following any production test non-compliance, components fabricated during the build shall be dispositioned using the Additive Manufacturer's Quality Control Program.

10) The results of the required witness specimen testing shall be documented in a Material Test Report certified by the Additive Manufacturer.

11) The Material Test Report shall be included in the Additive Manufacturer's construction records.

e) Chemical Composition Testing Requirements

1) The analytical method for chemical composition testing shall be in accordance with the applicable Material Specification listed in the original code of construction for the AM part.

2) The chemical composition of the specimens shall conform to the ASME filler metal specification identified in the AMS.

f) Mechanical Property Test Locations

1) The build x, y, and z axes are defined in Figure 1.

2) The z axis is defined as normal to deposition layers (parallel to build direction) as shown in Figure 1.

g) Tension Testing Requirements

1) Tension test specimens shall be constructed with their long direction parallel to the z-axis as shown in Figure 1.

2) All room temperature tension testing shall be in accordance with ASTM E8.

3) All elevated temperature tension testing shall be in accordance with ASTM E21. Elevated temperature testing may be done at a temperature at or above the design temperature.

4) Tension test acceptance (the allowable minimum yield and tensile strength values) shall be calculated as described in Figure 2, Table 1 and Examples 1 and 2.

h) Hardness Testing Requirements

1) Hardness testing shall be performed on the witness specimen when required by the Material Specification, the original code of construction, or the AMS.

2) Hardness testing shall comply with ASTM E10, ASTM E18 or ASTM E92.

i) Toughness Testing Requirements

1) Toughness testing shall be performed when required by the Material Specification, by the original product form in the original code of construction, or the AMS.

2) Toughness testing shall be in the orientation as shown in Figure 1.

3) The acceptance criteria for toughness testing shall be as specified by Material Specification, by the original product form in the original code of construction, or the AMS.

j) A copy of nondestructive test reports as required by the original code of construction by the R-Certificate holder or by the Owner/User contract specification requirements, if applicable.

k) Results of the hydrostatic test, as performed in accordance with the rules of the original code of construction, if applicable.

Figure 1 - Material Manufacturing Coordinate System and Material Test Specimen Orientation

