

# ASME VIII DIVISION 1 "PRESSURE VESSEL" CODE SIMPLIFIED

**COURSE DURATION: 4 DAYS**

**Master the best practices of ASME Pressure Vessel Fabrication Code to reduce costs, improve plant reliability & productivity, facilitate trade and prevent environmental hazard.**

## COURSE DESCRIPTION

The correct approach in design, fabrication and maintenance of pressure vessel is essential to operate equipment safely, reduce costs, improve plant reliability and productivity, facilitate trade, and prevent environmental hazard.

This course gives participants coming from Engineering, Manufacturing, Repair and Testing Companies a comprehensive overview about the ASME Boiler and **Pressure Vessel Code (BPVC) with main emphasis on ASME VIII Division 1; the world's most widely used and well known Code covering design, fabrication, inspection and testing for Pressure Vessels.**

It aims to prepare them to fully comply with Code Requirements. The more commonly used subsections, paragraphs and appendices will be covered. Relevant case studies and open discussion of individual problems or situations will be included. They will return with the state-of-the-art industrial knowledge.

## COURSE OBJECTIVES

Capitalize on Trainer's leading expertise and gain maximum value to:

- **Understand** and **interpret** ASME VIII code requirements correctly; leading to more efficient and profitable project execution.
- **Effectively** make **cross-references** to internal and external code requirements.
- **Perform** all necessary **precaution** in ordering, basic calculation, fabricating and inspecting pressure vessel in an efficient practice.



## COURSE OUTLINE

### DAY 1 & 2

#### 1) Welcome & Introduction

#### 2) Introduction into the ASME System

- Purpose of the Code
- Scope of the Code

#### 3) Certificates of Authorization

- Qualification requirements specified by the Code
- Roles specified by the Code

#### 4) Structure of Section VIII, Division 1

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

#### 5) Construction Requirements

- Types of Joints
- Static Head consideration
- ASME VIII Div. 1 - Basic Calculations & Charts
- Weld Joint Categories
- Amount of RT – Full or Spot
- RT Factors
- Workshop

### DAY 2 & 3

#### 6) Material Requirements

- Material Selection / Material specification
- Material Identification
- Material Testing
- Workshop

#### 7) Fabrication Requirements

- Fabrication sequence
- Material Identification and Traceability
- Forming processes



### WHO SHOULD ATTEND?

This class is designed for the following personnel, who fabricate, operate, and regulate the pressure vessels and pressure equipment:

- Mechanical Engineer
- Inspection / Asset Integrity Engineer
- Maintenance Engineer
- Design Engineer
- QA/QC Personnel
- Project Engineer
- Managerial Personnel
- Relevant Technical Specialist, Authorities
- Engineers working in refineries, chemical, industrial & gas plants and oil fields.

- Requirements towards to welding and welding inspection
- Workshop

### 8) Heat Treatment

- Different kinds of Heat Treatments
- Requirements Towards to Heat Treatment
- Temperature Control
- Heat Treatment Procedures

## DAY 3 & 4

### 9) Non-Destructive Testing (NDT)

- Different kinds of NDT
- Requirements of Radiographic Testing (RT)
- Ultrasonic Testing (UT)
- Requirements of Magnetic Particle (MT) & Dye Penetrant Testing (PT)
- Qualification of NDT-Procedures and Personnel
- Workshop

### 10) Pressure Testing, Stamping & Documentations

- Pressure Test Cautions & Requirements
- Hydrotest / Pneumatic Test
- Vessel MDMT
- Requirements of vessel / name plate stamping
- Requirements of "Manufacturer Data Record"
- Workshop

### 11) Exam (3 hours)

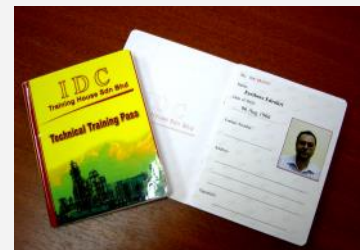
NOTE:

\* Sequence of chapter is subject to training progress.



**BONUS !!!**

**Technical Training  
Passes will be provided**



## WHAT OUR PARTICIPANTS SAY ABOUT OUR COURSE...

"What I like most about the Training is the **SIMPLIFICATION.**"

"It is an **excellent learning experience** and has value added in the work environment. It is strongly recommended for the relevant working group to attend.

"Putting the color tabs on the codes make it simpler to look into. Presentation by Lutz is **good and understandable.**"

"After explained by the Trainer, I am more familiar with the ASME code. I found that ASME is not as difficult as we thought. **Makes our life simpler and easier.**"

"Before I attend this Training, my knowledge about ASME is very poor. Now, I am **self-motivated** to get to know more about ASME, quite interesting."

"The presentation material is neat and almost complete; especially the little note given to stick onto the ASME code, **very helpful!**"

"The lesson is quite **interesting!**"



### COURSE DURATION

- 4 Days Training

### DAILY SCHEDULE

- 8:30am - 5:30pm

### ITEMS TO BRING

- **ASME BPVC VIII (Edition 2019)**  
- Hardcopy/Softcopy
- Calculator
- Lots of Questions
- A "CAN-DO" Attitude

**Stationeries such as pen & highlighter will be provided.**





## TRAINER'S PROFILE

# LUTZ SEIBT

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)



## TRAINER'S PROFILE

# LUTZ SEIBT

## TESTIMONIALS

It was an excellent program conducted by a very experienced tutor. The discussion topics were directly related to my work scope and responsibilities & helpful and recommended this course to any inspection personnel.

**E. Kannan**

Discipline Head, Inspection Execution, Sarawak Shell Bhd

As always the course has been conducted to an excellent standard and the learning very much tuned to actual work environments. Very much recommended to all levels of the engineering community.

**Pg Hassanal ASBPHM Puteh**

Utilities Plant Inspector, Brunei LNG Sdn Bhd

What I like most about the Training is the **SIMPLIFICATION**.

**P.Govalupillay**

Managing Director, PT. Atmindo (Indonesia)

Before I attend this Training, my knowledge about the pressure vessel code is very poor. Now, I am **SELF-MOTIVATED** to know more about ASME, quite interesting.

**Adi Setiawan**

Engineer, PT. Atmindo (Indonesia)

The course was conducted successfully and I believe it helps me in having a better understanding of ASME IX "Welding Qualification".

**Ir Mohd Rosli Salim**

Inspector Engineer, Petronas Penapisan (Melaka)

