Loading Master for Petrochemical, LNG, Oil and Gas Terminals

Improving Operational & Personal Safety

Introduction

Load mastering for Oil, LNG, Gas, and Petrochemical will be covered in great detail in this Course N Carry training course. Topics covered include management of ship shore operations, cargo documentation and calculation, charter party, and demurrage, as well as loading and unloading operations at terminals, on tankers, and on chemical and LNG gas carriers.

- Determine more effective methods for handling, loading, and unloading bulk liquids including LNG.
- Discover the most recent international norms and laws pertaining to tankers and terminals, including their physical characteristics and the kinds of cargo they may hold.
- Recognize risk and loss related to quality and quantity, and acquire preventative measures
- Boost environmental, safety, and compliance performance
- Study the technical features of pipeline systems and pumps, including how to load and unload them.

Objectives

The advanced technical load mastering elements, operations, and practical and commercial concerns in liquid and gas load master operations are covered in this training course on loading master for oil, LNG, gas, and petrochemical terminals. The following are covered: transportation; terminal operations; fiscal metering of liquids and gases; product quality assurance; ship to facility and terminal interface and operations; loading and discharging procedures for petrochemical tankers; measurement of product quality during custody transfer; and LNG metering parameters, techniques, and computations.

Training Methodology

Operators of petroleum, crude oil, LNG, and petrochemical terminals will benefit from this five-day hands-on training course in loading master for oil, gas, and petrochemical terminals. acquiring a competitive edge while making sure your personnel and operating

procedures meet current norms.

Organizational impacts

- Discover the whole LNG and liquid/gas production cycle.
- See the latest developments in cargo transfer operations from both a Liquid and Gas ship management and terminal / Facility viewpoint
- Make precise measurements, computations, and custody transfers of all liquids and gases, as well as accurate product quality assessments.
- Analyse the liquid and gas ship and shore transfer management design codes and recommendations.
- Examine genuine Case Studies from across the Globe about Liquid and Gas accidents

Personal Imapct

Everyone who handles, loads, unloads, transfers custody of, or handles cargo—especially operators of oil and gas companies, owners and operators of vessels, surveyors, and maritime superintendents.

Who should attend?

Those engaged in the transportation of tankers and cargo, as well as liquid and gas facilities, include:

- All suppliers, traders, and distributors of LNG and liquid/gas
- Ship Operators and Owners
- Safety officers and superintendents
- Executives in Operations and Technology
- Traders and Charterers
- Ship Brokers
- Port and Terminal Operators
- P&I Club and Insurance for Ships

Course Outline

Day 1

Pre-Test, ISGOTT, MTCOT, SAFETY - LOAD MASTER

- Evaluation of Delegates' Present Understanding and Knowledge

- Particular standards and topics that require in-depth discussion following the evaluation of the delegate's knowledge base. By posing broad inquiries about loading master responsibilities, the training session may be tailored to determine the delegates' maximum benefit.
- The most recent edition of the International Safety Guide for Oil Tankers and Terminals (ISGOTT)
- Safety Guidelines and Advice for Employees at Tankers and Terminals
- International Marine Forum of Oil Companies (OCIMF)
- The MTCOT, or Marine Terminal Competence and Training Guide,
- Critical Load Master: Types of Tanks and Liquid/Gas Carriers
- Technical Comparisons and Containment Systems in ESD 1 and 2
- Terminal for Regasification
- Options for Load Master depending on Land
- Load master vessels that Regas offers
- Crucial Load Master: Relevant Safety Regulations and Charterers' Needs
- Global Gas Code Vessel Descriptions
- LNG Tank Type
- Vessel Types

Controlling the Interface between Tankers and Terminals (ISGOTT)

- Procedures & Precautions for Load Master Communications
- Information Exchanged Prior to Berthing for Load Master
- Transfer of information from the tanker to the terminal is a critical load master.
- Crucial Load Master: Data transfer from tanker to terminal
- Load levels for cargo
- Plan for Load Master Discharge
- LNG: What is it? Particular Risks and Hazards

Examination and Compatibility Reports for Involved Vessels

- Ship Mutual Acceptance and OPTIMOOR
- Selection Criteria for Transfer Areas and Authorities' Approval
- Security Concerns
- Lists and Arrangements
- Risk Evaluation and Control, Weather, Cargo Risks, and Helicopter Operations
- Workers' injuries and mooring/unmooring procedures

Day 2

Transfer of Custody, Quality, and Loading and Unloading Preparations

- How does Custody Transfer work?
- Information exchanged prior to transfer
- MSDS
- Getting Ready for Loading Cargo (ship and shore tasks)
- Getting Ready for Cargo Discharge (ship and shore tasks)
- Procedures and Training for On-Board
- Code for International Ship and Port Security
- Self-Assessment for Tanker Management

