MODERN WELDING TECHNOLOGY: WELDING, FABRICATION, AND INSPECTION (AWS, ASME & API CODES)

TRAINIT ACADEMY

COURSE TITLE

MODERN WELDING TECHNOLOGY: WELDING, FABRICATION, AND INSPECTION (AWS, ASME & API CODES)

COURSE DATE/VENUE

09 – 13 March 2020

London, UK

COURSE REFERENCE

WE109

COURSE DURATION

05 Days

DISCIPLINE

Welding Engineering

COURSE INTRODUCTION

Welding Technology plays a major role in all maintenance and fabrication activities in the industry. Production equipment, a highly sophisticated welding technique and qualified personnel allow processing or production of steel products for different applications within short periods.

This course provides a much needed source of authoritative information on the complex subject of welding. It provides a comprehensive run-down of the complex science of welding- processes, selection of power sources, weld metallurgy, weldability of metals, testing and inspection techniques.

The course will cover welding processes, welding consumables, design of welded joints, applied welding metallurgy and heat treating, welding quality control, non-destructive testing and major International Welding Codes and Standards such as AWS and API.

COURSE OBJECTIVE

- This training course provides the complex science of welding- processes, selection of power sources, weld metallurgy, weld ability of metals, testing and inspection techniques.

- Also covers welding processes, welding consumables, design of welded joints, applied welding metallurgy and heat treating, welding quality control, non-destructive testing and major International Welding Codes and Standards such as AWS, API & ASME.

- Appreciation of Weld Design, Development, Planning, Production

- Understanding the key welding concepts to design and produce quality welds, reliably and economically.

COURSE AUDIENCE

- Engineers from welding and various related departments such as Design, Planning, Production, and Inspection Welders, Technicians, Inspectors, Supervisors, Engineers and Managers.

- This is also preparatory course for AWS/CWI, CSWIP Examinations.

- Selection of Metals and Metal Properties.

- ASME Section IX and V

- Weld Discontinuities

- Visual Inspection

- NDT and DT Inspection & Inspection Procedures.

COURSE CONTENT

- Overview of codes of construction

- Materials of construction

- Overview of fusion welding process

- Basic welding Metallurgy.

- Welding Consumables, usage testing

- Welding of plain caution steels

- Welding of low alloy steels

- Welding of Stainless steels

- Welding of dissimilar materials

- Welding of Procedure Qualifications

- Welding of Performance Qualifications

- Welding defects, process & detection

- Welding processes

- Concepts of SMAW, GTAW, GMAW, FCAW, SAW, RSW etc.,

- Safety precautions in welding

- Economics of welding

- Welding consumables

- Weld joint design and basic symbols, Metal Joining and Cutting Process

- Weld faults- causes and remedies

- Destructive and Non-destructive testing

- Welding qualification WPS, PQR, WPQ.

- QA systems for coded fabrication, typical QA plan

COURSE CERTIFICATE

TRAINIT ACADEMY will award an internationally recognized certificate(s) for each delegate on completion of training.

COURSE FEES

$6,150 per Delegate. This rate includes participant's manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

COURSE METHODOLOGY

The training course will be highly participatory and the course leader will present, guide and facilitate learning, using a range of methods including formal presentation, discussions, sector-specific case studies and exercises. Above all, the course leader will make extensive use of real-life case examples in which he has been personally involved. You will also be encouraged to raise your own questions and to share in the development of the right answers using your own analysis and experiences. Tests of multiple-choice

type will be made available on daily basis to examine the effectiveness of delivering the course.

- 30% Lectures
- 30% Workshops and work presentation
- 20% Case studies & Practical Exercises
- 10% Role Play
- 10% Videos, Software or Simulators (as applicable) & General Discussions