HSB

A Munich Re company

ASME Section II – Materials

HSB, a Munich Re company, is a technology-driven company built on a foundation of specialty insurance, engineering and technology, all working together to drive innovation in a modern world.

Course description: This seminar is an introductory overview of ASME Boiler and Pressure Vessel (BPV) Code Section II (materials), Parts A and B (ferrous and nonferrous specifications), and Part D (properties) [2023 Edition], and how they are referenced and used by the Codes of Construction.

The structure of Section II will be addressed and focus on the Codes' requirements for materials, along with brief descriptions of material technical terms that are used throughout the Code. Emphasis will be on metals, but a brief exposure to nonmetals (ceramics and polymers) will also be included.

How the non-nuclear BPV Codes reference, use, and supplement these materials Codes will be presented. Due to the administrative and technical complexities of Code Sections III and XI, specifics to nuclear construction are outside the scope of this seminar. However, most of the general information will be quite applicable to Section III, Divisions 1, 3, and 5, and also valuable for B31 piping applications.

Material documentation and design data case studies will also be reviewed to demonstrate the Code compliance process for such.

Who should attend?

- Individuals working with ASME BPV Codes such as Sections I, IV, VIII-1, VIII-2, VIII-3, or XII who want to gain a broader understanding of the materials requirements
- Purchasing, quality control, and engineering professionals involved with pressure equipment construction will find this seminar quite useful
- Those using Section II for the first time, as well as persons with more extensive Code exposure; experience/training as a metallurgist is not required
- Those who want to gain a better understanding of the "material world":
  - Avoid costly material purchasing mistakes
  - Prevent damage to or misapplication of materials
  - Easily find and correctly apply material data

Topics covered

General	Data/properties	Quality
ASME System & Materials History	Metallurgical Terms and Definitions	Construction Code Material Control Requirements
General Materials Information	Mechanical Properties	Quality Assurance Roles and Responsibilities
	Fabrication and Heat Treatment	Procurement Control
	Allowable Stresses	Quality Verification
	External Pressure Data	Chemistry Testing Requirements
	Physical Properties	Mechanical Testing Requirements
		Examination Requirements
		Material Quality and Repairs
		Welding Requirements for Materials
		Certification and Marking

For more information, contact GetInfo@hsb.com.

HSB
One State Street
P.O. Box 5024
Hartford, CT 06102-5024
Tel: (800) 417-3421

http:/go.hsb.com/gies

2023-255 (New 1/24)