



Pressure Points

Risk Solutions

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Hartford Steam Boiler Realignment

The Hartford Steam Boiler Inspection and Insurance Company finalized the realignment of HSB Global Standards with its parent company. As Hartford Steam Boiler, our commitment to provide the highest quality and most reliable service is unwavering. Rest assured that you will continue to receive the same high-quality inspection services from the same highly qualified and experienced inspection personnel you have known in the past.

Hartford Steam Boiler is a worldwide leader in providing global pressure equipment inspections which includes ASME Code Inspection Services, Pressure Equipment Directive (PED), Australian Standards, Brazil NR-13, Indian Boiler Regulation, Japan, KHK, Malaysia DOSH, Singapore MOM, DOT, Third Party Inspections, ISO Registration Services and more services. Hartford Steam Boiler pressure equipment inspection professionals are located globally, ready to service your inspection needs. We understand the complexities of global pressure equipment compliance, relieving you of that burden.

Below is a summary of key changes you should be aware of:

Accreditations

- Certificate of Accreditation - The American Society of Mechanical Engineers
- Certificate of Accreditation - The National Board of Boiler and Pressure Vessel Inspectors (NB-369)
- The Certificate of Acceptance - The National Board of Boiler and Pressure Vessel Inspectors (NB-360).

ASME Data Reports

The name to be used on the ASME data reports is The Hartford Steam Boiler Inspection and Insurance Company.

Website

Our website has changed to www.munichre.com/HSB/global-inspection

As valued customers, you will continue to have access to the most complete and annotated ASME Code synopsis and Code interpretations via our Client Access portion of our website as well as access to global technical leaders and international import requirements to more than 100 countries.



The Hartford Steam Boiler Inspection and Insurance Company is one of the largest engineering and inspection workforces in the world, with more than 1,350 engineers, inspectors and technical personnel around the globe offering world class inspection services, loss prevention and engineering-based risk management for business.

2017 Edition Code Synopsis – Sneak Peak

For several years now, ASME Section VIII, Division 1 (VIII-1) has allowed the substitution of UT examination for radiographic examination by means of Code Case 2235, and more recently a direct reference to Paragraph 7.5.5 of ASME Section VIII, Division 2 (VIII-2). But there still is a lack of consistency between VIII-1 in VIII-2 when it comes to use of manual UT. In VIII-1, paragraph UW-11(a)(8) currently permits the substitution of ultrasonic examination in accordance with UW-53 for radiography for the final closure seam of a pressure vessel if the construction of the vessel does not permit interpretable radiographs in accordance with Code requirements. But this UT may determine the design joint efficiency for this final closure seam, and as such, the requirements given in UW-51(a)(4) and 7.5.5 of Section VIII, Division 2 for the use of automated or semi-automated UT should be applied. This revision removes paragraph UW-11(a)(8) from the code and now treats a final closure seam no differently than any other vessel seam that requires volumetric examination. Also as part of this action, UW-51(a)(4) was revised to remove the reference to 7.5.5 of VIII-2 and replace it with a reference to UW-53(b). UW-53 was completely rewritten. New subparagraph (a) now states that ultrasonic examination of welded joints whose joint efficiency is not determined by ultrasonic examinations may be performed and evaluated in accordance with Mandatory Appendix 12. New subparagraph (b) states that ultrasonic examination of Welds per UW-51(a)(4) shall be performed and evaluated in accordance with the requirements of 7.5.5 of Section VIII, Division 2. Since the extent of examination (Full, Spot, None) of a Category B or C closure seam does affect the design efficiency of a shell or head, then when volumetric examination is applied to use a particular design joint efficiency, and UT is selected as the method, then the UT examination shall be carried out in accordance with 7.5.5 of Section VIII, Division 2. Manual UT per Appendix 12 for a final closure seam for this case is no longer acceptable. **Manufacturers should take special note of important change.**

The Certifying Engineer

Many international users of BPV Section III find that they are restricted in their use of the code due to Registered Professional Engineer (RPE) requirements for design certification. The current language of the code per the requirements of Mandatory Appendix XXIII requires an RPE to be registered in the United States or the Province of Canada. International organizations performing design activities were required to either have their engineering staff become an RPE in the United States or the Province of Canada, or subcontract design certification activities to meet code requirements.

