



# ASME Section VIII, Division 1 – Toughness

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:** Module 1 covers the definition of toughness, factors that affect toughness and methods to test toughness [e.g. Charpy Impact Test, Drop Weight Test].

Module 2 reviews the paragraph UG-84 CHARPY IMPACT TESTS of ASME Section VIII, Division 1 and its various subparagraphs with detailed examples to provide a deeper understanding of the code rules.

Module 3 covers some of the important rules of Part UCS and UHA of ASME Section VIII, Division 1 with detailed problem examples to provide a deeper understanding of the code rules.

### **Who should attend?**

Quality Control or Engineering professionals involved in Pressure Vessel Construction who work with ASME Section VIII, Division 1 and want to gain a broader understanding of the toughness rules.

## Topics covered

What is Toughness?

Why is Toughness a concern?

What are the rules in ASME Section VIII, Division 1 to address Toughness?

Rules for exemption from toughness testing based on specific materials of construction, governing thicknesses, and minimum design metal temperatures

What are the rules for welding procedure specification qualification with impact testing?

Brief Description of the Toughness Testing Methods that are addressed in ASME Section VIII, Division 1 and the acceptance criteria

Examples demonstrating toughness rules (UG-84, Part UCS, Part UHA) from ASME Section VIII, Division 1

**For more information, contact [GetInfo@hsb.com](mailto:GetInfo@hsb.com).**