

€ TRAINING

Conference: FPSO Marine Operation And
Maintenance





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Introduction:

The use of Floating Production Storage and Offloading FPSO Marine Operation and Maintenance has significantly increased in recent decades. FPSOs have lower cost relative to traditional offshore oil platforms. The latest FPSOs are used for developing deepwater oil fields and reserves where it is either not possible or not practical to install a fixed platform. It is crucial to understand the environmental and design aspects affecting the operation to operate FPSOs successfully. Also, beneficial to know all essential elements of FPSOs. FPSO Operation and Maintenance training will focus on the key technical challenges and risks associated the operation and maintenance of an FPSO. It will arm the participant with a wealth of knowledge to help them advance their project.

Course Objectives:

At the end of this course the participants will be able to:

- Identify the Key Operational Requirements
- Recognize the Effects of the Ocean Environment on FPSO Operation
- Understand the FPSO Process System
- Appreciate Safety in Operation and Maintenance
- Managers and executives who are new to the FPSO industry
- Operational & maintenance

Targeted Audience:

- Project engineers and managers
- Technical Staff
- Project Engineers, Engineering Discipline Leads, Engineering Specialists, and Operating Staff
- Maintenance Technicians, Supervisors, and Managers, as well as other non-engineering personnel

Course Outlines:

Unit 1: Environmental and Design Aspects affecting Operation

- Corrosion and Corrosion Protection
- Stress Buckling and Fatigue
- Hull Structural Assessment

- Topsides
- Mooring Lines and Anchors
- Turret and Swivel System
- SURF and Subsea Interfaces
- Accommodation and Lifesaving Equipment

Unit 2: Introduction to Floating Production, Storage and Offload

- Introduction to FPSO Design and Technology
- Rules, Regulations, Codes and Standards
- Operation Requirements
- Maintenance - Guidance and General Requirements
- Plant Inspection
- Plans Procedures and Records
- Processing Operations
- FPSO Process System

Unit 3: Storage and Offloading

- Cargo Pumping System Characteristics
- Cargo Storage
- Cargo Heating
- Cargo Blanketing and Venting
- Crude Oil Wash
- Cargo Control System
- Cargo Metering
- Tank Entry
- Ballast System
- Cargo Loading and Stability

- Cargo Transfer Operations and Procedures
- Offloading Crude
- Custody Transfer
- Diesel Oil Storage Treatment Transfer
- Pressure Safety Valves
- Emergency Shutdown Valves QC valves

Unit 4: Power Heating and Utility Systems

- Power Generation and Heating
- Power Distribution System
- Heating Sources and Generators
- UPSs and Batteries
- Cooling System
- Utility Systems
- Electrical System
- Piping
- Instrumentation
- Telecommunication
- HVAC

Unit 5: Safety in Operation and Maintenance

- Control and Safety Systems
- Safety Instrumentation
- Accessibility to the FPSO Offshore Plant
- Fire Prevention and Control F&G
- Hazards associated with Process Fluids
- Assessment of Hazards



- Emergency Plan - equipment and procedures
- Fire Prevention and Control
- Electrical Safety
- Emergency Shutdown