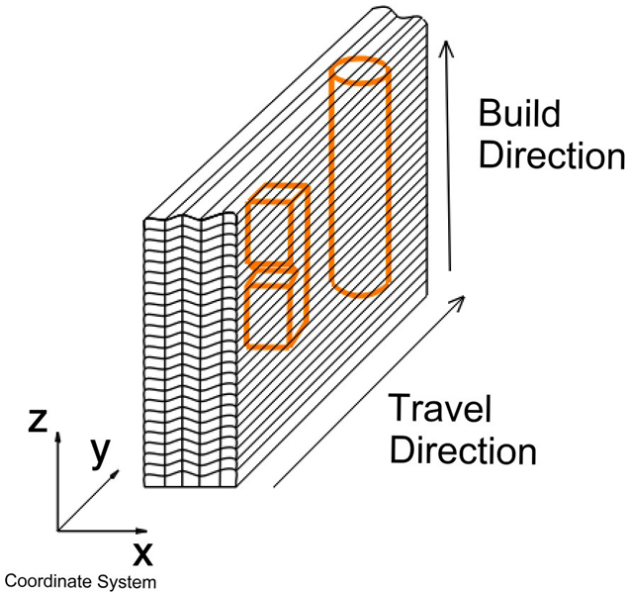

Figure 2 – Bracketed Weld Qualification Material Testing

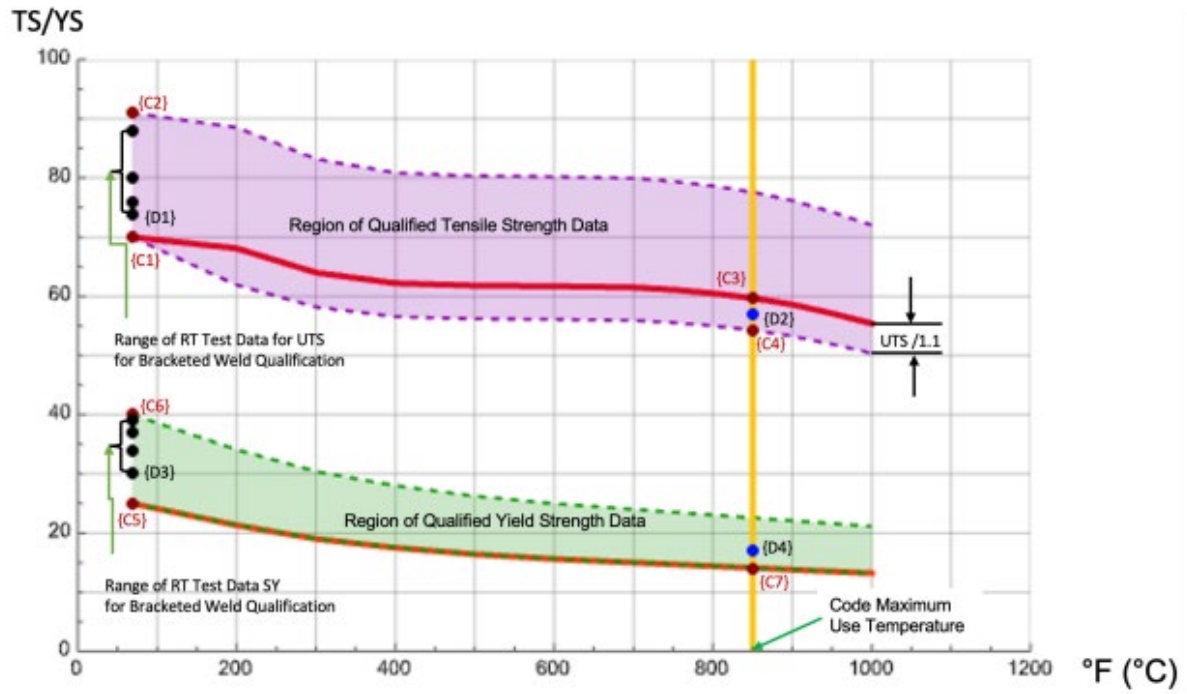

Table 1 - Control Points and Data Point Definitions and Nomenclature

Point	Temperature	Strength	Description	Criteria
C1	Room	Tensile Strength	Specified Minimum Tensile Strength	Specified Minimum Tensile Strength from the Material Specification.
C2	Room	Tensile Strength	The measured elongation from the tensile specimen is equal to the specified minimum elongation value in the Material Specification.	Specified Minimum Elongation from the Material Specification. Note: If the elongation in all the tensile specimens exceeds the specified minimum elongation it is not required that Control Point C2 be determined.
C3	Design	Tensile Strength	Value at Design Temperature	Tensile Strength from ASME BPVC Section II, Part D, Table U at Design Temperature.
C4	Design	Tensile Strength	Minimum Acceptable Value of Tensile Strength for High Temperature Test	Point C3/1.1 Value from Table U at Design Temperature Divided by 1.1
C5	Room	Yield Strength	Specified Minimum Yield Strength	Specified Minimum Yield Strength from the Material Specification.
C6	Room	Yield Strength	The measured elongation from the tensile specimen is equal to the specified minimum elongation value in the Material Specification.	Specified Minimum Elongation from the Material Specification. Note: If the elongation in all the tensile specimens exceeds the specified minimum elongation it is not required that Control Point C6 be determined.
C7	Design	Yield Strength	Minimum Acceptable Value of Yield Strength for High Temperature Test	Yield Strength from ASME BPVC Section II Part D Table Y-1 at Design Temperature.
D1	Room	Tensile Strength	Minimum value of tensile strength from ASME BPVC Section IX, Part QW, Article VI tension test data	Tensile strength and elongation from the ASME BPVC Section IX, Part QW, Article VI tension tests shall equal or exceed the specified minimum values in the Material Specification (Point C1). The elongation from the tension tests shall exceed the specified minimum elongation in the Material Specification.
D2	Design	Tensile Strength	Tensile strength value from elevated temperature tension test.	Tensile strength value from ASME BPVC Section IX, Part QW, Article VI tension test shall equal or exceed value calculated for Point C4.
D3	Room	Yield Strength	Minimum value of yield strength from ASME BPVC Section IX, Part QW, Article VI tension test data	Yield strength and elongation from the ASME BPVC Section IX, Part QW, Article VI tension tests shall equal or exceed the specified minimum values in the Material Specification (Point C5). The elongation from the tension tests shall exceed the specified minimum elongation in the Material Specification.
D4	Design	Yield Strength	Yield strength value from high temperature tension test	Yield strength value from ASME BPVC Section IX, Part QW, Article VI tension test shall equal or exceed value for Point C7.

