

THE NEW SUBSECTION D OF ASME SECTION VIII, DIVISION 1

The magic date for the 2025 edition of the ASME Boiler and Pressure Vessel Code is July 1. That is when the new edition of ASME Section VIII, Division 1, along with the other Sections, will be officially issued. By all accounts, the changes to the 2023 edition will be massive. The intent in this article is to focus on just one of the several changes planned for the new edition. That change is the creation of a new Subsection in the code.

The current structure of the ASME Section VIII, Division 1, is as follows:

- Introduction: consisting of paragraphs U-1 through U-5
- Subsection A: consisting of UG paragraphs for General Requirements
- Subsection B: consisting of various methods of fabrication – Welding, Forging and Brazing
- Subsection C: consisting of requirements pertaining to classes of materials
- Mandatory Appendices
- Nonmandatory Appendices

Subsection C consists of eleven parts, of which three, namely ULW (Pressure Vessels Fabricated by Layered Construction), UHX (Shell-and-Tube Heat Exchangers) and UIG (Pressure Vessels Constructed of Impregnated Graphite), do not fit the description for Subsection C – Requirements Pertaining to Classes of Materials. That at some point, these three Parts will be removed from Subsection C was always on cards. Two of the three parts – Part UHX and Part UIG will be moved out of Subsection C to the newly created Subsection D (Requirements for Specific Types of Pressure Vessels and Components) in the 2025 edition.

Similarly, there are currently eleven Mandatory Appendices and one Nonmandatory Appendix that provide rules for specific types of pressure vessels and components. These are as follows:

- Appendix 5: Flexible Shell Element Expansion Joints
- Appendix 9: Jacketed Vessels
- Appendix 13: Vessels of Noncircular Cross-section
- Appendix 17: Dimpled or Embossed Assemblies
- Appendix 19: Electrically Heated or Gas Fired Jacketed Stem Kettles
- Appendix 22: Integrally Forged Vessels
- Appendix 24: Design Rules for Clamped Connections
- Appendix 26: Bellows Expansion Joints
- Appendix 27: Alternate Requirements for Glass-lined Vessels
- Appendix 45: Plate Heat Exchangers
- Appendix 48: Vessels with Acrylic Cylindrical Shells
- Appendix EE: Half Pipe Jackets

The eleven Mandatory Appendices listed above will be moved to the newly created Subsection D. The new Subsection will now consist of the following Parts:

- Part UAS – Vessels with Acrylic Cylindrical Shells
- Part UCC – Design Rules for Clamped Connections
- Part UDA – Dimpled or Embossed Assemblies

- Part UEB – Bellows Expansion Joints
- Part UEJ – Flexible Shell Elements Expansion Joints
- Part UGL – Alternate Requirements for Glass-lined Vessels
- Part UHX – Shell-and-Tube Heat Exchangers
- Part UIF – Integrally Forged Vessels
- Part UIG – Pressure Vessels Constructed of Impervious Graphite
- Part UJK – Electrically Heated or Gas Fired Jacketed Steam Kettles
- Part UJV – Jacketed Vessels
- Part UNC – Vessels of Noncircular Cross-section
- Part UPX – Plate Heat Exchangers

The exact changes to the 2023 edition and the makeup of Subsection D will be known on July 1. If the structure of the new Subsection is as indicated above, then I would also like to see in the future editions two other parts included – Part ULW (Pressure Vessels Fabricated by Layered Construction) and Part UHJ?? (Half Pipe Jackets). Rules for half pipe jackets are currently included in Appendix EE.

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