

ASME BOILER & PRESSURE VESSEL CODE

2025 Key Changes Presentation

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ASME Boiler & Pressure Vessel Code

- ASME Boiler Code was first published in 1914 with 114 pages.
- The ASME Boiler and Pressure Vessel Codes are published on a two-year cycle with a July 1 publication date.
- The next edition will be published on July 1, 2025.
- The content for the Boiler Code is developed by volunteers using a consensus-based process that is managed by our ASME Staff Engineers.



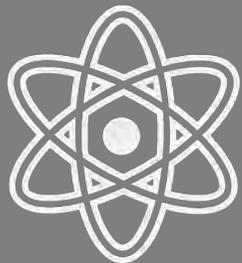
BPVC Sections



Boilers



**Pressure
Vessels**



Nuclear



**Services &
References**

Boilers



Power Boilers

- **BPVC Section I – Rules for Construction of Power Boilers**
- **BPVC Section VII – Recommended Guidelines for the Care of Power Boilers**

Heating Boilers

- **BPVC Section IV – Rules for Construction of Heating Boilers**
- **BPVC Section VI – Recommended Rules for the Care and Operation of Heating Boilers**



BPVC Section I

Rules for Construction of Power Boilers



Significant Changes

- **Location:** PW-38.2, PW-39.3 and Mandatory Appendix VIII
 - Revision of PW-38.2, PW-39.3 and Mandatory Appendix VIII to add a new terminology for electric resistance heating elements that include electric resistance heating pads, electric resistance heating coils etc.
- **Location:** PG-72
 - Revisions made to section PG-72 for clarity, differences between steam and liquid services, updating reference from PG-72.2 to PG-72.3 and updating table from MPa to kPa.
- **Location:** PG-67.4
 - In 1965, rules for overpressure protection of forced-flow steam dererators were incorporated into PG-67.4. These boilers have no steam drums. For these boilers, a combination of safety valves and power-actuated pressure-relief valves are permitted. PG-67.4 has been rewritten for clarity.
- **Location:** PG-5.7
 - New paragraph added to address the use of the term NPS and/or DN throughout the Code when addressing size limits. The new paragraph clarifies that the outside diameter associated with NPS and DN dimensions should be the dimension applied to other product forms.
- **Location:** Table A-360
 - Addition of note 5 to Table A-360 to permit qualification of NDE personnel for MT, PT and VT to the 2020 edition of ASME B31.1.



BPVC Section VII Recommended Guidelines for the Care and Operation of Power Boilers



Significant Changes

- **Location:** 101.4.2.4 and 103.4
 - Revised to include revised requirements for both watertube and firetube boilers.
- **Location:** 1 GENERAL
 - Revised to include locomotive boilers in Section VII and remove their exclusion in the "Organization of Section VII, General" paragraph.



BPVC Section IV

Rules for Construction of Heating Boilers



Significant Changes

- **Location:** Forms HC-1, HC-2, HC-3, HA-1, HA-2, and HA-3
 - Revised to add new Table 4-2 to include instructions for users.
- **Location:** Figures HG-530.2, HG-530.3, HLW-602.1(a), HLW-602.2 & Form H-4
 - Revised to permit the use of either kW or Btu/hr for units of input on the nameplate for electric boilers.
- **Location:** HG-605, HG-606, HG-613, HG-614 and Mandatory Appendix 2; Table 2-100
 - Provides alternate safety standards for compliance of safety devices specified UL 60730 family of safety standards is an alternative to UL 353 which is being withdrawn as a certification standard by UL.
- **Location:** HG-705(c)
 - Revised to require the temperature ratings of check valves, stop valves, cocks or backflow preventers be at least equal to the maximum allowable water temperature marked on the boiler rating plate or 250F (120C) if no temperature is marked.
- **Location:** HG-520, HG-801, HLW-601, HLW-901, Manufacturer's Modular Master Data Report Form H-1 and Non-Mandatory Appendix E
 - Revised terminology with respect to Manufacturer's Master Data Report and Manufacturer's Modular Master Data Report to correct usage and definitions of Data Reports in Section IV construction.



BPVC Section IV

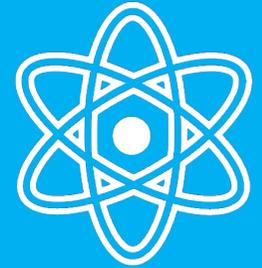
Rules for Construction of Heating Boilers



Significant Changes

- **Location:** HLW-506 Pneumatic Test
 - Incorporated CC 2883 into HLW to add new HLW-506 which provides provisions for allowing a pneumatic test in lieu of a hydrostatic test water heater vessels.
- **Location:** HLW-401.4(c)
 - Incorporated CC 2904 by adding new para. HLW-401.4(c) which provides requirements for distortion in lined vessels.
- **Location:** HLW-204 (b)
 - Added new requirements to provide instruction for use of nonstandard flanges on HLW marked vessels.
- **Location:** HG-530.1 & HLW-602 and Mandatory Appendix 3
 - Added requirements for adhesive attachment of nameplates to the boiler proper and modernize Mandatory Appendix 3, providing conditions for the use of adhesives to attach nameplates to the boiler proper.
- **Location:** HG-515.3 and HLW-600.3
 - Revised to clarify that the Authorized Inspector is not responsible for verification of the controls and installation requirements in Articles 6 and 7 in Part HG and Articles 7 and 8 in Part HLW.

Nuclear

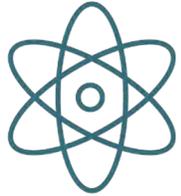


Construction

- **BPVC Section III – Rules for Construction of Nuclear Facility Components**

Inspection

- **BPVC Section XI – Rules for Inservice Inspection of Nuclear Reactor Facility Components**



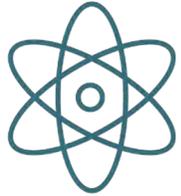
BPVC Section III

Rules for Construction of Nuclear Facility Components



Divisions 1 & 2, Subsection NCA Significant Changes

- **Location:** NCA-8322.3
 - NCA-8322.3 has been added to provide rules for applying the ASME Mark with NPT Designator at field locations without extending the certificate.
- **Location:** NCA-3211.19
 - NCA-3211.19 has been added to identify the organization responsible for performing the PSI and to identify the Section XI requirements applicable to the PSI.
- **Location:** NCA-4259.1 and 4358.1
 - NCA-4259.1 and 4358.1 has been added to allow a grace period be applied to external audits including Material Organizations and approved suppliers.
- **Location:** NCA-3211.60
 - NCA-3211.60 has been added to update material controls for items commensurate with their contribution to safety or risk (low safety significant) aligning with Code Case N-940.



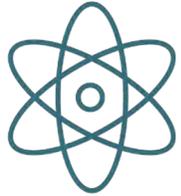
BPVC Section III

Rules for Construction of Nuclear Facility Components



Appendices Significant Changes

- **Location:** APPENDIX I
 - APPENDIX I has been revised to adjust High Tensile Steel values and change Appendix III III-1300 to reflect 2&12 factors, incorporating Case N-905.
- **Location:** APPENDIX XIII
 - APPENDIX XIII has been revised to generalize the use of plastic analysis for fatigue and provide strain measures that are consistent with either the existing elastic methods (strain intensity approach) or the structural failure theories that define the onset of plasticity (von Mises effective strain).
- **Location:** APPENDIX XXV
 - APPENDIX XXV has been revised to add stress-strain curves to support the strain-based acceptance criteria provided in Appendix EE.
- **Location:** Appendix XXIX
 - Appendix XXIX has been added to clarify minimum clearance requirements to allow access for Preservice volumetric examinations.
- **Location:** Appendix N
 - Appendix N -1332 has been revised to update the organization to allow easier incorporation of state-of-the-art research.
- **Location:** Appendix OO
 - Appendix OO has been added listing and describing all fatigue related code cases, assisting code users in understanding the relationship between various code cases.