EXAMPLES SHOWING CALCULATION OF ACCEPTANCE VALUES

Given the test data shown below determined from an ASME IX Article VI (QW-600 series) bracketed weld qualification testing, calculate the allowable minimum yield and tensile strength values to be used for acceptance of the tensile test specimens for qualification and production witness specimens.

Target Material Specification - ASME SA-403 Grade 316L
Filler Material Specification - ER316LSi

Control Points - Example Data SA 403 Grade 316L (ksi)

C1	C2	C3	C4	C5	C6	C7
70	Elongation Controlled	59.7	59.7/1.1=54.3	25	Elongation Controlled	14.1

Example 1 - Example Section IX, Part QW, Article VI Data Analysis

Data Point D1 = 74 ksi
Data Point D2 = Control Point C4 = 54.3 ksi
Data Point D3 = 30 ksi
Data Point D4 = Control Point C7= 14.1 ksi

Calculate the Minimum Allowable Tensile Strength and Yield Strength for the Production Witness Specimens using Equation 1 and 2.

$$AMTS_{Minimum} = Max\ [C1, D1 \times C4/D2] = Max\ [70, 74 \times 54.3/54.3] = 74\ ksi$$

$$AMYS_{Minimum} = Max\ [C5, D3 \times C7/D4] = Max\ [25, 30 \times 14.1/14.1] = 30\ ksi$$

Example 2 - Example Section IX, Part QW, Article VI Data Analysis

Data Point D1 = 74 ksi
Data Point D2 = Control Point C3 = 59.7 ksi
Data Point D3 = 30 ksi
Data Point D4 = 17 ksi

Calculate the Minimum Allowable Tensile Strength and Yield Strength for the Qualification Build Specimen and the Production Witness Specimens using Equation 1 and 2.

$$AMTS_{Minimum} = Max\ [C1, D1 \times C4/D2] = Max\ [70, 74 \times 54.3/59.7] = 70\ ksi$$

$$AMYS_{Minimum} = Max\ [C5, D3 \times C7/D4] = Max\ [25, 30 \times 14.1/17] = 25\ ksi$$

PROPOSED REVISION OR ADDITION

Item No.

A23-24

THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS

Subject/Title

GENERAL REQUIREMENTS FOR REPAIRS TO QUICK-ACTUATING/QUICK-OPENING CLOSURES

NBIC Location

New SUPPLEMENT XX

Project Manager and Task Group

Tim McBee (PM), Chuck Becker, Matt Schaser, Robert Smith, Aziz Khssassi

Source (Name/Email)

Kathy Moore (kathymoore@joemoorecompany.com)

Statement of Need

There are many small stamp holders (which I am one of them) that do not understand the "uniqueness" of these repairs. I would like to see some engineering controls as part of this "section".

Background Information

The NBIC currently has no specific safe guidelines for Quick-Actuating/Quick-Opening repairs.

Existing Text	**Proposed**
None	**See attached**

A23-24
SUPPLEMENT XX
GENERAL REQUIREMENTS FOR REPAIRS TO QUICK-ACTUATING/QUICK-OPENING CLOSURES

SXX.1 SCOPE

This supplement provides additional requirements and guidelines above and beyond those cited in the main body of the NBIC code for repairs to quick-actuating/quick-opening closure pressure-retaining components referred throughout this supplement as "Quick Closures". Special consideration shall be given to meet the requirements set forth in NBIC Part 3, Section 2 through 5 as appropriate and inspection requirements identified in paragraph 2.3.6.5 in NBIC Part 2.