As a globally used code, ASME saw a need to gain further user acceptance in the international community and remove potential hurdles that limit RPE qualifications. The 2017 code edition of BPV Section III revises Mandatory Appendix XXIII with the addition of a "Certifying Engineer."

The Certifying Engineer as defined in appendix XXIII, expands the recognition of an RPE to also include Chartered, Registered, or Licensed Engineers from countries other than the United States or Canada.

The requirements in the United States and Canada remain unchanged for the initial qualification of an RPE which is now encompassed and recognized throughout the code as a Certifying Engineer. The additional accepted method now includes Chartered, Registered, or Licensed Engineers from countries other than the United States or Canada that are signatories of the International Professional Engineers Agreement (IPEA) or the Washington Accords.

Member countries of the IPEA and Washington Accords are Australia, Canada, Chinese Taipei, Hong Kong, India, Ireland, Japan, Korea, Malaysia, New Zealand, Singapore, South Africa, Sri Lanka, United Kingdom, United States, and provisional members in Bangladesh, Pakistan, and Russia. Each country has representation by a licensing or accrediting body which meet the standards of the IPEA and Washington Accords, such as the United States Council for International Engineering Practice in the United States.

In addition to the creation of a Certifying Engineer, revisions to Mandatory Appendix XXIII also include more stringent controls for qualifications and records. Many requirements which would have been considered as recommendations through "should" and "may" statements have been changed to "shall" statements and "nonmandatory guidelines" are becoming "mandatory requirements" in area of "Established ASME Code Knowledge" with added "Mandatory Certification Requirements."

Outside of Mandatory Appendix XXIII many users will notice the code will change all references in NCA/NX from a Registered Professional Engineer to a Certifying Engineer. There are also new quality assurance records retention requirements in table NCA-4134.17-2 and annual audit responsibilities for Authorized Nuclear Inspector Supervisor (ANIS) in NCA-5000 for Certifying Engineer records and qualifications.

Although the potential expansion of the Certifying Engineer may not be used by everyone, the new changes to the 2017 edition for BPV Section III will require all users of the code, participating in design certification activities, to update their program.

Ask the Engineer

Question: Can a Materials Organization (MO) perform fabrication activities for an item within the scope of their NCA-3800 Program?

Answer: No.

However this does not mean that it cannot be done. There is no connection between the activities in NCA-3800 to NX-4000. The scope of NCA-3800 allows an MO to perform processes for materials manufacturing in accordance with a material or dimensional specification which may include bending and cutting activities. Outside the material or dimensional specifications it would be considered fabrication.

The provision of NCA-3125 allows an N-Certificate Holder (N-CH) to subcontract various processes and fabrication activities. The Code does not require these activities controlled under NCA-3125 to be performed by another N-Type CH. Provided the N-CH has controls for acceptance and takes responsibility of a subcontracted activity, meeting NCA-3125, a N-CH may use an MO or organizations that are non N-Type CH.

This was first addressed in Interpretation III-81-112 which led to the development of NCA-3125 which states:

“Organizations performing activities related to fabrication such as those described in the inquiry and for which requirements are given in NB/NC/ND-4200 are not required to have a Certificate of Authorization. These activities may be performed as subcontracted services, in which case the Certificate Holder is required to survey, qualify, and audit the subcontractor to provide the necessary control to assure that the requirements of Section III are met.”

Prior to this Interpretation, it was assumed that Code users could not perform Code activities other than through an N-Type CH. So under the provisions of NCA-3125 a Materials Organization may perform fabrication activities on Code items under the controls of the N-CH.

