

Loading Master Training Course 2020



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 oil and gas marine terminal management

1. **Identify improved 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.

COURSE OUTLINE

DAY ONE

Session 1

PRE-TRAINING TEST

We ask 10 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
- Cargo inspection definitions
- Custody Transfer Measurement
- Shore Tanks, fixed, floating roof, stratification, homogeneity

Session 3

INTERNATIONAL SAFETY GUIDE FOR OIL TANKERS AND TERMINALS (ISGOTT) 5th EDITION

- Safety procedures and recommendations for tanker and terminal operations
- Oil Companies International Marine Forum (OCIMF) Marine Terminal Competence and Training Guide (MTCOT) – Awareness, Skill & Knowledge
- Human Factors and Behaviour in Health, Safety, Environment and Social Responsibility
- Personal Protective Equipment, Risks of H₂S and Benzene

Session 4

MANAGEMENT OF THE TANKER AND TERMINAL INTERFACE (ISGOTT Part 4)

- Communications: procedures & precautions - The Nautical Chain
- Pre-Arrival and Pre-Berthing exchange of information
- Information from tanker to terminal
- Information from terminal to tanker
- Cargo load or discharge plan and Cargo Agreement (Role Play)
- Pre-transfer exchange of information
- MSDS (SDS) and product quality specifications & HSE risks
- LM Duties and Preparation for cargo loading (responsibilities ship & shore)
- LM Duties and Preparation for cargo discharge (responsibilities ship & shore)

PROCEDURES FOR SAFE MOORING

- Safe Mooring procedures (ISGOTT) Jetties & SPM
- Preparation and verification of mooring
- Loading Master monitoring of moorings

Day TWO

Session 5

CARGO DOCUMENTS AND CARGO CALCULATIONS

- 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.
- Trim and List correction calculation, basic interpolation
- Outturn determination - shore receipt reconciliation
- Wedge formula calculation of Remaining on Board (ROB) and On Board Quantity (OBQ)

Session 6

SHIP SHORE SAFETY CHECKLIST

- Ship-shore safety checklist – all questions made visible to understand technical details of equipment and their locations
- How to fill it in?
- Which questions are relevant?
- What to do when a situation is not covered by the checklist?

Session 7

CHARTER PARTY AND DEMURRAGE

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

DAY THREE

Session 8

MANAGEMENT OF OPERATIONS

- Setting up a Loading Master Ship/Shore control desk
- HSE and Operational Risk Management Skills
- Communication skills with operator and ship's officers

Session 9

REVIEW OF WORKSHOP MATERIAL

- Discussion on workshop subjects
- Pre-examination questions and answers session
- The value of being a member of the Energy Institute

Session 10

TWO HOUR 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 4th 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 a committee member of the Dutch Branch of the Energy Institute. Arend has worked for over 35 years as a CEO, Terminal Manager, Marine Cargo Expediter and Loss Prevention Advisor around the globe including Amsterdam, Rotterdam and Antwerp for a number of clients such as Shell, BP, Exxon, Pertamina, Q8 Petroleum, Gulf Nederland, Vopak, Cargill, Amfert, Mobil and Petroplus. 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 'CREAZENE', an institute researching sustainable methods to ensure human well-being and the preservation of the environment.

We make people better!