



ASME IX & AWS D1.1 "WELDING QUALIFICATION" CODE SIMPLIFIED

PREPARES DELEGATE FOR THIS CERTIFICATION EXAM:

* IICS 3.3 PERSONNEL REVIEWING WELDING PROCEDURES & WELDER CERTIFICATIONS IN ACCORDANCE TO ASME SECT. IX & AWS D1.1

COURSE DURATION: 4 DAYS

Master the best practices of ASME IX Welding Qualifications Code & AWS D1.1 (Structural welding code steel) to reduce costs, improve plant reliability & productivity, facilitate trade and prevent environmental hazard.

COURSE DESCRIPTION

This course gives participants coming from **Engineering, Manufacturing, Repair and Testing** Companies a comprehensive overview about "Welding Qualifications" as per ASME Section IX & AWS D1.1 (Structural Welding Code-Steel) and prepares them to fully comply with Code Requirements.

After completion of this workshop-like training course the participants will be able to handle **code-related welding certification tasks** like creating and interpreting WPS, PQR, WPQ etc. Understanding and interpreting the Code requirements correctly makes project executions and the company's operation more efficient and profitable.

Participants can now pursue IICS 3.3 Personal Reviewing Welding Procedures and Welder Certifications (ASME IX & AWS D1.1) with the international certification body, IICS.



Log in to www.international-inspector-certification.com for more information about IICS.





COURSE OBJECTIVES

The course provides participants with the knowledge necessary to:

- ✓ Understand and Interpret code requirements and effectively use ASME IX code and AWS (Welding certification part)
- ✓ Effectively make cross-references to internal and external code requirements.
- ✓ Encourage participants to take all necessary precaution in preparing, executing, reviewing and interpreting welding qualification documents in reference to ASME VIII, AWS D1.1 and various other codes and standards like "The National Board Inspection Code", API-510 (Pressure Vessel), API 570 (Piping Systems), API-653 (Storage Tanks) etc..



COURSE OUTLINE

DAY 1

1) Welcome & Introduction

2) Introduction into the ASME IX

- Purpose of the Code & Scope of the Code
- Scope of the Code

3) Structure of Section IX

- Organization of the Code
- Responsibilities
- Key terms discussed in the Code

4) Welding Processes

- Different Welding Processes
- Workshop

5) Welding Joint Design / Welding Positions (ASME, AWS)

- Butt welds / Fillet welds / other designs
- Understand different welding positions
- Workshop

6) Welding Consumable acc. ASME II, Part C & AWS

- Types of Electrodes
- Electrode Classification System
- Electrode Storage
- Shielding Gases
- Fluxes
- Workshop

WHO SHOULD ATTEND?

- Pressure equipment
 Manufacturer
- Manufacturer of Steel Structurers
- Inspectors of Plant Construction projects and civil structures
- Inspection companies
- Engineers & inspectors working in refineries, chemical, industrial & gas plants and oil fields.

COURSE DURATION

4 Days Training

DAILY SCHEDULE

• 8:30am - 5:30pm

ITEMS TO BRING

- ASME IX (welding part only, Edition 2017 recommended)
- AWS D1.1 (2015)
- Lots of Questions
- A "CAN-DO" Attitude

Stationeries such as pen and highlighter will be provided.



DAY 2

7) Welding Procedures

- 5 Steps of developing a WPS
- Essential, Supplementary & Nonessential Variables
- PQR
- Mechanical Testing
- Range of Qualification
- Changes of welding parameters
- Workshop

8) Welder Qualifications

- Qualification
- Essential & Nonessential Variables
- Test pieces
- Methods of testing
- Welding Continuity List
- Workshop

9) Practical exercises (ASME IX)

- Review of WPS
- Review of WPQ

DAY 3

10) Introduction into AWS D1.1

• Purpose & Scope of the code

11) Structure of AWS D1.1

Welding procedures

- Prequalification of WPS's
- Preparation of WPS's
- Groove welds filled welds
- Methods of testing & acceptancy criteria
- · Requirements for impact testing

DAY 4

12) Welder qualification

- Types of qualifications tests
- Preparation of welder qualification certificate
- Methods of testing & acceptance criteria

13) Practice Exercises

NOTE:

* Sequence of chapter is subject to training progress.









Lutz Seibt has more than 25 years hands-on experience as an Authorized Inspector and Auditor acc. to German Pressure Vessel (AD Merkblaetter), Boiler (TRD) and Storage Tanks Codes, Pressure Equipment Directive (PED), Transportable Pressure Equipment Directive (TPED) and European Construction Material Directive; 9 years out of it within TUV's International Business Unit in Asia Pacific.

He has conducted numerous training sessions related to Pressure Equipments (based on American and European standards) in Malaysia, Singapore, Korea, China, Thailand and Vietnam.

TECHNICAL QUALIFICATIONS

- ✓ Certified International Welding Engineers (International Institute of Welding IIW, Germany)
- ✓ Certified API 510 Pressure Vessel Inspector
- ✓ Certified API 570 Piping Inspector
- ✓ Certified API 577 Advanced Welding Inspection & Metallurgy Professional
- ✓ Certified Pedestal Crane Inspector acc. to API RP 2D (Cranetech Training & Inspection, Inc., USA)
- ✓ Certified Safety Engineer (Fachhochschule Frankfurt, Germany)
- ✓ Environmental Auditor (Technical Academy Esslingen, Germany)
- ✓ Bachelor Degree Motor Vehicle Engineering

SPECIAL SKILLS

- ✓ Inspector for periodical inspection & certification of
 - * Pressure vessels, Steam boilers, Piping Systems
 - * Cranes, Hoisting equipment, Hoisting equipment of lifeboats
- ✓ Inspector for third party & welding inspection and QA/QC in manufacturing / construction of
 - Pressure vessels, Steam boilers,
 Piping Systems

COURSES CONDUCTED

- API 510 Pressure Vessel Inspector
- API 570 Piping Inspector
- API 577 Advanced Welding Inspection & Metallurgy Professional cum IDC Welding Inspector
- ASME IX "Welding Qualification"
- ASME VIII Division 1 "Pressure Vessel"
- European Pressure Equipment Directive (PED) 97/23/EC Simplified
- IDC Piping Specialist Part 1: ASME B31.3 Process Piping
- Leak or Pressure Testing of Pressure Equipment
- Material Certificates (EN10204 / EN10168 / ISO10474)
- Welding & NDT Symbols (AWS / ISO Code)