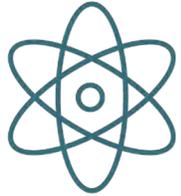
BPVC Section III

Rules for Construction of Nuclear Facility Components



Division 1, Subsection NB Significant Changes

- **Location:** NB-5281(a) and NB-5281
 - NB-5281(a) has been revised to tie PSI completion to N-3 data report instead of to the N-5 data report which is the current requirement. Add requirements to NB-5281 to identify the required reporting/documentation requirements for PSI.
- **Location:** NB- 5282
 - NB- 5282 has been revised to note that Preservice examinations shall be performed on steam generator tubes in accordance with the Design Specification prior to entering service.
- **Location:** NB-2311(a)(1)(d)
 - NB-2311(a)(1)(d) has been added to include non-welded flat heads, tubesheets and flanges.
- **Location:** NB-3125, NB-4244.2, NB-4250
 - NB-3125, NB-4244.2, NB-4250 has been revised to clarify minimum clearance requirements to allow access for Preservice volumetric examinations.
- **Location:** NB-2500
 - NB-2500 has been revised to incorporate requirements for fabrication and certification of welded with filler metal tubular product forms.



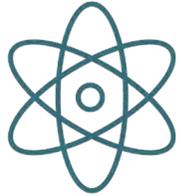
BPVC Section III

Rules for Construction of Nuclear Facility Components



Division 1, Subsection NCD Significant Changes

- **Location:** NCD-3654.2(a) and NCD-3655(a)(3)
 - NCD-3654.2(a) and NCD-3655(a)(3) have been revised to exclude the effects of anchor displacements due to reversing and non-reversing dynamic loads in calculating MB.
- **Location:** NCD-2311(a)(1)(d)
 - NCD-2311(a)(1)(d) has been added to include non-welded flat heads, tubesheets and flanges.
- **Location:** NCD-3125
 - NCD-3125 has been revised to clarify minimum clearance requirements to allow access for Preservice volumetric examinations.
- **Location:** NCD-2610
 - NCD-2610 has been revised to update material controls for items commensurate with their contribution to safety or risk (low safety significant) aligning with Code Case N-940.
- **Location:** NCD-2500
 - NCD-2500 has been revised to incorporate requirements for fabrication and certification of welded with filler metal tubular product forms.



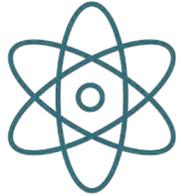
BPVC Section III

Rules for Construction of Nuclear Facility Components



Division 1, Subsection NE Significant Changes

- **Location:** NE-2311(a)(1)(d)
 - NE-2311(a)(1)(d) has been added to include non-welded flat heads, tubesheets and flanges.
- **Location:** NE-2610
 - NE-2610 has been revised to update material controls for items commensurate with their contribution to safety or risk (low safety significant) aligning with Code Case N-940.
- **Location:** NE-2500
 - NE-2500 has been revised to incorporate requirements for fabrication and certification of welded with filler metal tubular product forms.



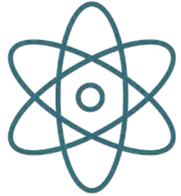
BPVC Section III

Rules for Construction of Nuclear Facility Components



Division 1, Subsection NF Significant Changes

- **Location:** NF-1-3522
 - NF-1-3522 has been revised to apply new holding time at temperature for weld thicknesses.
- **Location:** NF-2610
 - NF-2610 has been revised to update material controls for items commensurate with their contribution to safety or risk (low safety significant) aligning with Code Case N-940.



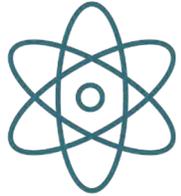
BPVC Section III

Rules for Construction of Nuclear Facility Components



Division 1, Subsection NG Significant Changes

- **Location:** NG Endnote 2 and throughout NG
 - NG Endnote 2 and throughout NG has been revised to update use of "Certificate Holder" and "N Certificate Holder".
- **Location:** NG-2610
 - NG-2610 has been revised to update material controls for items commensurate with their contribution to safety or risk (low safety significant) aligning with Code Case N-940.



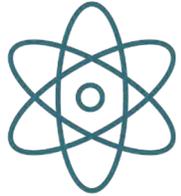
BPVC Section III

Rules for Construction of Nuclear Facility Components



Division 2 Significant Changes

- **Location:** Appendix W
 - Appendix W has been revised to include a brief discussion of Concrete Degradation Mechanisms.
- **Location:** CC-2100 and CC-5122.1
 - CC-2100 and CC-5122.1 has been revised to address recent NCA-3800 & NCA-3900 Reorganization.
- **Location:** CC-4210
 - CC-4210 has been revised to update requirements for certification of Ready Mix concrete trucks and/or concrete Ready Mix production plants.
- **Location:** Table CC-2231.7.4-1
 - Table CC-2231.7.4-1 has been revised to correlate with ACI 318-19 Table 26.4.2.2(c).
- **Location:** CC-2536
 - CC-2536 has been revised to incorporate requirements for fabrication and certification of welded with filler metal tubular product forms.



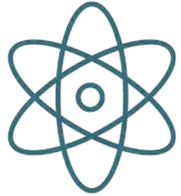
BPVC Section III

Rules for Construction of Nuclear Facility Components



Division 3 Significant Changes

- **Location:** WC-2560
 - WC-2560 has been revised to incorporate requirements for fabrication and certification of welded with filler metal tubular product forms.
- **Location:** WC-5200
 - WC-5200 has been revised to align with WB required examination of weld requirements.
- **Location:** WB/WC/WD-2610
 - WB/WC/WD-2610 have been revised to change from “Material Organization for small products” to “suppliers of small products” for consistency. Additionally, tube and tube fittings were separated into its own field with a size limitation as NPS designations are not utilized for tubing for consistency.



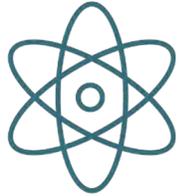
BPVC Section III

Rules for Construction of Nuclear Facility Components



Division 5 Significant Changes

- **Location:** HBB
 - HBB has been revised for the removal of the Class A, HBB design by analysis rules into the new Mandatory Appendix HBB-I and the removal of the design data to the new Mandatory Appendix HBB-II.
- **Location:** HAB-4559.1
 - HAB-4559.1 has been added to allow a grace period be applied to external audits including Material Organizations and approved suppliers.
- **Location:** HBB-3230, Table HBB-3225-1 and Tables I-14
 - HBB-3230, Table HBB-3225-1 and Tables I-14 have been revised for updated 304 and 316 Allowable Stress Tables and Figures; also addition of allowables for product forms with 70ksi UTS.
- **Location:** HHB-4000
 - HHB-4000 has been revised to allow use of representative data for as-manufactured ceramic composite material properties.
- **Location:** HBA-2610 and HBB-2610
 - HBA-2610 and HBB-2610 have been revised to update material controls for items commensurate with their contribution to safety or risk (low safety significant) aligning with Code Case N-940.



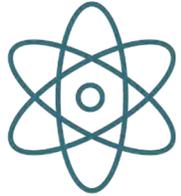
BPVC Section XI

Rules for Inservice Inspection of Nuclear Reactor Facility Components



Division 1 Significant Changes

- **Location:** Section XI, Division 1
 - The title of Section XI, Division 1 has been changed to “Rules for Inservice Inspection of Nuclear Power Plant Components.”
- **Location:** IWA-2316
 - Revised to modify the alternative qualification requirements for personnel who perform VT-2 examinations during system leakage tests and hydrostatic tests performed in accordance with IWA-5211(a) and IWA-5211(b). This revision specifies the relevant topics the training needs to address for VT-2 examiners in lieu of a specific timeframe.
- **Location:** IWA-4440
 - Revised to include a Repair/Replacement Organization along with an Owner for transfer of welding qualifications. The addition of this capability reduces the cost/schedule requirements for repair and replacement activities with no impact to quality or safety.
- **Location:** IWA-4520(b)(2), IWA-4521
 - Revised, and IWA-4521 has been deleted to incorporate Case N-831-1, “Ultrasonic Examination in Lieu of Radiography for Welds in Ferritic or Austenitic Pipe” and resolve an NRC condition in 50.55a(xix) Substitution of Alternative Methods.
- **Location:** IWA-5250, IWA-5251, IWB-3142, IWB-3522, IWC-3132, IWC-3516, IWD-3132, and IWD-3511
 - Revised to clarify requirements for VT-2 Relevant Conditions and associated Acceptance Criteria.
- **Location:** Table IWB-2500-1 (B-G-1)
 - Revised to incorporate Case N-864, “Reactor Vessel Threads in Flange Examinations” and its technical basis for elimination of Examination Category B-G-1, Item Number B6.40 examination requirements, except for the first inspection.