This supplement applies to the general component terminology and does not include all quick closure designs. For details refer to the quick closure manufacturer's partial data report, manufacturing drawings, service and maintenance documentation. Additional documents required by the original code of construction may be available for reference. No components furnished or specified by the Manufacturer of the quick closure shall be omitted unless the Manufacturer's concurrence is received or good engineering judgement is obtained.

The components of quick closures include but are not limited to the following:
a) Cover (Head, Flat Plate, etc.)
b) Support Elements (Davit Hinge, Post Davit, Vertical/Slide Sides, etc.)
c) Locking Elements (Wedges, Latch, etc.)
d) Locking Mechanism (Rotating Locking Ring, Seal Flanges, Lugs etc.)
e) Holding Elements (Pins)
f) Interlock Device (Pressure Indicating Device)
g) Seal design

SXX.2 REPLACEMENT PARTS FOR QUICK CLOSURES

a) Replacement pressure retaining parts shall be identical to the original equipment furnished. Substitutions may be allowed if they are approved by the Manufacturer or if the substitution has been determined acceptable through an engineering evaluation. The engineering evaluation shall be documented, reviewed and accepted by a Repair Inspector and Jurisdiction, where required.
b) Quick closure replacement pressure-retaining parts shall be fabricated in accordance with the manufacturer's design and the original code of construction.
c) Replacement of the non-pressure-retaining load bearing parts, when different from the manufacturer's design, shall be evaluated for any possible effect on the pressure-retaining parts.
d) Replacement materials, including welding materials, shall be consistent with the original materials of construction, including heat treatment.

SXX.3 REPAIR GUIDE FOR QUICK CLOSURES

a) The Manufacturer's Data Report or Manufacturer's drawings when available, shall be carefully reviewed to determine the material of construction of each quick closure. If material data is not available, positive material identification (PMI) to identify the material's chemistry and hardness testing shall be performed.

b) Weld repairs performed in accordance with NBIC Part 3 are permitted on quick closure pressure-retaining components that are manufactured from steel. Hinge pins or bolts shall not be welded. Special attention shall be paid to any requirements for the finished weld profile and PWHT.

c) Structural deterioration or damage caused by corrosion, thinning, or cracking shall not be repaired until its extent has been determined by suitable nondestructive examination.

d) The Certificate Holder shall have a plan covering the scope of the repair. The plan shall ensure that the work involved is compatible with the original design specification and good engineering practices.

e) Removing the quick closure mechanism components from one vessel for the installation on another vessel is STRICTLY PROHIBITED.

(f) When quick closures are repaired, the locking mechanism or locking device shall be operational per the quick closure Manufacturer's specifications.

SXX.4 ROUTINE REPAIRS

The following examples of repairs do not require stamping or nameplate attachment provided the repair procedure has been accepted by the Repair Inspector and the R-Certificate Holder has verified there will be no effect on the pressure-retaining capability of the quick closure:

a) Replacement of consumable parts, for example wedges.

b) Alignment adjustments.

SXX.5 REPAIR OF DAMAGE

SXX.5.1 REPAIR OF QUICK CLOSURE WELDS

All welds associated with the quick closure pressure-retaining components should be repaired in accordance with the original manufacturer's design specifications. Special attention shall be paid to any requirements for the finished weld profile and PWHT.

SXX.5.2 REPAIR OF QUICK CLOSURE SURFACES

The repair of quick closure surfaces shall be limited to the restoration of wasted areas through weld build-up. The final surface shall be flush with nominal surface. Seating surfaces shall be machined back to original design specifications. External weld build-up is prohibited on closure components. Alternatively, Fitness-for Service (FFS) may be used to qualify local thin areas.

SXX.5.3 REPAIR OF QUICK CLOSURE MECHANISM

a) The designs of quick closure locking mechanisms are typically proprietary; therefore, all repairs shall be performed to restore the closure to the original design specifications. If design specifications, such as original quick closure configuration and nominal thicknesses are not available, then all repairs shall be performed by the original manufacturer. If this is not practicable, the Certificate Holder shall contact an organization competent in quick closure design and construction to approve or establish a repair plan prior to implementing any repairs.

b) Safety devices (sensors, interlocks, etc.) removed during maintenance or repair shall be reinstalled per the original manufacturer's specifications.

c) Repairs shall avoid damaging gasket materials. If damage occurs to gasket materials, the gaskets shall be replaced before returning system back into service.

