CLEAN HYDROGEN at ASME

Quarterly Portfolio Update, December 2022

UPCOMING CONFERENCES

Turbomachinery Technical Conference & Exposition (Turbo Expo) June 26–30, 2023
Boston, MA, USA
https://event.asme.org/Turbo-Expo

A global event for professionals who want to stay current on new technology and industry trends and developments in turbomachinery. Program sessions led industry experts cover Hydrogen and Energy Storage, Clean Combustion and Dynamics, Heat Transfer, Materials and Ceramics, Mechanical Integrity, Aerodynamics, and more.

Pressure Vessels & Piping Conference® (PVP)
July 16–21, 2023, Atlanta, GA
https://event.asme.org/PVP

The PVP Conference is the ideal platform to keep up with new technologies, network and interact with experts, practitioners, and peers in the Pressure Vessels & Piping area.

ASME Power Division Conference (Power R&D)
August 6–9, 2023, Long Beach, CA
https://event.asme.org/POWER

The conference is a unique event that focuses research and development specifically relevant to power generation as it applies to current and future power industry issues, applications, and emerging technologies. Program topics are:

- Advanced Combustion Systems and Cycles
- Steam Power Generation
- Plant Management, Performance & Operations
- Sustainable Power Solutions
- Digital Twins Analysis & Cyber-Physical Systems

For other ASME events see Conference & Event Overview

UPCOMING MEETINGS AND EVENTS

February 5-10, 2023 - Boiler Code Week – Virtual Meetings

May 14-19, 2023 - Boiler Code Week - Las Vegas, NV

April 2023 – B31 Standards Committee Meeting, Virtual meetings, Date to be selected:

Sep. 11-15, 2023 - Code Week B31 & Nonmetallic Pressure Piping Code Week (B31 Code Week), In-person - Location: TBD

HYDROGEN FOR THE GREEN ECONOMY

- ASME formed a Hydrogen for a Green Economy Steering Committee to identify industry needs and propose products and services to address those needs through cross-Society recommendations.
- Developing a *Guidelines and Gap Analysis of ASME Standards in Hydrogen Value Chains* document to provide:
  - o roadmap of the hydrogen landscape and the audience that the products are addressing, usability, and confusion for hydrogen applications
  - o gap analysis to identify deficiencies in the current standards, or topics that should be considered, based on the current industry practices and challenges.

For other more information see Steering Committee

PRESSURE TECHNOLOGY STANDARDS

ASME Pressure Technology Codes and Standards exist to ensure public safety, support global trade, develop technology and foster knowledge transfer while easing government's regulatory burden. ASME develops consensus standards which can be adopted, applied, and accepted globally.

Following are the most relevant hydrogen-related standards for the hydrogen value chains (production, transportation, storage, and end use):

Boiler Pressure Vessel Code Sections

- BPV VIII, Division 1 - Rules for Construction of Pressure Vessels Division 1
- BPV VIII, Division 2 - Rules for Construction of Pressure Vessels Division 2 – Alternative Rules
- BPV VIII, Division 3 - Rules for Construction of Pressure Vessels Division 3 - Alternative Rules for Construction of High Pressure Vessels
- BPV X - Fiber-Reinforced Plastic Pressure Vessels
- BPV XII - Rules for Construction and Continued Service of Transport Tanks
- BPV II, V, IX & XIII Service Sections

Pipelines and Piping Standards

- B31.12 Hydrogen Piping and Pipelines
- B31.3 Process Piping
- B31.4 Pipeline Transportation Systems for Liquid and Slurries
- B31.8 Gas Transmission and Distribution Systems
- B31.8S Managing Systems Integrity of Gas Pipelines

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Participate in Standards Development

Committees meet on a regular basis to update these standards. All committee meetings are open to the public and you are welcome to join the process. No cost to be a committee member, and you do not need to be an ASME member to be on a committee. Contact the Staff Secretary for more information.

To learn more, visit: go.asme.org/joinCS

CERTIFICATION

Boiler and Pressure Vessel Certification Program

Section VIII Division 1 – Pressure Vessels (U, UM)
Section VIII Division 2 – Pressure Vessels (U2)
Section VIII Division 3 – Pressure Vessels (U3)
Section X – Reinforced Vessels (RP)
Section XII – Transport Tanks (T, PRT)
The ASME BPVC Certification Program conforms to the rules governing the design, fabrication, assembly, and inspection of boiler and pressure vessel components during construction.

Quality Program for Suppliers (QPS)

The QPS program is for any general industry organization regardless of type of product they are producing or the size of the company. Typical companies that would benefit from QPS would be, but are not limited to:

- raw material manufacturers - Ingots, slabs, additive materials
- material manufacturers - forgings, piping, fittings, castings, bolts and nuts, plates, filler metal (materials for welding)
- manufacturers with or without design responsibility - Valve Manufacturers, Oil & Gas, Power Generation, Additive Manufacturing, Green Industries
- Service providers - NDE, Auditing, Heat Treating, Welding (Cladding), Machining, Coating

Go to Certification and Accreditation to learn more

LEARNING & DEVELOPMENT

Courses on the requirements of the Pressure Vessels codes and Pipeline & Piping standards throughout the lifecycle, from design, operation, in-service inspection and quality assurance.

NEW Video-based On Demand Courses

- **EL548** - Failure Prevention, Fitness-for-Service, Repair and Life Extension of Piping, Vessels and Tanks (On Demand)
- **EL554** - Introduction to ASME BPV Code, Section VIII, Division 1 (On Demand)
- **EL556** - ASME BPV Code, Section VIII, Division 2: Design & Fabrication of Pressure Vessel (On Demand)
- **LP106** - ASME BPV Code, Section VIII, Division 1: Pressure Vessel Learning Path

UPDATED Self-Study Courses

- **ZABC15** - ASME B31.3 Process Piping Code Overview (Online Course)
- **LP101** - ASME B31 Process and Power Piping Design Learning Path

UPCOMING Virtual Classes

- **VCPD581** - ASME B31.3 Process Piping Design, Materials, Fabrication, Examination and Testing Combo Course (Virtual Classroom); **Feb 27-Apr 14, Apr 24-Jun 16**
- **VCPD391** - ASME B31.4 Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids (Virtual Classroom); **May 22-25**
- **VCPD370** - ASME B31.8 Gas Transmission & Distribution Piping Systems (Virtual Classroom); **May 1-4**
- **VCPD443** - ASME BPV Code, Section VIII, Division 1: Pressure Vessel Combo Course (Virtual Classroom); **Mar 13-21, Jun 05-13**
- **VCPD857** - ASME BPV Code, Section IX, Welding Overview and Procedures Combo Course (Virtual Classroom); **Mar 27-Apr 27, Apr 17-May 25, May 22-Jun 15**

For more ASME courses see Find Courses
For information - LearningExperience@asme.org

PUBLICATIONS - ASME Digital Collection

Journals

- Journal of Electrochemical Energy Conversion and Storage
- Journal of Energy Resources Technology
- Journal of Engineering for Gas Turbines and Power
- Journal of Fluids Engineering
- Journal of Heat Transfer
- Journal of Pressure Vessel Technology
- Journal of Verification, Validation and Uncertainty Quantification

For info contact: journals@asme.org