HSB Global Standards

2015 Edition ASME Boiler & Pressure Vessel Code Synopsis Sample

All ASME B&PV Code Sections

Codes and Standards Group July 2015

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HSB Code Services ASME Boiler and Pressure Vessel Code 2015 Edition Synopsis – Executive Summary

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2015 ASME Code Addenda Synopsis

The 2015 Edition of the ASME Boiler and Pressure Vessel Code was published on July 1, 2015, and includes revisions, additions and errata approved by the ASME B&PV Standards Committees in 2013 and 2014. The mandatory implementation date for the 2015 Edition is six months from the date of publication, or January 1, 2016. However Manufacturers may begin using the 2015 Edition beginning with the date of issuance.

There will be no addenda issued to this edition, and this edition will remain valid until publication of the 2017 edition in July of 2017. Changes that have taken place in the 2015 Edition are indicated by "(15)" in the margin adjacent to the affected paragraph/figure/table.

Code Case Supplements continue to be published four times per year and republished as a new Edition on a cycle concurrent with the rest of the Code.

Interpretations of the Code have historically been posted in January and July at <u>http://cstools.asme.org/interpretations</u>. However interpretations approved between January 1, 2013 and December 31, 2014 have been included with the publication of the applicable Section of the Code in the 2015 Edition as Volume 63. Following the 2015 Edition, interpretations will not be included in the edition; they will be issued in real time in ASME's Interpretation Database at: <u>http://go.asme.org/Interpretations</u>. This online Interpretation database also contains previously approved BPVC interpretations dating back to 1977.

Errata [publishing errors identified in the Code] are reviewed and approved by the Committee four times a year and posted on ASME's website. Information regarding "Special Notices" and "Errata" is published under the ASME Boiler and Pressure Vessel Code Resources Page at: http://cstools.asme.org/BPVErrataAndSpecialNotice.cfm.

ASME offers users the option to receive an e-mail notification when "Special Notices" or "Errata" are posted on their Web site. This will be especially useful now that annual Addenda are no longer published.

Nearly 1200 changes are itemized in this Synopsis. Many of these changes are the result of new technology and/or at the request of Certificate Holders like you.

This Synopsis was prepared by the HSB Global Standards (HSB GS) Codes & Standards staff to provide insight into the intent of these changes, and their potential impact on Code users. Each item that passed the ASME B&PV Standards Committee for the 2015 Edition was entered into the Synopsis database. The "Subject" and "Description" were created by HSB CT personnel involved with the cognizant Code Section Standards Committee, and each entry was checked against the published standard to verify that it made it into publication. This particular report contains a summary of changes for the three Divisions of Section VIII Pressure Vessel Code, as well as the three reference codes, Sections II (Materials), V (Nondestructive Examination) and IX (Welding, Brazing and Fusing Qualifications).

Commentary on revisions represents HSB Global Standard's opinion of the changes, and is not intended to be an official interpretation of the ASME Code. Every effort was made to accurately describe the changes. However, we caution Code users to always refer to the actual Code rules that apply and to use this document as a supplementary tool to the Code. Please contact HSB GS Codes & Standards Group if further background information is desired on any of the revisions or Code Cases published.

HSB Global Standards Synopsis of the 2015 Edition of the ASME BPV Code

Part: B

Subpart/Table: Appendices

Paragraph	Туре	Subject - Description
Appendix A	Revision	Sources of Standards - Updated Appendix A with new/changed addresses of organizations that are sources of non-ASTM material standards.
Appendix A	Revision	Sources of Standards - Updated Appendix A with new/changed addresses of organizations that are sources of non-ASTM material standards.
Appendix IV, IV-1500, Table IV-1500	Addition	New Paragraph to Address Requirements for Welding Data - Requirements similar to those for base metals are added for weld data for new alloys in new paragraph IV-1500. Requirements similar to those for base metals are added for weld data for new alloys. Three types of welding information are not required when a new base metal is requested for use in welded construction in the ASME boiler and pressure vessel code; 1. data on weldability; 2. data on strength and toughness in the time-independent regime, and data on strength in the time-dependent regime. Also Table IV-155-1 has been added containing an example of a comparison of allowable stresses of base metals with composition similar to those of selected welding consumables and the proposed new base metal.
Appendix IV, IV-800	Revision	Time-Independent Properties - For time-independent properties, clarified the temperatures at which data must be provided for various classes of alloys.
Appendix IV, Table IV-800-1	Addition	Revision to Appendix IV - Mandatory Appendix IV contains Guidelines on the Approval of New Materials Under the ASME Boiler and Pressure Vessel Code. In an effort to improve the consistency and quality of data submitted to support requests for code cases for new materials of construction, companies submitting request must now identify all the ASTM test methods used to generate the material data based on Table IV-800-1. In addition the data submitted must satisfy the units for reporting as given in Table IV-800-1, including number of significant figures. Also as part of this revision is the use of the 0.2% offset method to determine the yield strength and the recognition that some material specifications permit a different method such as the 0.5% extension under load method to determine the yield strength.

Subpart/Table: Code Cases

Paragraph	Туре	Subject - Description
Code Case 2792	Addition	SB-626 Flare Test Instead of Flange Test - This is a joint Code Case among Sections I, II-B and VIII-1. It provides an exemption to the flange test required by SB-626 and instead requires a [less severe] flare test per SB-751 or SA-370. It also limits the flare in production to no more than 30 degrees.

Subpart/Table:

Paragraph	Туре	Subject - Description
SB-148, 5.1	Revision	Editorial Correction to 5.1 Heat Treatment Temperature - The Metric tolerance range corrected from "+ 10° C" to " + 28° C"
SB-209	Revision	 Adoption of ASTM B209-10 - ASME has adopted ASTM B209-10 "Specification for Aluminum and Aluminum-Alloy Sheet and Plate". Revisions to this specification include: (1) In Table 2, 5083-H32 and 5456-H32 removed maximum yield strength. (2) Various changes made to alloys that are not used for B&PVC. (3) Standardized and verified that the element limits listed in Table 1 as footnotes are not included in the Total for Other Elements. (4) Sections 4 and 9 revised to accommodate testing direction shown for 2124 in Table 3.