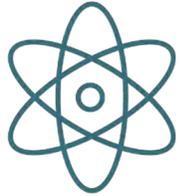
BPVC Section XI

Rules for Inservice Inspection of Nuclear Reactor Facility Components



Division 1 Significant Changes

- **Location:** Appendix I, I-2400
 - Revised to include nozzle-to-safe-end and nozzle-to-component welds.
- **Location:** Mandatory Appendix III, Supplement 2
 - Revised to add demonstration as an alternative verification method. This revision adds clarity by ensuring the search unit selection and corresponding verification methods are consistent with changes in Case N-824, “Ultrasonic Examination of Cast Austenitic Piping Welds From the Outside Surface”.
- **Location:** Nonmandatory Appendix L
 - Revised to include a two-tiered approach to determine the allowable operating period for circumferential flaws. For axial flaws, procedures have been updated for the postulated flaw shape in ferritic and austenitic pipes. Guidance has also been added for determining allowable flaw sizes based on Nonmandatory Appendix H.
- **Location:** Nonmandatory Appendix R
 - Revised to recognize three methods for performing risk informed examinations. Additionally, rules for PRA adequacy, examinations, successive inspections, an additional examinations have been added. Supplement 3 has been added to Nonmandatory Appendix R to incorporate rules from Case N-716-3, “Alternative Classification and Examination Requirements”.
- **Location:** Appendix R, Supplement 3
 - Revised to clarify the selection criteria applicable to the degradation mechanisms.



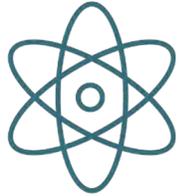
BPVC Section XI

Rules for Inservice Inspection of Nuclear Reactor Facility Components



Division 1 Significant Changes

- **Location:** Nonmandatory Appendix L
 - Revised to include a two-tiered approach to determine the allowable operating period for circumferential flaws. For axial flaws, procedures have been updated for the postulated flaw shape in ferritic and austenitic pipes. Guidance has also been added for determining allowable flaw sizes based on Nonmandatory Appendix H.
- **Location:** Nonmandatory Appendix R
 - Revised to recognize three methods for performing risk informed examinations. Additionally, rules for PRA adequacy, examinations, successive inspections, an additional examinations have been added. Supplement 3 has been added to Nonmandatory Appendix R to incorporate rules from Case N-716-3, “Alternative Classification and Examination Requirements”.
- **Location:** Appendix R, Supplement 3
 - Revised to clarify the selection criteria applicable to the degradation mechanisms.



BPVC Section XI

Rules for Inservice Inspection of Nuclear Reactor Facility Components



Division 2 Significant Changes

- **Location:** Section XI Preface, RIM-1.2
 - The Preface of Section XI and RIM-1.2 have been revised to clarify the jurisdiction of RIM. This change addresses the issue that RIM-1.2 requires meeting the requirements of Section XI, Division 1, IWA-1200 even though IWA-1200 only pertains to “plants” and RIM-1.2 addresses “facilities”.
- **Location:** RIM-1.1(d)
 - RIM-1.1(d) has been added to address when areas within Section XI, Division 2 are in the course of preparation, an Owner may develop these areas and submit the information to the Regulatory Authority having jurisdiction at the site for review and approval as established with that Regulatory Authority.
- **Location:** RIM-2.9.4
 - RIM-2.9.4 has been revised to delete reference to “the Construction Code”. This change has been made to not permit performing alternative examination methods in lieu of the methods specified in the Construction Code.
- **Location:** Mandatory Appendix VII, RIM-2.7.6.1, RIM-4.2.5, RIM-4.4, RIM-5.1, RIM-5.3, RIM-7.1, Mandatory Appendix V, Nonmandatory Appendix A
 - Section XI, Division 2 has been revised to include new requirements specific to sodium-cooled fast reactor-type plants in Mandatory Appendix VII and revise related requirements in RIM-2.7.6.1, RIM-4.2.5, RIM-4.4, RIM-5.1, RIM-5.3, RIM-7.1, Mandatory Appendix V and Nonmandatory Appendix A. Additionally, leak-before-break assessment procedures have been added to determine the sensitivity required for liquid-sodium leakage detectors.

Pressure Vessels



- **BPVC Section VIII – Rules for Construction of Pressure Vessels**
- **BPVC Section X – Fiber-Reinforced Plastic Pressure Vessels**
- **BPVC Section XII – Rules for Construction and Continued Service of Transport Tanks**



BPVC Section VIII

Rules for Construction of Pressure Vessels



Division 1 Significant Changes

- **Location:** UW-51
 - Added statement in UW-51(a)(1)(-a) to recognize deterioration of radiographic film is expected and that deterioration does not violate the requirements of record maintenance.
- **Location:** UHA-51
 - Added new paragraph UHA-51(a)(3) for the requirements of diffusion welding (DFW), incorporating Code Case 3054.
- **Location:** U-2, Mandatory Appendices 3, 43, and Nonmandatory Appendix NN
 - Added text in U-2(a)(2), 43-2(a)(5) of explicit requirements for design responsibility of replacement/repair parts and establishment of the Mandatory Code Edition, and definition in 3-2 for replacement/repair parts. Addition of User responsibility in Table NN-6-5 for requesting replacement parts.
- **Location:** Mandatory Appendix 47
 - Revised Mandatory Appendix 47 in its entirety and provide minimum requirements for pressure vessel designers and Manufacturers.
- **Location:** UG-91, UG-116, UG-118 and Nonmandatory Appendix NN
 - Removed requirements for marking and user's inspection of User-Manufacturer Vessels.
- **Location:** UG-99 and UG-100
 - Required that the inspection be performed at the MAWP. Added precautions for thermal expansion. Added requirements for depressurization before performing work on the vessel. Added requirements for test equipment and test closures.



BPVC Section VIII

Rules for Construction of Pressure Vessels



Division 2 Significant Changes

- **Removal of Class 1 vessels from Division 2**
- **Location:** Annex 2-C
 - Added statement in 2-C.3 to recognize deterioration of radiographic film is expected and that deterioration does not violate the requirements of record maintenance.
- **Location:** Part 2.4, Annex 2-F and Annex 7-A
 - Removed requirements for marking and user's inspection of User-Manufacturer Vessels.
- **Location:** Part 8.1
 - Require that the inspection be performed at the MAWP. Added precautions for thermal expansion. Added requirements for depressurization before performing work on the vessel. Added requirements for test equipment and test closures
- **Location:** Part 5
 - Complete editorial rewrite of Part 5, Design by Analysis Requirements, (not including the Annexes) to bring the paragraph structure of into compliance with the ASME Style Guide.
- **Location:** Annex 3-F
 - General Revisions to Mirror API 579-1/ASME FFS-1, Annex 14.B



BPVC Section VIII

Rules for Construction of Pressure Vessels



Division 3 Significant Changes

- **Location:** Part KM
 - KM-2: Deleted KD-401(d) and moved most of its former text to KM-250.
 - KM-4: Added higher strength carbon steel bolt materials in Table KM-400-1 and Table KM-400-1M.
 - KM-4: Added high strength low alloy steel castings in Table KM-400-1 and Table KM-400-1M.
 - KM-4: Revised Table KM-400-1 and Table KM-400-1M notes
 - KM-4: Modified temperature limits for Grade XM-12 630 H1150 / H1150M in Table KM-400-2 and Table KM-400-2M.
 - KM-8: Added a new section regarding rules for the use of castings for impulsively loaded vessels.
- **Location:** Part KD
 - KD-2: Added new paragraphs KD-236.1 and KD-236.2 to incorporate requirements for elastic-plastic analysis with a true stress-strain curve model.
 - KD-2: Modified the existing strain limits for impulsively loaded vessels in KD-240(d) to align with test data.
 - KD-2: Revised KD-240(e) bolt analysis to expand the allowable design methods.
 - KD-3: Revised the equations for fatigue curves in KD-320.
 - KD-4: Added new paragraph to KD-430 regarding crack growth rate testing for unlisted materials.
 - KD-4: Added new paragraphs KD-450 and KD-451 to allow for development of design specific weld acceptance criteria.
 - KD-6: Revised rules for Tapered Threads in KD-620.
 - KD-10: Revised paragraphs KD-1043(a), KD-1043(d) and KD-1048(b) and deleted paragraph KD-1045(d) to clarify KD-10 Specimen Validity Check.



