



MOE114

Offshore Pipelines

Course Introduction:

Modern pipeline design enables the engineer to fully optimize and tailor each pipeline to specific needs. This course will give an understanding of the design philosophy of the pipeline design standard, teach how to perform simple wall thickness design and give an overview of relevant failure modes.

Course Objectives:

Upon successful completion of this course, the delegates will be able to:

- ✓ Understand the design philosophy of pipeline standard
- ✓ Perform simple wall thickness design
- ✓ Gain an overview of relevant failure modes for pipeline design

Who Should Attend?

This course intended for Design engineers and engineers working with design related subjects, who need a more detailed knowledge of standard pipeline design and its tasks.

Course Outline:

Day 1:

- **Pipe fabrication**
 - General
 - Steel Manufacture
 - Line pipe fabrication technology (U.O.E. versus Seamless)

Day 2:

- **External protection**
 - External protection with coatings
 - External protection with cathodic protection
 - Weight coating
 - Buckle arrestors

Day 3:

- **Conventional laying**
 - Lay barge: pipe handling, storage, preparation, and line up, alignment, clamping and welding stations, tensioner, inspection, Field joint, stinger
 - Other Vessels: Anchor Handling tugs , supply vessel, diving support vessel

Day 4:

- **Non-conventional laying**
 - J laying
 - Towing (the 5 methods)
 - Reeling

Day 5:

- **Protection stabilization and connections**
 - Protection: Jetting, Trenching, Ploughing
 - Stabilization
 - Connections: Welded connections (hyperbaric welding and above water welding)
 - Mechanical connections (flanges, mechanical connections)

Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Fees:

To be advised as per the course location. This rate includes participant's manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies

- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionnaires
- Group Work
- Discussion
- Presentation

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee/Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee/Tea/Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Coffee/Tea/Snacks
13:30 - 15:00	Last Session

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