

## 2024 Loading Master Training Course



For 2024 we updated our Bulk Liquids Loading Master Training program according to the latest ISGOTT 6 and Tanker Jetty Safety publications.

HSE, knowledge, insight, awareness, skill, control, efficiency, time to name just a few are the necessary foundations for tank terminal and marine operations.

This has led to an increasing demand for certified and trained Loading Masters for tank storage terminals, FPSO's and refineries. The challenging tasks include mastering the art of loading and unloading activities and carrying the responsibilities that come with it.

### **Why You Should Attend**

This 3-day highly interactive and practical course will assist petroleum products, crude oil, and chemical terminals in achieving a competitive advantage by having an effective and well-managed operation. This will ensure your operational processes and workforce perform up to the highest standards and expectations achieving a competitive advantage.

**The only course that includes TTT certification of Loading Masters!**

## Learning Objectives

**Master operational best practices** and apply a structured approach to marine terminal management of the ship shore interface.

1. **Identify updated procedures** for the handling, loading and discharging of bulk liquids
2. **Learn updated international guidelines and regulations** concerning tankers and terminals including physical properties and types of cargoes
3. **Increase your operational efficiency** for oil storage and transport
4. **Become aware of Quality & Quantity risk & loss and learn** prevention techniques
5. **Improve compliance, safety and environmental performance**
6. **Understand pumps and pipeline systems** including tanker loading and discharge operations
7. **Become a Master of Loading / Unloading**

## Who Should Attend?

This course is designed for anyone with immediate responsibility for loading, discharging and care in custody transfer or handling oil or gas cargoes especially oil and gas operators, vessel owners and operators, surveyors and marine superintendents.

**This course is NOT intended for LNG or LPG Terminals. TTT offers a special LNG and LPG Loading Masters & Operational Excellence Course Program, please check our website?**

## Attendees include:

- **Supply Chain** - Personnel involved in crude oil and products transshipment, chartering, shipping, finance, quantity measurement and accounting, cargo operations, planning, scheduling, including management who did not have a chance of working 'in the field'.
- **Energy and Logistics** - Ship-brokers, traders, shipping agents, claims departments staff, loading masters, cargo inspectors, surveyors, demurrage departments, marine insurers, charterers, ship-owners: biofuel, crude oil, oil products, chemical or mineral resource enterprises.
- **Administrative and Non-Operational office** staff who lack 'on hand' practical experience, this course will help them to vividly imagine operational reality by discussing and solving 'real time' daily issues. Highlighted by photographic material and true live situations taken from our international experience.

**Oil & Gas Industry Management** responsible for safe and effective cargo custody transfer and handling based on the 2020 ISGOTT and latest JETTY SAFETY publication.

## **COURSE OUTLINE**

### **DAY ONE**

#### **Session 1**

**Introduction:** How to prevent and control the various risks of the Ship/Shore Interface? TTT developed a unique learning method based on the science of information theory. Before we start the course, you will understand that information is key. We designed an Early Warning System to measure the information quality and quantity available in your terminal/refinery.

#### **PRE-TRAINING TEST**

We ask 10-15 questions to test existing knowledge in order to assess specific areas that need in depth coverage. Asking general questions related to loading master duties, this allows customizing the training program to ascertain optimum benefit to the students.

#### **Session 2**

##### **TANKERS & SHORE TANKS**

In order to understand and being able to professionally communicate, supervise and control the ship/shore interface, relevant technical and maritime terminology must be learned and understood.