BPVC Section VIII

Rules for Construction of Pressure Vessels



Division 3 Significant Changes

- **Location:** KD-4 and Nonmandatory Appendix D
 - Deleted Nonmandatory Appendix D, moving the crack growth rate factors from Table D-500 into KD-4 as new Table KD-431, and made appropriate clarifications to KD-120 and KD-4.
- **Location:** KF-615
 - Revised to clarify toughness requirements for welds.
- **Location:** Part KE
 - Revised to include eddy current examination.
 - Added new Section KE-270 for the examination of castings.
- **Location:** KS-320
 - Added statement to recognize deterioration of radiographic film is expected and that deterioration does not violate the requirements of record maintenance.
- **Location:** KT-3
 - Added paragraphs in KT-304 and KT-305 relative to hydrostatic testing of special constructions such as combination units and jacketed vessels.
 - Revised KT-311 to introduce a constraint on materials used for the lower limit of hydrostatic test pressure.



BPVC Section X

Fiber-Reinforced Plastic Pressure Vessels



Significant Changes

- **Location:** RD-7
 - Revised para. RD-7 to include “rods and bars” to align with BPV Section VIII.
- **Location:** RD-1111, RD-1186, RD-1200, RD-1210, & 1-110(c), Table AJ-1, Table AJ-4(26), RD-900, Form Q-120, Form RP-3.
 - Requirements for design engineer qualifications were revised to align with other ASME Codes & Standards.
- **Location:** Mandatory Appendix 8 – Class III Vessels with Liners for High Pressure Fluids in Stationary Service
 - Revised the requirements for Hydraulic Proof Pressure to be a range of 1.25 to 1.5 times the design pressure.
- **Location:** Data Report Forms RP-1, RP-2, RP-3 and RP-4
 - Correct the minimum allowable temperature text in the Data Report Forms RP-1, RP-2, RP-3, and RP-4.



BPVC Section XII

Rules for Construction and Continued Service of Transport Tanks



Significant Changes

- **Location:** Tables TM-130.2-1, TM-130.2-2, TM-130.2-4, TM-130.2-5, and TM-130.2-7
 - Updated these tables to remove materials not approved for use in Section XII by Section II Part D.
- **Location:** TD-300
 - Revised Paragraph TD-300.2(b) to correct the thickness calculation formula. Specifically, the term "4t" should be "4P".
- **Location:** Part TS
 - TS-100, TS-110, and TS-130 were updated to better align with Section VIII, Div 1 which is currently being used in the transport industry.
- **Location:** Model Appendix 1
 - A new paragraph was added in Article 1-1.4.2 with the title "Cargo tank securement/attachment". A new paragraph was added in Article 1-1.5 to ensure designer considers ground clearance requirements. Article 1-4.4(d) was revised to clarify the pressure cycle requirements and propose a more practical and yet conservative design requirement for pressure cycles. Article 1-4.4 was revised to add the design requirements of inner vessel and outer jacket Article 1-4.7 was revised to indicate that T stamping of outer jacket is not required.
- **Location:** Model Appendix 3
 - Article 3-1.8 was revised to indicate T stamping is not require for outer jacket.
- **Location:** Nonmandatory Appendix E
 - A new paragraph was added to handle cooling shields and venting from cooling shields, like what is specified in ISO 20421-1. A new paragraph E-12 Hydrogen Environment Embrittlement of Cold-Worked Stainless Steels at Low Temperatures was added to provide guidance on this topic by referring Section II-D(C) or (M), A702.1.6. Nonmandatory Appendix E-6(o) has been revised. The required minimum melting point of brazing material was changed from 538C (1000F) to 593C (1100F).

Service & Reference



- **BPVC Section II – Materials**
- **BPVC Section V – Nondestructive Examination**
- **BPVC Section IX – Welding, Brazing, and Fusing Qualifications**
- **BPVC Section XIII – Rules for Overpressure Protection**



BPVC Section II Materials



Part A Significant Changes

- **Location:** Statement of Policy on the Use of ASME Material Specifications
 - This statement of policy has been revised to clarify the committee’s position found in the scope sections of the various specifications as well as add the committee’s position on notes and terminology.
- **Location:** General
 - Updates to the latest adopted edition have been made to ~30 specifications. Three new Specifications have been added SA-859/SA-859M “Standard Specification for Age-Hardening Alloy Steel Forgings for Pressure Vessel Components”, SA-1091/SA-1019M “Standard Specification for Steel Castings, Creep-Strength Enhanced Ferritic Alloy, for Pressure-Containing Parts, Suitable for High-Temperature Service”, and SA-ISO 898-1 “Specification for Fasteners Made of Carbon Steel and Alloy Steel Part 1: Bolts, Screws and Studs With Specified Property Classes – Coarse Thread and Fine Pitch Thread”.
- **Location:** SF-568M “Specification for Carbon and Alloy Steel Externally Threaded Metric Fasteners”
 - This specification has been removed.
- **Location:** Mandatory Appendix II ASME Material Specifications
 - This appendix has been revised to add clarification regarding the term “all acceptable editions” in the II-200 Tables.
- **Location:** Mandatory Appendix IV Guidelines on the Approval of New Materials Under the ASME BPVC
 - This appendix has been revised to address specific testing and post examination required for advanced materials that can exhibit intolerance to in-service damage.



BPVC Section II Materials



Part B Significant Changes

- **Location:** Statement of Policy on the Use of ASME Material Specifications
 - This statement of policy has been revised to clarify the committee’s position found in the scope sections of the various specifications as well as add the committee’s position on notes and terminology.
 - **Location:** General
 - Updates to the latest adopted edition have been made to 13 specifications.
 - **Location:** SB-625 “Specification for UNS N08925, UNS N08031, UNS N08034, UNS N08932, UNS N08926, UNS N08354, UNS N08830, and UNS R20033 Plate, Sheet, and Strip”
 - Mandatory heat treatment requirements for N08354 have been added to this specification.
 - **Location:** Mandatory Appendix II ASME Material Specifications
 - This appendix has been revised to add clarification regarding the term “all acceptable editions” in the II-200 Tables.
 - **Location:** Mandatory Appendix IV Guidelines on the Approval of New Materials Under the ASME BPVC
 - This appendix has been revised to address specific testing and post examination required for advanced materials that can exhibit intolerance to in-service damage.
 - SFA-5.25/SFA-5.25M, SFA-5.01M/SFA-5.01(R2024), SFA-5.02/SFA-5.02M, SFA-5.1/SFA-5.1M, SFA-5.3/SFA-5.3M, SFA-5.10/SFA-5.10M, SFA-5.12/SFA-5.12M, SFA-5.13/SFA-5.13M, SFA-5.14/SFA-5.14M, SFA-5.15, SFA-5.18/SFA-5.18M, SFA-5.21/SFA-5.21M, SFA-5.22/SFA-5.22M
- ³⁵ Updates have been made to the listed specifications to stay current with the latest AWS revisions.



