





# Course: LIQUEFIED PETROLEUM GAS (LPG),CARGO OPERATIONS AND RELIQUEFACTION

| Code | City                 | hotel              | Start      | End        | price  | Hours |
|------|----------------------|--------------------|------------|------------|--------|-------|
| 776  | Hamburg<br>(Germany) | Hotel Meeting Room | 2024-09-16 | 2024-09-20 | 5950 € | 25    |

## Why Choose this Training Course?

Liquefied Petroleum Gas (LPG) has a specialist function in the petrochemical industry, simultaneously providing gas for energy and manufacturing processes. Whilst heavy industry deals with the advent of renewable energy sources, the transition from traditional and established sources will continue for the foreseeable future. Manufacturing processes show no sign of slowing so there is every reason to be confident the LPG industry in terms of production, processing and refining will continue at pace.

This training course will cover all aspects of LPG tanker transportation, both the larger sized tankers delivering propane and butane for heating and the smaller size for manufacturing materials. The hazards and complexities of operating these tankers will be comprehensively covered in this training.

### This training course will highlight:

- The range of cargoes transported by LPG tankers
- The properties and hazards of LPG cargoes
- Best practice to protect the commercial interests of the tanker owner
- The complete cargo cycle: dry dock to dry dock
- Risk management and mitigation

## What are the Goals?



- Identify the hazards of handling LPG
- Protect the commercial interests of the tanker owner
- Apply current regulations
- Understand best operational practice
- Understand the complexities of the cargo cycle

## **Who is this Training Course for?**

- Energy company oil and gas process managers and operators
- Energy company oil and gas plant managers and operators
- Sales and marketing managers
- Financial directors
- Project managers
- Investment analysts
- Asset managers
- Asset engineers
- Ship and voyage managers
- Ship superintendents
- Cargo surveyors and expeditors
- Ships' staff

## **Outline**

### **Day One: The Application of Regulation and Mitigation of Hazard**

- The range of LPG cargoes
- Regulations
- Properties and hazards of LPG
- Design for safety
- Sources of ignition



## **Day Two: Atmosphere Control and the Physics of LPG Re-liquefaction**

- Physics and chemistry
- Inert gas generators
- Nitrogen generators
- Behaviour of gases
- Re-liquefaction
- Cargo conditioning

## **Day Three: Types of LPG Tanker and Cargo Tank**

- Types of LPG carrier
- IMO ship types
- IGC Code damage assumptions
- Tank types
- Cargo pumps
- Level measurement

## **Day Four: Safe Working Practices and Preparation for the Cargo Cycle**

- Dangerous space entry
- Gas detection instrumentation
- Cargo operational cycle for LPG tankers;
- Preparation for first cargo after dry dock
- Gassing up and cooling down
- Purpose of DPV

## **Day Five: The Cargo Cycle and LPG Fire Fighting Techniques**

- Loading cargo
- Loaded voyage
- Discharge cargo



- Prepare for dry dock
- Personnel protection
- Fire-fighting LPG



**The Scandinavian Academy for Training and Development employs modern methods in training and skills development, enhancing the efficiency of human resource development. We follow these practices:**

- **Theoretical Lectures:**

- We deliver knowledge through advanced presentations such as PowerPoint and visual materials, including videos and short films.

- **Scientific Assessment:**

- We evaluate trainees skills before and after the course to ensure their progress.

- **Brainstorming and Interaction:**

- We encourage active participation through brainstorming sessions and applying concepts through role play.

- **Practical Cases:**

- We provide practical cases that align with the scientific content and the participants specific needs.

- **Examinations:**

- Tests are conducted at the end of the program to assess knowledge retention.

- **Educational Materials:**

- We provide both printed and digital scientific and practical materials to participants.

- **Attendance and Final Result Reports:**

- We prepare detailed attendance reports for participants and offer a comprehensive program evaluation.

- **Professionals and Experts:**

- The programs scientific content is prepared by the best professors and trainers in various fields.

- **Professional Completion Certificate:**

- Participants receive a professional completion certificate issued by the Scandinavian Academy for Training and Development in the Kingdom of Sweden, with the option for international authentication.

- **Program Timings:**

- Training programs are held from 10:00 AM to 2:00 PM and include buffet sessions for light meals during lectures.