SXX.6 EXAMINATIONS AND TEST METHODS

NBIC Part 3, Section 4 is applicable for all post construction activities pertaining to examination and testing.

SXX.7 CERTIFICATION/DOCUMENTATION AND STAMPING

NBIC Part 3, Section 5 is applicable for all post construction activities pertaining to certification/documentation and stamping.

Stamping may also be waived per SXX.4 of this Supplement.

PROPOSED REVISION OR ADDITION

Item No.	A24-17
Subject/Title	Specific Requirements For Stamping and Nameplates
NBIC Location	NBIC Part 3, 5.7.5 a) and b)
Project Manager and TaskGroup	B. Schaefer (PM), TG - S. Marks, T. LeBeau, J. Ferreira, A. Khssassi
Source (Name/Email)	Certificate Administrator
Statement of Need	Allow alternative stamping method within the NBIC Part 3, Section 5, Paragraph 5.7.5 a) and b). Currently ASME Section VIII Div 1 (23), ASME Section I (23) - PG-106.6 and Mandatory Appendix VIII and ASME CA-1 (22) all allow other methods of stamping nameplates.
Background Information	I feel that the pressure vessel nameplates would look more professional with the use of mechanical etching. There wouldn't be anymore stampings that are upside-down, cock-eyed, wrong location on the plate, or uneven striking pressure that results in the edges not showing up clearly. When the above happens, I need to find someone capable of destroying the "said" nameplate (especially hand stamped symbols and marks) and then verify that the plate is destroyed.
Existing Text	5.7.5 Specific Requirements For Stamping and Nameplates a) Required data shall be in characters of at least 5/32 in. (4 mm) high, except that characters for pressure relief valve repair nameplates may be smaller. Markings may be produced by casting, etching, embossing, debossing, stamping, or engraving. The selected method shall not result in any harmful contamination, or sharp discontinuities to, the pressure-retaining item. See NBIC Part 3, Figures 5.7.5-a through 5.7.5-e. b) The National Board Code Symbols ("R", "VR", and "NR") are to be stamped; do not emboss.
Proposed Text	a) Required data shall be in characters of at least 5/32 in. (4 mm) high, except that characters for pressure relief valve repair nameplates may be smaller. Markings may be produced by casting, etching, embossing, debossing, stamping, ~~or~~ engraving, or laser. Any marking by laser is permitted only on stainless steel and aluminum. No coating that obscures the marking shall be allowed. The selected method shall not result in any harmful contamination, or sharp discontinuities to the pressure-retaining item. See NBIC Part 3, Figures 5.7.5–a through 5.7.5-e. b) The National Board Code Symbols (“R” and “NR”) ~~are to be stamped; do not emboss.~~ shall be made by direct application of the National Board Code Symbol Stamp. As an alternative: 1) The Code Symbol may be made by casting, embossing, engraving, etching, dot peening, laser, or any other process that will leave a legible and permanent image. 2) The applied Code Symbol shall be the same shape and configuration as the National Board Code Symbol Stamp.

	3) The process controls for the custody and method of marking shall be described in the Quality Management System.

	VOTE:						
COMMITTEE	Approved	Disapproved	Abstained	Not Voting	Passed	Failed	Date
SG R&A							
SC R&A							

CODE REVISIONS OR ADDITIONS

Request for code revisions or additions shall provide the following:

a) Proposed Revisions or Additions

For revisions, identify the rules of the code that require revision and submit a copy of the appropriate rules as they appear in the code, marked up with the proposed revision. For additions, provide the recommended wording referenced to the existing code rules.

b) Statement of Need

Provide a brief explanation of the need for the revision or addition.

c) Background Information

Provide background information to support the revision or addition, including any data or changes in technology that form the basis for the request that will allow the Committee to adequately evaluate the proposed revision or addition. Sketches, tables, figures, and graphs should be submitted as appropriate. When applicable, identify any pertinent paragraph in the code that would be affected by the revision or addition and identify paragraphs in the code that reference the paragraphs that are to be revised or

THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS

PROPOSED INTERPRETATION

Item No. A25-04 Rev 01
Subject/Title Part 3, 2.5.3 Special Service Equipment
Project Manager and Task Group Robert Derby (PM), Phil Gilston
Source (Name/email) Paul Shanks / paul.shanks@bureauveritas.com (now with Arise Boiler Inspection & Insurance Company)
Statement of Need An interpretation request was received regarding the use of alternate welding methods for pressure equipment identified as Special Service. Comments received in the initial R&C indicated that the current words did not support the proposed Q&A. The proposal had been presented as an intent interpretation, and the comment was made if this was the desire, then to have a separate action item.
Background Information 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.