BPVC Section II Materials



Part DC Significant Changes

- **Location:** General
 - Code cases 2223-3, 2432-1, 2478, 2620, 2628, 2643, 2698-2, 2761, 2778, and N-898 have been incorporated.
- **Location:** General
 - Additions and revisions to stress tables and mechanical property tables have been made to support updated specifications.
- **Location:** General
 - Several N08XXX Alloys are now considered ferrous alloys and are covered by SA Specifications. As part of this transition, the stress lines have been added to the ferrous tables. NOTE: The plan is to then remove these duplicated lines from the nonferrous tables in a future edition.
- **Location:** Table 6A
 - SF-568M “Specification for Carbon and Alloy Steel Externally Threaded Metric Fasteners” has been removed.
- **Location:** Mandatory Appendix 5 Guidelines on the Approval of New Materials Under the ASME BPVC
 - This appendix has been revised to address specific testing and post examination required for advanced materials that can exhibit intolerance to in-service damage.



BPVC Section II Materials



Part DM Significant Changes

- **Location:** General
 - Code cases 2223-3, 2432-1, 2478, 2620, 2628, 2643, 2698-2, 2761, 2778, and N-898 have been incorporated.
- **Location:** General
 - Several N08XXX Alloys are now considered ferrous alloys and are covered by SA Specifications. As part of this transition, the stress lines have been added to the ferrous tables. NOTE: The plan is to then remove these duplicated lines from the nonferrous tables in a future edition.
- **Location:** Table 6A
 - SF-568M “Specification for Carbon and Alloy Steel Externally Threaded Metric Fasteners” has been removed.
- **Location:** Mandatory Appendix 5 Guidelines on the Approval of New Materials Under the ASME BPVC
 - This appendix has been revised to address specific testing and post examination required for advanced materials that can exhibit intolerance to in-service damage.



BPVC Section V

Nondestructive Examination



Significant Changes

- **Location:** Article 1
 - Revised Para. T-120(e)(1)(-e)(-3), to make it clearer that that the requirements of para. T-120(e)(1)(-e)(-3) apply to both written procedure (T-120(e)(1)(-e)) and practical examination (T-120(e)(1)(-e)(-1)).
 - Para. T-120, Adoption of 2024 editions of American Society for Nondestructive Testing (ASNT) TC-1A, and CP-189 Standards.
- **Location:** Article 2
 - Revised Para. T-275 to eliminate the word "permanently" and to clarify acceptable methods of obtaining location marker traceability.
 - Revised Para. T-284 & VIII-284 to add requirements regarding the acceptance of radiographs in case the lead symbol "B" is not visible.
 - Include additional requirements for bendable, flexible, and curved digital detector arrays (DDAs).
 - Revised Para. IX-284 to add requirements regarding the acceptance of radiographs in case the lead symbol "B" is not visible.



BPVC Section V

Nondestructive Examination



Significant Changes

- **Location:** New Article 3
 - Relocated all Full Matrix Capture (FMC) requirements from Article 4 to Article 3.
- **Location:** Article 4
 - Revised Para. T-434.1.4 to add clarity of cladding requirements. This helps distinguish between material clad and weld clad.
- **Location:** Article 9
 - Added requirements for surface preparation.
- **Location:** Article 10
 - Added requirements for calculation of the test sensitivity as well as requirements to evaluate the test sensitivity that is achieved during a leak test (LT).
 - Revised Mandatory Appendix I, Para. I-1032 and Mandatory Appendix II, Para. II-1031 to include new requirements for bubble testing solution.
- **Location:** Article 11
 - Removed a contradiction between paras. T-1122 (c) and T-1171 regarding the pressurization of Fiber-Reinforced Thermosetting Piping (FRP) for acoustic emissions (AE) testing using liquid or gases or both.



BPVC Section V

Nondestructive Examination



Significant Changes

- **Location:** Subsection B
 - Adoption of latest editions of numerous American Society for Testing and Materials (ASTM) Specifications within Subsection B. This includes:
 - American Society for Testing and Materials (ASTM) A263, A264, A265, A388/A388M, A578/A578M, & A609/A609M.
 - American Society for Testing and Materials (ASTM) D516, D7091, & D808.
 - American Society for Testing and Materials (ASTM) E94/E94M, E165/E165M, E243, E317, E709, E747, E1255, E1411, E1416, E1475, E1647, E2007, E2096/E2096M, E2297, E2491, E2775, & E2929.



BPVC Section V

Nondestructive Examination



Significant Changes

- **Location:** New Subsection C
 - Added a new Subsection C that addresses Inservice Nondestructive Examination (NDE) Techniques. Some of the Nondestructive Examination (NDE) Techniques that will be included in the 2025 edition are:
 - Radiographic Examination (RT).
 - Full Matrix Capture (FMC).
 - Eddy Current Examination (ET).
 - Visual Examinations (VT).
 - Acoustic Emissions (AE). This was relocated from Subsection A, Article 13 to new Subsection C.
 - Alternating Current Field Measurement Technique (ACFMT). This was relocated from Subsection A, Article 15 to new Subsection C.
 - Acoustic Pulse Reflectometry (APR). This was relocated from Subsection A, Article 18 to new Subsection C.
 - Guided Wave Examination (GW). This was relocated from Subsection A, Article 19 to new Subsection C.
 - Pulsed Eddy Current Technique for Corrosion Screening (PEC). This was relocated from Subsection A, Article 21 to new Subsection C.



BPVC Section IX

Welding, Brazing, and Fusing Qualifications



Significant Changes

- **Location:** Part QG – General Requirements
 - New/revised definitions of ‘Fusing’ and ‘Fusion’ as used in Part QF & QG-109. Terms in the text were revised to be consistent with these definitions.
- **Location:** Article 1
 - Modified the acceptance criteria for porosity for diffusion welding in QW-185.3.
- **Location:** Article 2
 - Addition of a new Spot Size variable and revised Table QW-264.1
 - Table QW-253 - Addition of a new supplementary essential variable to provide rules addressing bead width.
 - QW-202.2 (a) and (b) revised to eliminate the reference to QW-451 directly.
- **Location:** Article 3
 - Revised QW-381.1, QW-382 .1(d) and Table QW-453.



BPVC Section IX

Welding, Brazing, and Fusing Qualifications



Significant Changes

- **Location:** Article 4
 - Deleted the third row from QW-452.4 and modified the diameter range of the second row to be from 1 inch to less than 2 7/8 inch.
 - Deleted paragraph QW-421.3(a). Renamed paragraph QW-421.3(b) to (a), and (c) to (b). In Table QW/QB-421.2 moved P-No. to the column title row, removed P-No. from each individual row, and changed brazing P-No. groupings.
 - Revised variable QW-403.15 in Table QW-260 from Essential to Supplementary Essential variable.
 - Revised Note (1) of QW-433 - revised to reflect the fact that F-numbers are assigned to welding electrodes, rods and wires based on their usability characteristics. F-numbers are not assigned to weld deposits.
 - Removed paragraph QW-421.3 (c) and deleted all four references to S-Numbers in QW-421.4.
 - Revised Table QW/QB-421.2 in its entirety.
- **Location:** Article 6
 - Changed QW-410.7 from nonessential to essential variable in Table QW-651.



BPVC Section IX

Welding, Brazing, and Fusing Qualifications



Significant Changes

- **Location:** Article 4 - Table QW/QB-422
 - Revised Table QW/QB-422 and added WPT 2H (UNS R50400) to B/SB-363.
 - Revised Table QW/QB-422 to include Grade WP11 Cl. 2 for A/SA-234.
 - Added CSA Z245.16 and Z245.17 specifications and grades to Table QW/QB-422.
 - Added A or SA-351 Grade CG3M to Table QW/QB-422.
 - Added A743 Grade CF10SMnN (UNS J92972) to Table QW/QB-422.
 - Revised CSA Z245.1 Brazing P-numbers in Table QW/QB-422.
 - Revised all API 5L grades in Table QW/QB-422.
 - Removed UNS numbers in Table QW/QB-422 for:
 - A/SA-508 22, Cl. 3; 4N, Cl. 1, 2 and 3; 5, Cl. 1 and 2;
 - A/SA-533 E, Cl. 1 and 2;
 - A/SA-541 22, Cl. 3, 4 and 5;
 - A/SA-542 A and B, Cl. 1, 2, 3, 4 and 4a;
 - A/SA-543 B, Cl. 1, 2 and 3;
 - A/SA-739 B22