- What is it, Who is it for?
- Overview of Elements and Stages
- How does one utilize the TMSA?
- Inspection System SIRE
- Why have it for LNG and what is it?
- The Phases of the Cycles for LNG and Liquid/Gas Cargo
- Locations of Regasification Terminals—Land Based
- Overview of the Regas Vessels System: Common Schemes and Working Principles
- Design of the LNG Transfer System and the Parameters That Help Boil Off Gas
- Studying the Compatibility of Liquid/Gas Terminals and LNG for the Cargo Cycle
- Functions and Accountabilities of the Terminal in LNG Cargo Transfer
- Terminal Loading and Discharging
- Ship-to-Shore Operations Interfaces
- Compatibility Forms

Day 3

Safe Mooring Protocols for POACs and Load Masters

- Secure Docking (ISGOTT)
- POAC Obligations and Accountabilities
- Master Mariners and POAC/Load Master Terminal Interface
- SPM and jetties
- Setting Up Mooring
- Monitoring of Moorings using Loading Master
- The loading master's obligations and responsibilities
- Optimoor
- Letting Go and Hiding Out
- IMO, ILO, HSE, Project LNG, and Liquid Natural Gas (LNG)
- Safety Checklist for Ship Shore Operations

Ship-shore Safety Checklist

- Determine Better Practices for Bulk Liquid Handling, Loading, and Discharging
- Recognize the functions of pumps and pipeline systems, including loading and discharging
- Tanker loading and unloading procedures and preparations related to liquid and gas operations
- Arrival Checklists and Preparations
- Loading Arms: Designs, Vendors, and Technology
- Cryogenic Hoses: Type 8-inch and 6-inch; Testing;
- Adjustable Positioning
- Manoeuvring both with and without DP or tug assistance
- Jetty Approaches: Finger or Face Terminal Design Interface

Day 4

Interface between Ship and Shore (STS) and Operational Management

- Available Technologies for LNG and Liquid/Gas Transfer System Architectures
- Ship to Ship to Land
- Transport to Deck
- From Ship to Ship
- Tandem Configurations and Transfer Systems Connected to Ships
- Aspects of System Uptime That Affect Effective Operations
- Meteocean Situations and Prediction Resources

Normal LNG and Liquid/Gas Terminal Operations

- Leadership Capabilities
- Capabilities in Risk Management
- Skills in Organization
- Ships' Officer and Operator's Motivation for Cooperation

Tankers and Coastal Tanks

- Dimensions of Vessels and Barges and Terms Used in Shipping Terminology for Quantity and Quality
- Definitions of Cargo Inspection
- Details about Fixed and Floating Roofs, as well as Shore Tanks
- Differential Flow Mechanisms, Design, Metering, and Performance in Liquid Form Measurement
- Mechanisms, Design, Measuring, and Performance of Ultrasonic Flow
- Mechanisms, Design, Measuring, and Performance of Vortex Flow
- Flow meter applications, calibration, computations, and transfer

Gas and Liquid RELEASES / ESD / CARGO SPILLS

- Protocols and System Utilization

Day 5

LOAD MASTERING for Emergency Response and Contingency Planning

- What to Do in the Event of an Emergency
- Management of General Emergency Response
- Things Not to Do in Emergency Situations
- Emergency Gear
- Leak of LNG and Oil Spill
- Use of SOPEP / SIMOPS

- Structural damage or fire
- Unfavourable Weather and Mooring Mistakes
- Safeguards Against Theft
- Parties Involved in Media Management and Communications
- Selected Incidents from the Recent Industry

Typical Reasons for These Events

- Essential Crew Instruction and Readiness
- Risks and Hazards in the Future
- Regional Risks
- Factor of Crew
- Ship and Landing Gear Needs
- Getting Ready for Unexpected Events - Emergency Management
- ƒƒ STS Tools and Instruction
- ƒƒ Recovery of an LNG Ship
- Aspects to Take into Account for Cargo Recovery
- Impact on the Environment
- Development of Technical Equipment
- Risk Profiling of Your Operations
- What action is necessary?
- Options and Systems for Safety Management

LOAD MASTER Technical Developments: LNG Fuel, STS, and Bunkering; Wear down, Fatigue, and Failure Management Practices and Planning; Load Master Marine Engineers and Tech Superintendents

- Synopsis of PMS and SMS
- Talk about PMS, or onboard planned maintenance systems.
- Talk about T. A. Trend Analysis.
- Technical Analysis of Condition Monitoring - CME
- Failures of OEM Main Engine Components Associated with Engine Performance

How do all parties involved in the industry get affected by the commercial aspects of general average insurance and LNG cargo incidents and claims?

- What is G.A. and why does it have an impact on all players in the market?
- G.A. - Issues with Carriers
- Case Studies and LNG Losses
- LNGC Loss Cost and Ways to Reduce Economic and Commercial Risks
- LNG Estimates and Loss Mitigation Techniques
- G.A. - Issues with Charterers
- G.A. - Concerns for Facilities and Operators
- The Impact of Commercial Agreements on All Affected Parties
- The G.A.'s technical nature
- All Participants' Rights and Duties in the G.A. Event