



ASME Section VIII, Division 1 Introduction to Section VIII, Division 1

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 two-day training course is a basic introductory overview of the Section VIII, Division 1 Unfired Pressure Vessels Code. It focuses on the ASME Certificate Holder engaged in the construction of unfired pressure vessels, and organizations conducting repairs or alterations of these vessels under the NBIC.

Topics Covered

Organization and Formatting of VIII-1

Scope of VIII-1

- Pressure and Temperature Scope
- Geometric Scope
- Scope Exemptions

Material Requirements

- Pressure Retaining
- Non-pressure Retaining
- Acceptability
- Code Cases
- Product Forms
- Filler Metals

Material Recertification

- Identified
- Partial Documentation
- Unidentified and Undocumented
- Differences in product form

Standard Pressure Parts

- ASME Accepted Product Standard
- Manufacturers' Standard
- Pressure and Temperature Rating

Material Identification

- Marking Requirements
- Coded Markings
- Subdivided Materials

Material Documentation

- Test Reports
- Certificates of Compliance

Material Inspection

- Condition
- Markings
- Identification

Subsection C Requirements

- Accepted Specifications
- Fabrication Requirements
- NDE Requirements
- Toughness

Design Requirements

- Basic Design Philosophy
- Design Loads
- Responsibilities for Design
- Parameters
- Welded Joint Categories
- Joint Types and Limitations
- Joint Efficiencies
- Application of Radiography

Toughness Requirements

- Determining MDMT
- Exempt or Required
- Notable Exemptions
- Toughness Test Performance
- Base Metal Tests
- PQR Tests
- Production Tests

Fabrication Requirements**Cutting Plates and Other Stock**

- Cut Edge Examination
- Cutting Methods

Forming Shell Sections and Heads

- Acceptable Forming Methods
- Fiber Elongation
- Shape Conformance and Tolerances

Welded Attachments

- Welding Requirements
- Opening in Welds
- Lugs and Fittings

Joint Preparation

- Edge Alignment
- Dissimilar Thickness
- Tack Welds
- Joint Cleaning

Welding Requirements

- Acceptable Welding Processes
- Procedure and Performance
- Qualifications
- Joint Preparation
- Final Welding Inspection Criteria

Postweld Heat Treatment

- Exemptions
- Time at Temperature
- Heating and Cooling Rates
- Thermocouple Placement
- Toughness Implications

Pressure Relief

- Capacity Certification Selection and Installation

Pressure Testing

- Test Pressure Determination
- Test Application

Code Stamping

- Location
- Required Information

Manufacturers' Data Reports

- Preparation and Certification
- Distribution
- Record Retention

For more information, contact GetInfo@hsb.com

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This is a summary of coverages. For all coverages, terms, conditions and exclusions, refer to the actual insurance policy.

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