Proposed Revision

Current Wording (Approved for 2025)	Proposed Wording for 2027
2.5.3 b) Competent technical advice should be obtained from the manufacturer of the pressure-retaining item or from another qualified source, such advice being especially necessary if the alternative is to be used in highly stressed areas, if service conditions are conducive to stress corrosion cracking, if materials are subject to hydrogen embrittlement, or are operating at temperatures in the creep range, or if the alternative is being considered for “on-stream” repairs or “hot tapping” on piping systems. Selection of the welding method used shall be based on the rules of the original code of construction together with the above mentioned advice concerning the adequacy of the weld in the as-welded condition at operating and pressure test conditions.	2.5.3 b) Evaluation for Use of Alternative Weld Methods Competent technical advice should be obtained from the manufacturer of the pressure-retaining item or from another qualified source, for repair of pressure parts subject to one or more of the following conditions: 1) Items identified as special services per the original code of construction where PWHT was not exempted for new construction; 2) Repairs in highly stressed areas where the stress concentration cannot be reduced by weld repair alone; 3) Parts subject to high-cycle operation or fatigue service; 4) Where any one of the following service conditions are conducive to:

	a. stress corrosion cracking b. hydrogen embrittlement c. creep damage 5) The alternative welding method is being considered for 'on-stream' repairs or 'hot tapping' on piping systems. Selection of the welding method used shall be based on the rules of the original code of construction together with the above mentioned advice concerning the adequacy of the weld in the as-welded condition at operating and pressure test conditions.

	VOTE						
COMMITTEE	**Approved**	**Disapproved**	**Abstained**	**Not Voting**	**Passed**	**Failed**	**Date**

PROPOSED REVISION OR ADDITION

Item No.

A 25-28

Subject/Title

Remove reference to FIAs (Federal Inspection Agency).

NBIC Location

Part3; Section 3; Repairs and Alterations – General and Administrative Requirements - 1.3 b) and AIA definition

Project Manager and Task Group

PM - Aziz Khssassi

Source (Name/Email)

Terry Hellman / THellman@nbbi.org & Robert Underwood / robert_underwood@hsb.com

Statement of Need

FIA's are to be a scope under OUIO. Definitions have been removed from RCI-1. This will remove references in the: Introduction; 1.3 b); and in the definition of an Inservice AIA.

Background Information

FIA's are to be a scope under OUIO. Definitions have been removed from RCI-1. This will remove references in the: Introduction; 1.3 b); and in the definition of an Inservice AIA.

