

Training Title

PIPELINE AND PIPING OPERATIONS, INSPECTION, MAINTENANCE, REPAIR, INTEGRITY & REHABILITATION

Training Duration

5 days

Training Dates & Venue

REF ME071	Pipeline and Piping Operations, Inspection, Maintenance, Repair, Integrity & Rehabilitation	5	19 - 23 January, 2020	\$4,500	Dubai, UAE
--------------	---	---	-----------------------	---------	------------

Training will be held at any of the 5 star hotels. Exact venue will be informed once confirmed.

Training Fees

- 4,500 US\$ per participant for Public Training includes Materials/Handouts, tea/coffee breaks, refreshments & Buffet Lunch

Training Certificate

Define Management Consultancy & Training Certificate of course completion will be issued to all attendees.

INTRODUCTION & DESCRIPTION

The pipeline networks expanded rapidly all over the world when it became apparent that pipelines are an efficient, economic way to move oil, gas, and petroleum products to consumers. More challenges face the pipeline industry. So, good understanding of pipeline design, maintenance and rehabilitation will help tackling these challenges.

Although pipelines are protected by many methods such as coating and cathodic protection, pipe failures are likely to take place. Various methods are used to repair defected pipelines such as pipe clamp, clock spring or pipe replacement.

This course deals with the design, maintenance and rehabilitation of pipeline systems. An overview of pipeline industry is discussed. Participants will have acquire and/or consolidate the essential knowledge and skills to design, maintain and repair pipelines.

WHO SHOULD ATTEND?

Managers, engineers, operators, supervisors, inspectors, equipment suppliers, or those who wish to be familiar with pipeline systems.

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

DMCT/OL/9/18(Rev3Dt:23/9/18)

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. All presentations are made in excellent way. Very useful Course Materials will be given.

- 30% Lectures
- 30% Workshops and work presentation
- 20% Group Work & Practical Exercises
- 20% Videos & General Discussions

COURSE OUTLINES

- Transportation by Pipeline
- * Pipeline System Components
- * Types of Pipelines
- * Piping Overview (pipes – valves – fittings)
- * Pipeline material
- * Prime movers in Pipeline Systems
- * Pipeline Safety.
- * Pipeline Glossary.
- ■ Pipeline Design
- * Design Sequence of P/L network.
 - -- Evaluation of fluid availability
 - -- Estimate of fluid demands.
 - -- The Basic design of P/L network.
 - -- The Economics of P/L system.
- * Fluid properties affecting flow.
- * Design of Gas Pipelines
 - -- Calculation of compressibility factor.
 - -- Properties of gas mixtures.
 - -- Pressure drop in gas pipeline due to friction.
 - -- Gas pipeline flow equations.
 - -- Friction factor and transmission factor.
 - -- Gas Pipeline velocity and erosional velocity calculation.
 - -- Increasing gas throughput by looping and booster compressor.
 - -- Calculation of pipe maximum allowable operating pressure.
 - -- Fundamental Calculations of gas compressor stations.
-
- * Design of Liquid Pipelines
 - -- Calculation of Liquid Flow Parameters
(Line capacity – Pressure drop – Pipe Diameter – Max. Velocity)
 - -- Designing Loop Systems. -- Heavy Crude Transport.

DMCT/OL/9/18(Rev3Dt:23/9/18)

- -- Water Hammer Phenomenon.
- -- Pumps in Liquid Pipeline Systems.
- ■ Pipeline Maintenance
- * Pipeline Patrolling.
- * Corrosion-resistant Material.
- * Pipeline Coating.
- * Pipeline Corrosion Inhibitor.
- * Pipeline Cathodic Protection.
- * Pipeline Pigging.
- * Smart Pig.
- ■ Pipeline Rehabilitation
- * Pipe sleeve/clamp.
- * Pipe clock spring.
- * Pipe Replacement.
 - Case studies.

NOTE:

Pre & Post Tests will be conducted

Case Studies, Group Exercises, Group Discussions, Last Day Review & Assessments will be carried out.

www.definettraining.com

DMCT/OL/9/18(Rev3Dt:23/9/18)

P.O BOX 45304
ABU DHABI, U.A.E

T +971 2 6264455
F +971 2 6275344

www.definettraining.com