BPVC Section IX

Welding, Brazing, and Fusing Qualifications



Significant Changes

o **Location:** Article 4 - Table QW/QB-422 (Continued)

- Revised Table QW/QB-422. Added TP310MoCbN (UNS S31025) to A/SA-213.
- Added EN 10213-2 specification, grade GX4CrNi13-4 to Table QW/QB-422.
- Revised Table QW/QB-422 ISO 15608 group for AS or SA/AS 1548 PT430 and PT460 in Table QW/QB-422.
- Revised weld metal product form Spec. No. in Table QW/QB-422.
- Revised all references to cobalt base alloys from P-no. 49 to P-no. 81, and add references to P-no. 54 titanium base alloys
- Revised Table QW/QB-422 to assign welding P-Number 45 and brazing P-No. 420 to UNS N08935 for material specifications B or SB-163, B625, B649, and B677.
- Added B/SB-150 UNS C63200 to Table QW/QB-422.
- Revised Table QW/QB-422. Added UNS S41003 to A/SA-240.
- Revised ISO 15608 group for:
 - A/SA-533 B and C , Cl. 3;
 - A/SA-672 J100



BPVC Section IX

Welding, Brazing, and Fusing Qualifications



Significant Changes

- **Location:** Article 14
 - Updated QB-402.1 to correct the reference to QB-153.1. Update QB-402.2 to make reference to new Table QB-421.
 - Addition of a new Table QB-421 which is a listing of additional brazing P-numbers qualified based on the base metal used in the performance qualification test.
- **Location:** Article 21
 - Revised terminology of essential variable QF-406.7 to be generic, clarified table description, and added it to butt-fusing to differentiate between hydraulic and manual butt fusing.
 - Added new essential variable QF-406.8 for fusing of piping greater than NPS 48 since different models require different skills to operate.
 - In Table QF-452.3 Merged confusing and redundant category 6 to <8 with the first category. Added a new category for piping larger than NPS 48 including restriction to specific model of machine to be used for production.
 - Revised diameter limits to reflect NPS and corresponding DN sizes rather than O.D. dimensions.
 - Deleted '-2006' from ASME B46.1 reference.
- **Location:** Mandatory Appendix E
 - Updated the table in Mandatory Appendix E to permit the latest Editions of the SWPSs currently published by AWS and earlier Editions.



BPVC Section XIII

Rules for Overpressure Protection



Significant Changes

- **Location: Para 9.7.7 Flow Resistance Method**
 - A detailed description has been added for the method by which minimum net flow area evaluation is performed.
- **Location: Part 6 Spring-Actuated Non-Reclosing Devices**
 - This is a complete rewrite of the entire section.
- **Location: I-2 Definitions of Terms**
 - Many definitions have been added or revised to align and incorporate the definitions from PTC 25.
- **Location: Mandatory Appendix V Performance Testing of Pressure Relief Devices, Nonmandatory Appendix D Examples of Determining Flow Rate Uncertainties and Nonmandatory Appendix E Example of Pressure Tap Profile Comparison**
 - Requirements have been incorporated from the PTC 25 Performance Test Codes – Pressure Relief Devices standard.
- **Location: New Nonmandatory Appendix Design Guidelines for Pressure-Containing and Pressure-Retaining Shell Parts of Pressure Relief Devices**
 - This new appendix provides guidelines for designing the pressure-containing and pressure-retaining shell parts of pressure relief devices such as bodies, bonnets, yokes, nozzles, caps, body-to-bonnet joints, cover-to-body joints, and rupture disk holders.

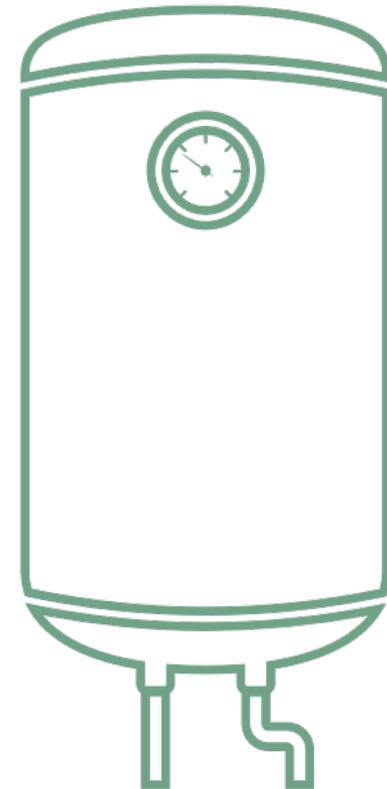
ASME BOILER & PRESSURE VESSEL CODE

2025 Key Changes Presentation

APPENDIX

Boiler Sections

- Section I – Rules for Construction of Power Boilers
- Section IV – Rules for Construction of Heating Boilers
- Section VI – Recommended Rules for the Care and Operation of Heating Boilers
- Section VII – Recommended Guidelines for the Care of Power Boilers

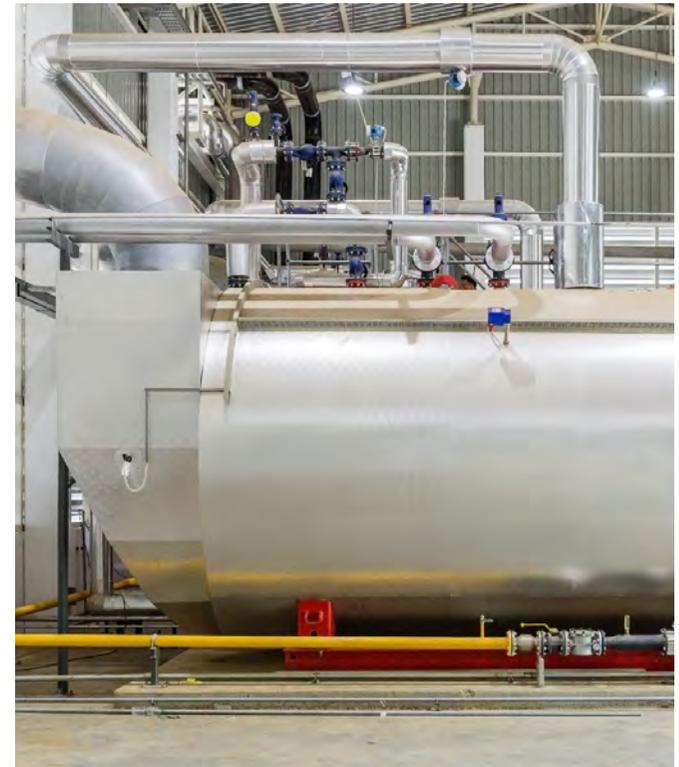


Section I – Rules for Construction of Power Boilers

Section I provides requirements for all methods of construction of power, electric, and miniature boilers; high temperature water boilers used in stationary service; and power boilers used in:

- Locomotive
- Portable
- Traction service

The rules are applicable to boilers in which steam or other vapor is generated at pressures exceeding 15 psig and high-temperature-water boilers intended for operation at pressures exceeding 160 psig and/or temperatures exceeding 250° Fahrenheit.



Section IV – Rules for Construction of Heating Boilers

Section IV provides requirements for the design, fabrication, installation, and inspection of steam heating, hot water heating, hot water supply boilers, and potable water heaters that are intended for low-pressure service and are directly fired by oil, gas, electricity, coal, or other solid or liquid fuels.

Section IV contains appendices that cover:

- Definitions relating to boiler design and welding
- Quality control systems
- Methods along with examples of
 - Checking safety-valve and safety-relief-valve capacity
 - Calculation and computation



Section VI – Recommended Rules for the Care and Operation of Heating Boilers

This Section covers general descriptions, terminology, and operation guidelines applicable to steam heating, hot-water heating, hot-water supply, cast iron, and potable water boilers that are limited to the operating ranges of Section IV Heating Boilers.

