



ASME Section III Nuclear Certification Process

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 course is an overview of Section III, with an emphasis on Division 1, and is intended to assist technical organizations, utilities, equipment and material manufacturers in the understanding of the Nuclear Code.

This course covers the history of the ASME Boiler and Pressure Vessel Code; its various Construction, Reference and Inspection Code Sections; how they are written, revised and maintained; as well as the workings of the Committee System and basic policies of the Society. It blends the technical and administrative requirements that form the basis for the Section III Quality Programs as detailed in ASME Section III, Div. 1, NCA-4134 and NQA-1. In addition, the process on how to obtain various ASME Nuclear Certificates of Authorization and Accreditation is available.

Topics Covered

ASME Nuclear Certification Process

- Types of Certificates
- QAI-1 - Qualifications and Duties of:
 - Authorized Nuclear Inspection Agency
 - Authorized Nuclear Inspection Supervisor
 - Authorized Nuclear Inspector
- Organization and Use of Section III
- Quality Program Requirements
- Demonstration of Quality Program for ASME Survey

ASME System

- History
- Familiarization with the ASME and its Committee members:
 - Jurisdiction
 - Manufacturer
 - Authorized Inspection Agency
 - National Board
 - Owner/User
 - Voluntary person supported by their employer
 - Delegate Program for persons outside USA and Canada
 - Overview of ASME Codes, I through XI

Introduction to Section III, Div. 1

- Overview of the Code, how Code revisions are issued, definition of Code Cases, Interpretations

Organization and Use of Section III

- Divisions, Articles, Subarticles; Numbering System

Terms and Definitions

- Key terms used in the Code are defined in this topic

Classification of Components

Control of Design Documents

- Design documents such as Owner's Specifications, Design Reports and the responsibility for control of such documents

Duties and Responsibilities

- Discuss the responsibility of the Owner, Manufacturer / Certificate Holder and the Authorized Inspection Agency

Quality Assurance

- Triennial ASME Survey, NCA-4000 requirements and NQA-1 requirements

Procurement Control

- Procurement of items and services, qualification requirements of vendors and subcontractors

Metallic Material Organization Quality Systems Program

- Material organization, quality assurance program requirements, and evaluation or qualification of material organization

NX-2000 Material Requirements

- Permitted materials for pressure retaining parts, marking requirements, different material products, materials testing, heat treatment and storage and handling requirements

Fabrication and Installation & Heat Treatment

- Forming and welding procedure qualification and performance qualification requirements, weld categories, travelers and checklist and rules governing making and repairing welds

Examination Requirements

- NDE requirements for different Code classes in NB, NC, ND, etc.

Testing Requirements

- Hydrotesting, pneumatic testing, gage requirements for testing the system, components and appurtenances, testing procedure and criteria

Measuring and Test Equipment

- Selection, calibration control, handling, storage and record keeping requirements

Certification and Application of ASME Mark with Designator

For more information, contact GetInfo@hsb.com