Interpretation: III-81-112

Subject: Section III, Division 1, NB/NC/ND-4200 Forming, Fitting and Aligning

Date Issued: September 11, 1981

File: NI-77-70

Question: Do organizations performing cutting, bending, and forming operations to meet the requirements of NB/NC/ND-4200 have to possess a Certificate of Authorization?

Answer: No. Organizations performing activities related to fabrication such as those described in the inquiry and for which requirements are given in NB/NC/ND-4200 are not required to have a Certificate of Authorization. These activities may be performed as subcontracted services, in which case the Certificate Holder is required to survey, qualify, and audit the subcontractor to provide the necessary control to assure that the requirements of Section III are met.

Question: My Shop has been asked to build and supply Non Boiler External Piping (NBEP) in accordance with ASME B31.1, 2012 Edition. Our customer wanted us to treat the piping assemblies like Boiler External Piping (BEP) and apply the ASME Certification Mark though it is not a mandatory requirement for NBEP in ASME Section I. ASME Section I, 2015 Edition, Preamble states: "Construction rules for materials, design, fabrication, installation, and testing of the boiler external piping are contained in ASME B31.1, Power Piping. Piping beyond the valve or valves required by Section I is not within the scope of Section I, and it is not the intent that the Certification Mark be applied to such piping or any other piping."

Does ASME Section I prohibit the application of the ASME Certification Mark to Non Boiler External Piping provided such piping is constructed in accordance with the rules for boiler external piping (BEP) and all ASME Section I and B31.1 requirements for BEP are met?

Answer: While it isn't the "intent" for NBEP to be stamped and have data reports, there are not any prohibitions in Section I to disallow this practice either. If the NBEP meets all of the Code requirements and the customer wants it to be inspected, certified and stamped, it is perfectly acceptable to do so. Section I recently published an Interpretation (see below) offering further clarification on this matter.

Interpretation:	BPV I-16-11
Standard Designation:	BPV Section I
Edition/Addenda:	2015
Para./fig./Table No:	Preamble
Subject Description:	Certification Mark for Nonboiler External Piping
Date Issued:	09/28/2016
Record Number:	16-1626

Question: Does ASME Section I prohibit the application of the ASME Certification Mark to nonboiler external piping (NBEP) provided such piping is constructed per the rules for boiler external piping (BEP) and all ASME Section I and B31.1 requirements for BEP are met?

Answer: No.

Question: If the response to Question (1) is no, does Section I prohibit the use of a Form P-4A to document the NBEP piping being stamped, with the remarks section identifying the piping as NBEP along with the edition of B31.1 applied to the NBEP piping?

Answer: No.

Subsequent to the publication of the above Interpretation, to avoid confusion, the Preamble of Section I will be revised in 2017 by eliminating the sentence "and it is not the intent that the Certification Mark be applied to such piping or any other piping."

ASME Section VIII, Division 1 and ASME Section IX Three-Day Seminar

Introduction to ASME Section VIII, Division 1 and ASME Section IX Seminar. The seminar will cover the following:

Material	Design	Fabrication	Welding
Requirements	Requirements	Requirements	Requirements
Re-certification	Toughness	Post Weld Heat Treatment Issues	Welding Procedure Qualifications
Documentation		Joint Preparation Processes	
Identification		Toughness Testing	Welding Performance Qualifications
Pressure Testing, Manufacturer's Data Report and More			

Location	Dates
Philadelphia, Pennsylvania	June 20-22, 2017
Columbus, Ohio	August 22-24, 2017
Baton Rouge, Louisiana	September 19-21, 2017
Philadelphia, Pennsylvania	October 10-12, 2017

To Register: <https://bookstore.hsbct.com>

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May 2017

Pressure Points is published by

Hartford Steam Boiler
One State Street
Hartford, CT 01141-0299

Editor:
Stephen McKelvey

Contributors:
Paul Coco, Codes and Standards
Alex Garbolevsky, Codes and Standards
Jayaram Vattappilly, Codes and Standards

GetInfo@HSB.com