

Training Title

WELDING TECHNOLOGY & TESTING

Training Duration

5 days

Training Venue and Dates

Welding Technology & Testing	5	04-08 March, 2024	\$5,500	Dubai, UAE
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Trainings will be conducted in any of the 5 star hotels.

Training Fees,

- *5,500 US\$ per participant for Public Training includes Materials/Handouts, tea/coffee breaks, refreshments & Buffet Lunch.*

Training Certificate

Prolific Consultants FZE Certificate of Course Completion will be issued to all attendees.

TRAINING OVERVIEW

COURSE DESCRIPTION

Distillation is still the most widely used means of separating chemical species in the petroleum and chemical industries and is the first unit operation in an oil refinery. This course covers the key areas of assessing the operation of the internals through to their eventual installation but with the emphasis placed on design, operation, troubleshooting, and control. Various aspects relating to the initial design of column internals are covered, including simulation packages and VLE. Current internals are reviewed including critical design aspects of trays, packing and auxiliary equipment. Distillation column control is an essential ingredient in cost-effective operations, safety, and environmental management.

COURSE OBJECTIVES:

- ★ *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.*

SUITABLE FOR:

- ★ *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.*

TRAINING METHODOLOGY:

A highly interactive combination of lectures and discussion sessions will be managed to maximize the amount and quality of information and knowledge transfer. The sessions will start by raising the most relevant questions, and motivate everybody find the right answers. 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. Very useful Course Materials will be given.

COURSE OUTLINE :-

- *Overview of codes of construction*
- *Materials of construction*
- *Overview of fusion welding process*
- *Basic welding Metallurgy.*
- *Welding Consumables, usage testing*
- *Welding of plain carbon 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*

Case Studies, Last Day Review, Discussions & Pre & Post Assessments will be carried out.

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