Existing Text (2025 Edition)	Proposed Text (08 July 2025)
1.3 INSPECTOR a) Inspection and certification shall be performed by an Inspector holding a National Board Commission with the National Board "R" Endorsement who is employed by an Authorized Inspection Agency in accordance with NB-263, RCI-1, Rules for Commissioned Inspectors. (See NBIC Part 3, Section 9, Glossary of Terms for definition of Authorized Inspection Agency.) b) An Inspector employed by an Owner-User Inspection organization or Federal Inspection Agency may authorize and accept work only on pressure-retaining items owned or used by the respective organization. Each accredited Owner-User Inspection Organization's Quality Management System (QMS) shall have specific approval of the jurisdiction as required. **9.1 DEFINITIONS** **Authorized Inspection Agency (AIA)** **Inservice:** An Authorized Inspection Agency is either: a) a Jurisdictional authority as defined in the National Board Constitution; or b) an entity that is accredited by the National Board meeting NB-369, Accreditation of Authorized Inspection Agencies Performing Inservice Inspection Activities; or NB-371, Accreditation of Owner-User Inspection Organizations (OUIO).; or NB-390, Accreditation of Federal Inspection Agencies (FIA).	**1.3 INSPECTOR** a) Inspection and certification shall be performed by an Inspector holding a National Board Commission with the National Board "R" Endorsement who is employed by an Authorized Inspection Agency in accordance with NB-263, RCI-1, Rules for Commissioned Inspectors. (See NBIC Part 3, Section 9, Glossary of Terms for definition of Authorized Inspection Agency.) b) An Inspector employed by an Owner-User Inspection organization ~~or Federal Inspection Agency~~ may authorize and accept work only on pressure-retaining items owned or used by the respective organization. Each accredited Owner-User Inspection Organization's Quality Management System (QMS) shall have specific approval of the jurisdiction as required. **9.1 DEFINITIONS** **Authorized Inspection Agency (AIA)** **Inservice:** An Authorized Inspection Agency is either: a) a Jurisdictional authority as defined in the National Board Constitution; or b) an entity that is accredited by the National Board meeting NB-369, Accreditation of Authorized Inspection Agencies Performing Inservice Inspection Activities; or NB-371, Accreditation of Owner-User Inspection Organizations (OUIO).~~; or NB-390, Accreditation of Federal Inspection Agencies (FIA).~~

NBIC Action Item A25-42
Submitted by <NAME> (Email)
Submitted on

THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

Subject:	**Renaming Supplement 11**
NBIC Location:	Part 3, Supplement 11
Statement of Need:	Renaming Supplement 11 to "Advanced Repairs and Alterations"
Background Information:	Removing "Engineered" from the title so as not to suggest that the work would require direct involvement from an engineer or engineering certification. The purpose of the supplement is to provide repairs activities that have been developed with sound engineering judgment backed up with technical references. In some cases, an engineering evaluation will be recommended.

Proposed Text:

SUPPLEMENT 11
ADVANCED REPAIRS AND ALTERATIONS

NBIC Interpretation Item I24-87
Submitted by Darris Mosley (Darris_mosley@oxy.com)
12/16/2024

THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

Subject:	Changes to the original pressure relief device nameplate.
NBIC Location:	2023 NBIC Part 4, 4.7.3 a) and b)
Statement of Need:	Clarification is needed on the correct way to communicate changes to a relief device through nameplate stamping.
Background Information:	A VR certificate holder has been audited and has received corrective actions for only stamping out the items of a relief device's part number that have been changed. The shop was given guidance to update their quality control manual to stamp out the entire part number even when not all components have been changed.
Proposed Question:	Part 4, paragraph 4.7.3 (a) second sentence states "For these repairs, the invalidated information on the original nameplate or stamping shall be marked out but left legible." Is the invalidated information considered the to be the entire field (for example entire model number or only a portion of model number)?
Proposed Reply:	No. Only the portion that is invalidated shall be marked out but left legible. However, the entire new model number shall be marked on the VR nameplate.
Committee's Question:	Part 4, paragraph 4.7.3 (a) second sentence states "For these repairs, the invalidated information on the original nameplate or stamping shall be marked out but left legible." Is it the intent that the invalidated information is considered to be the entire field?
Committee's Reply:	Yes
Rationale:	The intention is to mark out the entire field, however, the invalidated/incorrect information shall remain legible.

NBIC Interpretation Item I25-10
Submitted by Riley Collins (rileycollins@eastman.com)
4/8/2025

THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

Subject:	Is a Pressure Relief Device the only Relief Method for Pressure Vessels?
NBIC Location:	2023 NBIC, Part 4, 2.6
Statement of Need:	The jurisdiction is claiming the NBIC implies that a pressure relief device is the only acceptable relief method for a pressure vessel since Part 4 Section 2.6 only addresses pressure relief devices.
Background Information:	NBIC Part 4 Section 2.6 only provides requirements for the pressure relief devices that protect pressure vessels. This does not mean that a pressure relief device is the only relief method for pressure vessels. ASME Section VIII Div 1 permits the use of open flow paths and overpressure protection by system design which do not have pressure relief devices.
Proposed Question:	NBIC Part 4 Section 2.6 only provides requirements for the pressure relief devices that protect pressure vessels. Is NBIC Part 4 Section 2.6 declaring that a pressure relief device is the only relief method for pressure vessels?
Proposed Reply:	No.
Committee's Question:	NBIC Part 4 Section 2.6 provides requirements for pressure relief devices that protect pressure vessels. Does NBIC Part 4 Section 2.6 require that a pressure relief device is the only overpressure protection method for pressure vessels?
Committee's Reply:	No.
Rationale:	NBIC Part 4, 2.6 addresses the requirements for Pressure Relief Devices when used as the method of overpressure protection for pressure vessels.

