

TRAINING TITLE

PRODUCT STORAGE, LOADING AND TRANSPORT (CRUDE OIL)

Training Duration

5 day

Training Venue and Dates

Ref. No. Product Storage PE129 Transport (C	5	29 Sep-03 Oct 2025	\$5,500	ABU DHABI, UAE
--	---	-----------------------	---------	----------------

In any of the 4 or 5-star hotels. The exact venue will be informed later.

Training Fees

• \$5,500 per participant for Public Training includes Materials/Handouts, tea/coffee breaks, refreshments & Lunch

Training Certificate

Define Management Consultants Certificate of course completion will be issued to all attendees.

TRAINING DESCRIPTION

The storage, loading, and transportation of crude oil are crucial processes in the oil and gas industry, ensuring that this valuable product is safely and efficiently moved from production facilities to refineries, storage tanks, and end-users. As the demand for crude oil increases and global infrastructure becomes more complex, professionals in the industry must design and manage systems that meet operational, safety, and environmental standards.

The "Product Storage, Loading, and Transport (Crude Oil)" course is designed to provide participants with a thorough understanding of the key principles, technologies, and best practices involved in the storage, loading, and transportation of crude oil. This 5-day program will focus on system design, operational considerations, safety protocols, environmental concerns, and regulatory compliance throughout the entire crude oil supply chain.

TRAINING OBJECTIVES

By the end of the course, participants will be able to understand

• Equip you with the expertise to design, operate, and optimize storage, loading, and transport systems for crude oil.

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



- Provide hands-on learning through real-world case studies, group projects, and practical workshops.
- Address operational challenges such as flow assurance, corrosion control, and leakage prevention.
- Ensure you understand safety and regulatory frameworks, helping you comply with environmental and industry standards.
- Introduce new technologies and innovations in automation, monitoring, and system optimization for efficient operations.

WHO SHOULD ATTEND?

This course is ideal for:

- Process and mechanical engineers involved in the design of crude oil storage and transportation systems.
- Project engineers working on the construction of oil terminals, pipelines, and transport facilities.
- Operations and maintenance professionals managing day-to-day operations at crude oil storage and transportation facilities.
- Safety and compliance engineers ensuring the safe and compliant operation of storage and transport systems.
- Technical managers overseeing crude oil operations in upstream, midstream, and downstream sectors.

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 motivating everybody to 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.

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

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



COURSE PROGRAM:

Day 1: Introduction to Crude Oil Storage and Transport

- o Overview of the Crude Oil Supply Chain: From Production to End User
- Types of Storage Systems: Above-ground vs. Underground Storage Tanks
- Key Factors Affecting Storage Design: Capacity, Safety, and Environmental Concerns
- Fundamentals of Crude Oil Handling and Loading
- o Types of Loading Systems: Marine, Rail, Truck, and Pipeline Loading
- Health, Safety, and Environmental (HSE) Considerations in Storage and Transport

Day 2: Crude Oil Storage Tank Design and Operation

- Design Principles for Storage Tanks: Tank Materials, Design Codes, and Standards
- Storage Tank Types: Fixed-roof, Floating-roof, and Bullet Tanks
- o Tank Sizing, Venting, and Overpressure Protection
- Tank Inspection, Maintenance, and Safety Protocols
- Corrosion Prevention and Leak Detection Methods
- Case Study: Storage Tank Design for Large-Scale Oil Terminal

Day 3: Loading and Unloading Systems Design

- o Introduction to Loading and Unloading Facilities
- Design and Operation of Loading Arms and Hose Systems
- o Marine Loading Terminals: Design, Mooring, and Safety Considerations
- Pipeline Loading and Transfer Systems
- Rail and Truck Loading Systems: Design and Operational Challenges
- Safety Measures in Loading Systems: Emergency Shutdown, Spill Prevention, and Monitoring

Day 4: Crude Oil Transport Systems

ABU DHABI, U.A.E

- Transport Methods Overview: Pipelines, Rail, Marine, and Road
- o Pipeline Design and Operation: Pump Stations, Pigging, and Flow Control
- o Shipping Crude Oil: Tankers, Barge Design, and Terminal Operations
- Transport System Integrity: Monitoring, Leak Detection, and Corrosion Control
- Transport Scheduling and Optimization: Minimizing Costs and Maximizing Efficiency
- Case Study: Design of a Crude Oil Pipeline and Marine Transport System

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

P.O BOX 45304



Day 5: Environmental and Regulatory Compliance

- Environmental Impact of Crude Oil Storage and Transport: Spills, Emissions, and Waste Management
- o Regulatory Standards: API, ISO, and Local Environmental Regulations
- o Emergency Response Plans and Contingency Management
- o Optimizing Efficiency in Storage and Transport: Reducing Losses and Increasing Throughput
- Technology Advancements: Automation, Monitoring, and Remote Control Systems
- Designing a Comprehensive Crude Oil Storage, Loading, and Transport System

NOTE:

Pre-& Post Tests will be conducted.

Case Studies, Group Exercises, Group Discussions, Last Day reviews, and assessments will be carried out.



www.definetraining.com

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