

LIQUID CARGO AND BALLAST OPERATIONS ON GAS (LPG) TANKERS (LICOS)



TARGET GROUP

This training course primary is intended for Masters, Chief Officers and mates who are engaged in liquefied gas tanker operations.



OBJECTIVES OF THE COURSE

A trainee successfully completing this course will be able to:

- plan and perform loading and discharging of liquefied gas cargo;
- provide evidence of knowledge of the impact of cargo and cargo handling upon the seaworthiness and stability of a ship;
- perform required stability, trim and stress control;
- provide evidence of knowledge of cargo handling equipment;
- provide evidence of knowledge of principles and procedures for safe handling of ballast and bunkers;
- provide evidence of knowledge of safe handling and stowage of dangerous, hazardous and harmful cargoes;
- provide evidence of general knowledge of gas tankers and gas tanker operation.

The course covers all subject areas recommended by IMO Model

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COURSE CONTENTS

This training course covers the following topics:

- Cargo planning, safe loading and unloading cargoes
- Prevention of sea pollution
- Maintaining of the ship stability and seaworthiness
- Study of the ship design and systems
- Cargo containment and cargo handling systems
- Ship operating procedures and emergency procedures
- Safety practices and equipment;
- General principles of cargo operations.

INCOME REQUIREMENTS:



To be assigned on the training course, participant should present:

- national passport,
- seamen's book,
- national license or educational diploma.

DURATION OF THE TRAINING COURSE



The duration of the Liquefied Gas Tanker Cargo and Ballast Handling Simulator training course is 4 working days.

COURSE LIMITATIONS



The maximum number of participants - 6 persons.



THE COURSE PROGRAM

DAY 1

- Familiarization with simulator
 - Ship type simulation
 - Tank arrangement
 - Cargo containment system
 - Pipeline arrangement
 - Pipe system control valves
 - Pumps, compressors and reliquefaction plant
 - Instrumentation
 - Controls
 - Basic operations and procedures
- Special Operations and Procedures
 - Tank atmosphere evaluation
 - Cargo ventilation system

DAY 2

- Special Operations and Procedures
 - Reliquefaction system and control of boil-off
 - Procedure for changing cargo and tank cleaning
 - Use of inert gas
 - Draining and stripping procedures
 - Gas freeing

DAY 3

- Ballast Operations
 - General provisions
 - Ballasting
 - Deballasting
- Cargo Operations
 - General cargo handling provisions
 - Cargo measurement and calculation
 - Cargo condition maintenance on passage and in port

DAY 4

- Cargo Operations
 - Procedure for preparation for loading cargo
 - Procedure for preparation for unloading cargo
- Operational Problems
 - Cargo and related operations – normal working
 - Introduction of system faults, malfunctions and accidents
 - Remedial actions

DAY 5

- Operational Problems
 - Cargo and related operations – normal working
 - Introduction of system faults, malfunctions and accidents
 - Remedial actions

Note: during training course theoretical lessons are given using PowerPoint presentations, practical tasks are conducted on SAFE Cargo - Liquefied Gas Tanker Model - L3-DPA Simulations Group.