Item 25-01
J. Simms

Part 4 2025 Edition (with proposed changes)

4.7.3 CHANGES TO ORIGINAL PRESSURE RELIEF VALVE NAMEPLATE INFORMATION

a) Information on the original nameplate or stamping, such as but not limited to set pressure, capacity, blowdown, or type/model number may no longer be valid following certain repair activities. For these repairs, the entire field containing the invalidated information on the original nameplate or stamping shall be marked out, but left legible. Any changes to capacity shall be based on that for which the valve was originally certified, or if a conversion has been made, as described in 4.2, on the capacity certification for the valve as converted.

b) Repair organizations shall verify the Type/Model number, inlet size, set pressure, and capacity on the original nameplate or stamping that is not marked out. The entire field containing incorrect information on the original manufacturer's nameplate or stamping shall be marked out, but left legible. Corrected information shall be indicated on the repair nameplate and noted on the document as required by the quality system.

4.7.4 ILLEGIBLE OR MISSING NAMEPLATES

The VR Certificate Holder shall not perform repairs under the VR Program on any pressure relief valve (PRV) that cannot be positively identified by the manufacturer or through in-house sources. Such identification shall include the verification of the original ASME Stamping. Pressure relief valves that have missing or illegible nameplates and can be positively identified shall be equipped with a nameplate marked "DUPLICATE", which contains all original nameplate data. The duplicate nameplate shall not bear the "NB" Mark or the ASME Certification Mark. To indicate the original designator or code stamping, the duplicate nameplate shall be stamped with a "V", "HV", or "UV" as applicable. Illegible nameplates, if applicable, shall not be
removed.

Record: 21-397
Revision Date: 4/14/2025

CAP-21 CRITERIA FOR REAPPLICATION OF AN ASME CERTIFICATION MARK

1. After an item has been certified under an ASME standard, if the stamping of the Certification Mark with appropriate designator becomes indistinct or the nameplate is illegible or lost, but traceability to the original certification can be established, the Single Certification Mark and designator may be reapplied to the item. For the purpose of this provision, application of the Single Certification Mark with the appropriate designator shall be equivalent to the Code Symbol stamping required by earlier Code editions and addenda if applicable.

2. Reapplication of the Certification Mark and designator shall only apply to finished and completed components and not apply to parts that have been assembled/installed into a finished component.

3. Reapplication of the Single Certification Mark and designator shall only be permitted under the following conditions:

(a) The Owner has requested the reapplication of the Single Certification Mark and designator by the original Certificate Holder.
(b) Where applicable, the jurisdiction has granted permission for the reapplication.
(c) The reapplication shall be performed by the original Certificate Holder. Where responsibility for the original Code certification has been maintained, reapplication by a successor organization to the original Certificate Holder is permitted.
(d) The reapplication shall be authorized and witnessed by any National Board Authorized Inspector, National Board Inservice Inspector, or Certified Individual providing designated oversight for the protection of the Single Certification Mark as governed by the relevant standard on which the Single Certification Mark is based.

The B2 committee recently completed updating all existing SWPSs adopted by the NBIC.

The AWS committee's recently approved SWPS B2.1-23-2024; Aluminum SWPSs with the GMAW process on M/P 23 materials. Additional SWPSs using both the GMAW and GTAW processes on Aluminum (M/P 22, M/P 23 and M/P 25 materials) for both Piping Applications and Plate and Structural Applications are currently being developed by the B2D Subcommittee on SWPSs'.

The committee is also actively soliciting the donation of PQRs from industry to support the development of P91/P92 SWPSs in the near future.

This concludes my report

Regards,

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