

Training - Oil Terminals, FSO and FPSO



TERM-EN-P



Face-to-face only



5 days

This course provides a comprehensive knowledge of the technology and operation of oil terminals in general, and of FSO/FPSO in particular (Floating Storage Off-loading/Floating Production Storage Off-loading)

Level

Knowledge

Public

Managers, engineers, staff, technicians and operators whose activities are related to oil terminals (production, marine maintenance, operation, design, manufacturing, trading, control, regulations...)

Objectives

Attendees will be able to implement the following skills:

- Review all loading/unloading operations on oil terminals, FSO's and FPSO's
- Understand technical characteristics of onshore or floating storage facilities
- Understand metering and sampling techniques used to measure volume of marketed oil
- Grasp technology of oil tanker loading facilities (jetty, loading buoy, tandem point...)
- Learn about mooring crew activities, pilotage, port regulations, assess oil terminals HSE hazards and operational constraints

Pedagogical & technical resources

- Highly interactive training by industry specialist lecturers
- Several applications and illustrations

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsible

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

OVERVIEW OF OIL TERMINALS

0.5 day

Functions of oil terminals: reception, oil processing, storage, export...

Different actors of an oil terminal.

Crude oil treatment, water treatment...

Evaluation of terminal storage capacity, tanker loading planning...

ONSHORE STORAGE TANKS

0.5 day

Different types of storage tank (fixed roof, floating roof). Selection criteria.

Fixed roof tank: shell, roof, bottom, foundation, retention basins and various equipment.

Floating roof tank and various equipment.

Firefighting facilities: water deluge, foam, gas extinguisher...

Safety risks on storage tanks: H₂S, dangers of ignition, explosion risk, collapse, static electricity...

Incidents and equipment failures on storage tanks.

Fire types on storage tanks.

METERING OF OIL QUANTITIES: RECEIVED, STORED & EXPORTED

1 day

Metering and sampling on onshore tank (level, reference temperature scales).

Determination of amounts standard issued.

Counting dynamic transactional, sampling and calibration. Calculation of standard volume and weight.

Maintenance of metering unit and calibration loop and meter calibration.

Presentation of oil exported commercial documents.

FLOATING STORAGE FACILITIES (FSO/FPSO)

1 day

Presentation of the main functions of a FPSO.

Anchoring the FSO/FPSO.

Technology of floating storage tanks.

Storage tanks of crude oil, methanol ballast. Tanks atmosphere control. Inerting system.

Procedures for storage tanks entry. Incidents.

Safety on-board storage of FSO/FPSO.

EXPORT & MARINE OPERATIONS

1 day

Tanker approach operations and mooring at: jetty, loading buoy, tandem point...

Tanker loading operations, tanker loading planning, preparations before loading, monitoring during the loading operations and procedures after loading.

International Ship and Port facility Security (ISPS) code: principle, actors, responsibilities, practical difficulties.

Mooring crew operations.

Safety Port Regulations. Pilot activities.

Commercial contracts, demurrage, commercial claims.

TANKERS TECHNOLOGY & TANKER LOADING INSTALLATIONS

1 day

Ships transport of crude oil (tankers): different sizes of vessels, equipment related to the handling of products (cargo circuit, pump room), ballasting and deballasting, inert gas generation, tank washing.

Different modes of loading tankers: jetty, tandem and buoy. Advantages/drawbacks.

Safety checklist (IMO).

Description of tandem loading point and loading buoy.

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.

Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com