- Vessel and Barge dimensions, equipment and maritime terminology
- Quantity and Quality terminology
- Pumps & lines – deep well, pump room, understanding stripping and ballasting
- Tank Cleaning systems: understanding Crude Oil Washing (COW)
- Inert gas systems and requirements for loading or discharge
- Displacement, Draft, Trim, List, Deadweight, Q88
- Custody Transfer Measurement
- Shore Tanks, fixed, floating roof, stratification, homogeneity

#### **Session 3**

##### **PROCEDURES FOR SAFE MOORING**

- Safe Mooring procedures (ISGOTT) Jetties & SPM
- Loading Master monitoring of moorings

#### **Session 4**

##### **HEALTH, SAFETY AND ENVIRONMENT - SUSTAINABILITY**

- ISGOTT Chapter 7, Human Factors and Behaviour in Health, Safety, Environment and Social Responsibility
- Personal Protective Equipment, Risks of H<sub>2</sub>S and Benzene.
- Hazards of Petroleum – SDS
- Emergency Preparedness and Handling

## **Day TWO**

### **Session 5**

#### **CARGO DOCUMENTS AND CARGO CALCULATIONS**

**Every Loading Master must be able to verify ship and shore quantities calculations before discharge and after loading**

- Understanding Bill of Lading, Ullage report, Vessel Experience Factor and other relevant documentation
- ASTM-API measurement & calculation methods of petroleum products, crude oil, chemicals and LPG. Loading Masters must be able to verify quantification of cargoes and not depend on surveyors or ship's officers.
- Trim and List correction calculation, basic interpolation
- Outturn determination - shore receipt reconciliation

### **Session 6**

#### **ISGOTT Chapter 21 MANAGEMENT OF THE TANKER AND TERMINAL INTERFACE**

- Standard Operational Procedure for Controlling the Ship-Shore Interface 2024
- Pre-Arrival exchange of information
- Pre-Berthing exchange of information
- Pre-Transfer Conference
- Information from terminal to tanker
- Agreed Loading and Discharge Plan

### **Session 7**

#### **HOW TO FILL IN THE ISGOTT SHIP SHORE SAFETY CHECKLIST, Chapter 21&25**

- Composition of the Ship Shore Safety Checklist
- Safety Letter
- Instructions for completing the Ship Shore Safety Checklist
- Role Play Exercise: Simulation of Pre-Transfer Conference Procedure: Cargo Agreement, SSSCL implementation by face to face discussion.
- NATO Alphabet – Everyone must be able to use it

## **DAY THREE**

### **Session 8**

#### **CHARTER PARTY AND DEMURRAGE**

- Charter party and INCO trading terms
- Understanding Laydays, Laytime, Laycan and Demurrage
- Statement of Facts – Time Keeping – Time Breakdown
- Cargo Retention clause
- Notice of readiness – when and how to sign, receive or accept
- Writing a Letter of Protest
- Storage Terminal General Terms and Conditions

### **Session 9**

#### **MANAGEMENT OF OPERATIONS**

- Setting up a Loading Master Ship/Shore control desk
- Implementing the Loading Master Standard Operational Procedure.
- The value of being a member of the Energy Institute

### **Session 10**

#### **WRITTEN EXAMINATION FOR LOADING MASTER CERTIFICATION**

Students are required to manage all ship/shore loading master duties in order to pass the test.

### **Session 11**

#### **REVIEWING TEST RESULTS AND CLASS DISCUSSION OF EXAMINATION ANSWERS**

- Awarding of Loading Master Certificates of Competence

#### **Note:**

***A 4<sup>th</sup> day can be added,(if possible) to visit a tanker and instruct the class how to physically check relevant technical specifics listed on the Ship/shore Safety Checklist***



**Course Instructor: Arend van Campen, Tank Terminal Training**

Arend van Campen is member the Energy Institute. Arend has worked for over 40 years as a CEO, Terminal Manager, Marine Cargo Expediter and Loss Prevention Advisor around the globe. TTT has been officially recognized by the Energy Institute as a Learning Affiliate. Arend holds a Master's degree in Business Ethics & Social Responsibility and teaches that a safe, sustainable and profitable business can thrive only when people choose and act ethically and are willing to learn. He set up [www.sustenance4all.com](http://www.sustenance4all.com), a thinktank researching sustainable business design to ensure human well-being and the preservation of the environment.

*We make people better!*