Section VI includes:

- Guidelines for associated controls and automatic fuel burning equipment
- Illustrations showing typical examples of available equipment
- A glossary of terms commonly associated with boilers, controls, and fuel burning equipment

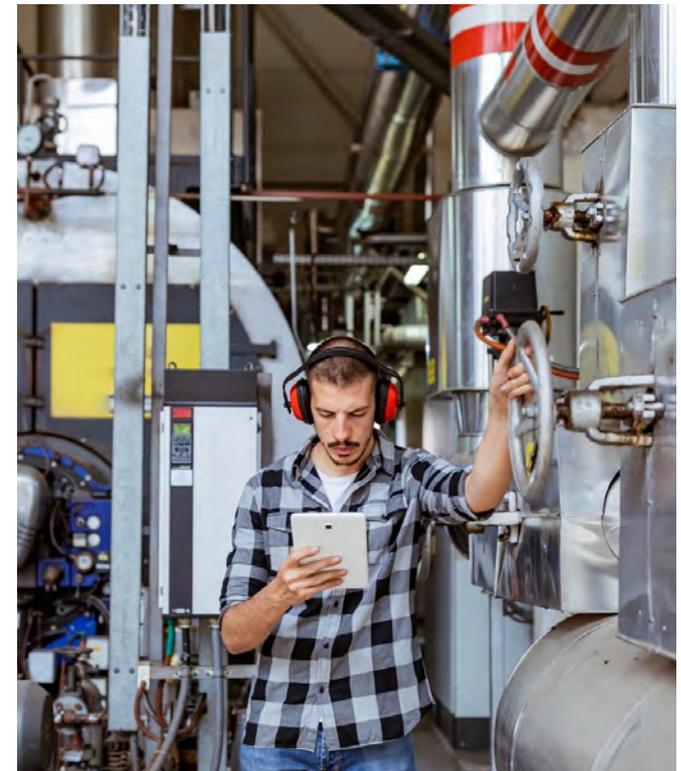


Section VII – Recommended Guidelines for the Care of Power Boilers

This Section provides recommended guidelines to promote safety in the use of power boilers. The term “power boiler”, in this Section, includes stationary, portable, and traction-type boilers, but does not include locomotive and high-temperature-water boilers, nuclear power-plant boilers, heating boilers, pressure vessels, or marine boilers. Emphasis has been placed on industrial type boilers because of their extensive use.

Section VII includes:

- Guidelines to assist those directly responsible for operating, maintaining, and inspecting power boilers.
- Operation of auxiliary equipment and appliance guidelines that affect the safe and reliable operation of power boilers.



Pressure Vessel Sections

- Section VIII – Rules for Construction of Pressure Vessels
- Section X – Fiber-Reinforced Plastic Pressure Vessels
- Section XII – Rules for Construction and Continued Service of Transport Tanks



Section VIII – Rules for Construction of Pressure Vessels, Division 1

Division 1 is very important from a design perspective because of the compulsory requirements, specific prohibitions, and impulsive, guidelines for materials, design, fabrication, inspection, and testing, markings and reports, overpressure protection, and certification of pressure vessels having an indoor or external pressure more than 15 psi (100 kPa)

This Division isn't numbered within the traditional method (Part 1, Part 2, etc.) but is structured with Subsections and Parts, which contains letters followed by variety.

“Design-by-Rule” philosophy



Section VIII – Rules for Construction of Pressure Vessels, Division 2, Alternative Rules

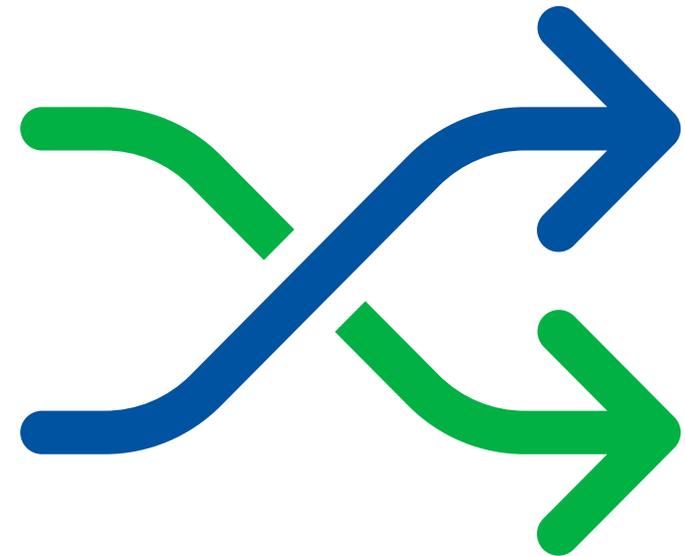
- Division 2 provides requirements applicable to the design, fabrication, inspection, testing, and certification of pressure vessels operating at either internal or external pressures exceeding 15 psig.
- This pressure may be obtained from an external source or by the application of heat from a direct or indirect source, or any combination thereof.
- These rules provide an alternative to the minimum requirements for pressure vessels under Division 1 rules. These rules may also apply to human occupancy pressure vessels, typically in the diving industry.
- Both “Design-by-Rule” and “Design-by-Analysis” (a methodical approach for demonstrating the adequacy of a pressure vessel component design, which provides detailed rules for performing analyses) philosophy



Section VIII – Rules for Construction of Pressure Vessels, Differences Between Divisions 1 and 2

- ASME Section VIII, Division 2 is intended for purpose-specific vessels with a defined fixed location.
- Another major difference between the Division 1 and Division 2 lies in failure theory. While Division 1 is based on normal stress theory, Division 2 is based on maximum distortion energy.

Von Mises Distortion Energy Theory (1913). In this theory, failure by yielding occurs when at any point in the body, the distortion energy per unit volume in a state of combined stress becomes equal to that associated with yielding in a simple tension test.



Section VIII – Rules for Construction of Pressure Vessels, Division 3, Alternative Rules for Construction of High Pressure Vessels

- Provides requirements applicable to the design, fabrication, inspection, testing, and certification of pressure vessels operating at either internal or external pressures, generally above 10,000 psi.
- Division 3 rules cover vessels intended for a specific service and installed in a fixed location or relocated from work site to work site between pressurizations.
- Division 3 does not establish maximum pressure limits for Section VIII, Divisions 1 or 2.



Section X – Fiber-Reinforced Plastic Pressure Vessels

This Section provides requirements for the construction of a fiber-reinforced plastic (FRP) pressure vessel in conformance with a manufacturer's design report.

- Includes production, processing, fabrication, inspection and testing methods required for the vessel.
- Speaks to three Classes of vessel design:
 - Class I and Class III - qualification through the destructive test of a prototype
 - Class II - mandatory design rules and acceptance testing by nondestructive methods.
- These vessels are not permitted to store, handle or process lethal fluids.
- Vessel fabrication is limited to the following processes: bag-molding, centrifugal casting and filament-winding and contact molding.



Section XII – Rules for Construction and Continued Service of Transport Tanks

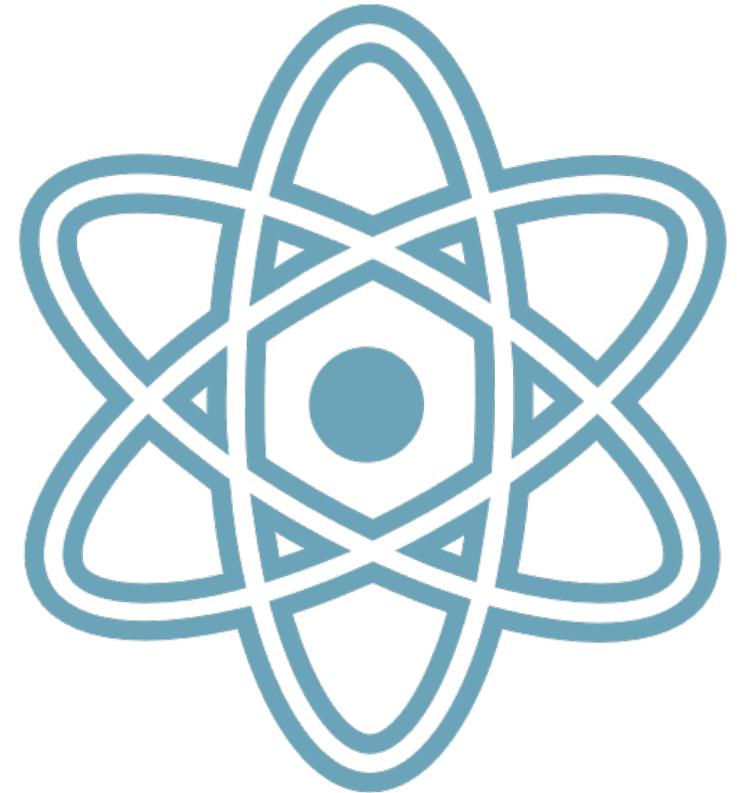
This Section covers requirements for construction and continued service of pressure vessels for the transportation of dangerous goods via highway, rail, air, or water at pressures from full vacuum to 3,000 psig and volumes greater than 120 gallons.

- "Construction" is an all-inclusive term comprising materials, design, fabrication, examination, inspection, testing, certification, and over-pressure protection.
- "Continued service" is an all-inclusive term referring to inspection, testing, repair, alteration, and recertification of a transport tank was in service.
- This Section contains modal appendices containing requirements for vessels used in specific transport modes and service applications.



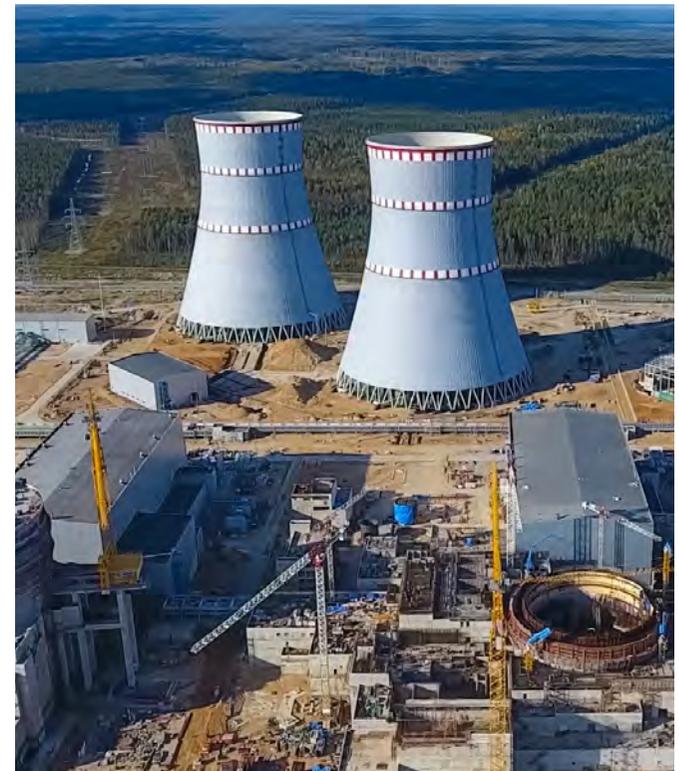
Nuclear Sections

- Section III – Rules for Construction of Nuclear Facility Components
- Section XI – Rules for Inservice Inspection of Nuclear Reactor Facility Components



Section III – Rules for Construction of Nuclear Facility Components

- Subsection NCA – General requirements for Divisions 1 and 2
- Appendices – Mandatory and non-mandatory appendices referenced by all Divisions of Section III
- Division 1 – Requirements for Class 1, 2, 3, and MC Components, Supports, and Core Support Structures
 - Subsection NB – Class 1 Components
 - Subsection NCD – Class 2 and 3 Components
 - Subsection NE – Class MC Components
 - Subsection NF – Supports
 - Subsection NG – Core Support Structures
- Division 2 – Code for Concrete Containments
- Division 3 – Containment Systems and Transport Packaging
- Division 4 – Fusion Energy Devices
- Division 5 – High Temperature Reactors



Section XI – Rules for Inservice Inspection of Nuclear Reactor Facility Components

Provides requirements to maintain the nuclear power plant or nuclear reactor facility while in operation and to return the plant or facility to service following outages.

- **Division 1 Rules for Inspection and Testing of Components of Light-Water-Cooled Plants:**

Rules for the examination, inspection, and testing; NDE methods, qualifications, and requirements; evaluation and acceptance standards for flaws, defects, and relevant conditions; repair/replacement processes and correction actions/measures in light water-cooled nuclear power plants.

- **Division 2 Requirements for Reliability and Integrity Management (RIM) Programs for Nuclear Reactor Facilities:**

Provides requirements for the creation of the Reliability and Integrity Management Program, which addresses the entire lifecycle of a facility for all types of nuclear reactor facilities, including advanced nuclear reactor designs.



Service & Reference Sections

- Section II – Materials
- Section V – Nondestructive Examination
- Section IX – Welding, Brazing, and Fusing Qualifications
- Section XIII – Rules for Overpressure Protection



Service & Reference Sections

- Section II Materials
 - Provides material specifications and material properties adequate for safety in the field of pressure equipment for ASME construction that is referenced by the other BPVC sections.
- Section V Nondestructive Examination
 - Provides requirements and methods for nondestructive examination (NDE) to detect surface and internal imperfections in materials, welds, fabricated parts, and components. They include radiographic examination, ultrasonic examination, liquid penetrant examination, magnetic particle examination, eddy current examination, visual examination, leak testing, and acoustic emission examination.
- Section IX Welding, Brazing and Fusing Qualifications
 - Provides requirements relating to the qualification of welding, brazing, and fusing procedures including rules relating to the qualification and requalification of welders and brazers.



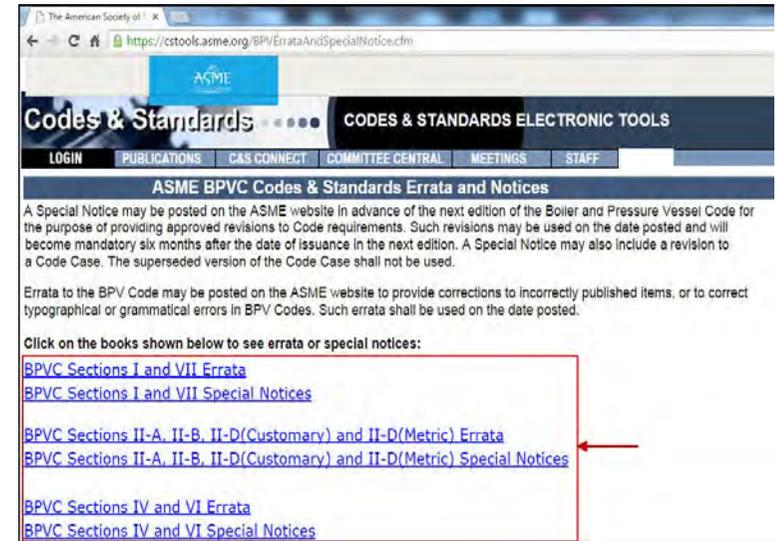
Section XIII – Rules for Overpressure Protection

- Provides rules for the overpressure protection of pressurized equipment such as boilers, pressure vessels, and piping systems.
- Provides clear pressure integrity and performance requirements, enabling users to identify a pressure relief device's performance along with anything needed to support overpressure protection.
- Organizes all requirements by pressure relief device type, including any exceptions or unique ones identified in a specific BPVC section, enabling users to easily identify all requirements across a device.
- Places capacity certification requirements across BPVC's many sections into one centralized location for easy reference, allowing users to easily compare the test results of different equipment across similar applications.



Errata

- Errata provide corrections to incorrectly published items, or to correct typographical or grammatical errors in code and standard.
- Errata to codes and standards may be posted on the ASME website under the Committee Pages.
- Such errata shall be used on the date posted.
- On the Committee Page, there is an option available to automatically receive an e-mail notification when errata are posted for a particular code or standard.



Boiler & Pressure Vessel Code

Code Cases

- Created when an urgent need arises for alternative rules concerning materials, construction, or an inservice inspection activity not covered by existing BPVC rules
- Released 7 times over the 2-year BPVC edition cycle
- Provided as part of a subscription service for purchasers of BPV or Nuclear Code Case books
- Available for download until a supplement is issued, after which, the PDF is removed



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