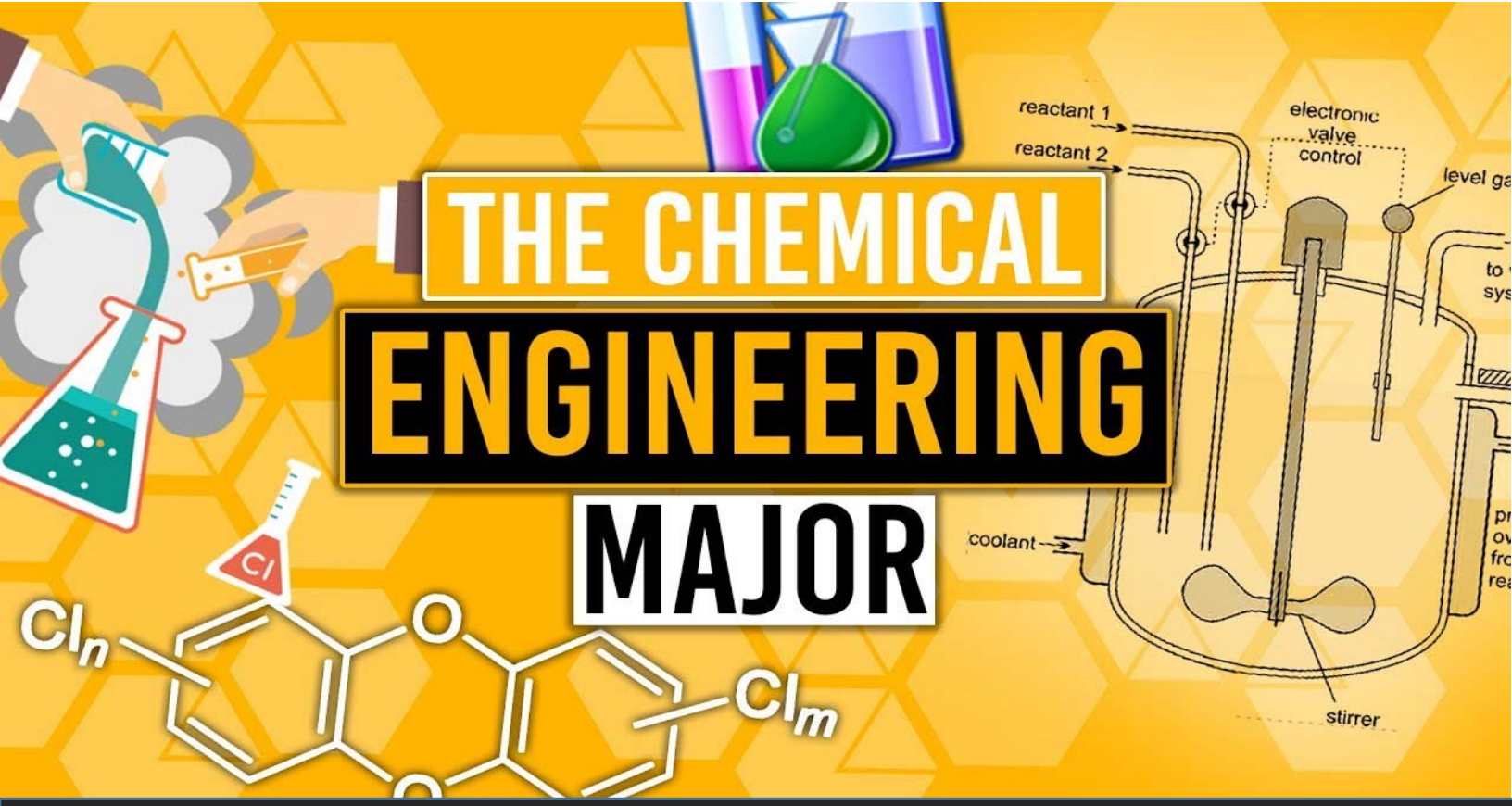

Managing Tanker Cargo Operations

BTS
Training & Consultancy

Managing Tanker Cargo Operations

Introduction

This BTS training course is designed to provide an understanding of the types of bulk liquid vessels which are used and the reasons for the differences between them. It also looks at the cargo operations to be conducted and the critical elements of these operations. As Part of the operations the methodology of maintaining the cargo in optimum conditions are examined. Many cargoes are extremely specialized and therefore are very expensive. Loss of cargo to mismanagement is completely avoidable if it is properly managed. By understanding the type of cargo, the hazards it presents and the management processes, it is possible to minimize the risk of cargo spoiling, pollution and incorrect vessel selection thus making for a more efficient and cost effective overall operation. Major points:

- Vessel types and their construction
- Cargo care and measurement
- Ballasting operations and optimizing vessel discharge features
- Hazards associated with different cargoes and how to manage them
- Determining the most suitable vessel
- Interpreting and understanding the regulations associated with these types of operation

This training course will highlight:

- The differences between Oil, Chemical and Liquefied Gas Tankers
- The properties of different cargoes and the associated hazards
- Health, safety and environmental controls when working on tankers
- What is involved in the safe operation and monitoring of cargo on board tankers
- How to perform and monitor safe oil tanker cargo operations in compliance with legislative requirements

Training Objectives

By the end of this BTS training course, participants will learn:

- The main requirements of cargo operations in compliance with legislative requirements
- To understand the principal physical and chemical properties of tanker cargoes
- Awareness of hazards relating to health and safety and prevent pollution of the environment
- Methods to apply occupational health and safety precautions
- Principles of how to respond to emergencies

Target Audience

Who is this Training Course for?

This training course is suitable to a wide range of professionals but will greatly benefit any person who deals with any aspect of tanker cargo operations. This may not be direct involvement but may require individuals particularly at a higher level who should understand the issues with tanker cargo operations. In particular:

- Senior Management with high level responsibility for tanker operations
- Fleet Managers
- Vessel Charterers (Aids ability to select the correct vessel)
- Technical Managers (Aids understanding of maintenance issues)
- Vessel personnel wishing to progress in their careers
- Refinery personnel at the vessel/facility interface

Training Methods

How will this Training Course be Presented?

Participants to this training course will receive a thorough training on the subjects covered by the seminar outline with the Tutor utilising a variety of proven adult learning teaching and facilitation techniques. Seminar methodology include.

The structure for this course is based around a power point presentation supported by video clips and class-based exercises. Examples of the properties and problems that can be encountered with the cargoes are demonstrated. Exercises will be based on scenarios that have happened or will be comparable to real time incidents. All exercises will use standard IMO/ Flag state pro- forma.

Organisational Impact

- Improves individual understanding of the impact of tanker operations
- Helps to build team structures in cargo management
- Assists in prevention of environmental issues and their control if they occur
- Demonstrates the criticality of cargo separation
- Provides knowledge of safe methods of cargo transportation
- Contributes to the competence of personnel in a structured competence scheme

Personal Impact

Individuals will benefit from enhanced knowledge of cargo handling methodologies, emergency response techniques and HSE issues. Individuals will benefit by:

- Better understanding of operational structures
- Appreciation of the importance of properly structured procedures
- Increases awareness of hazards presented by different operations
- Learning techniques to ensure vessel integrity is not compromised
- Practicing methodologies which will aid incident prevention
- Understanding how emergencies occur and how to manage them

Daily Agenda

Day One: Regulations & Properties of the Cargoes

- Regulations and Codes of Practice
- Defining hydrocarbons
- Hazard warning symbols, MSDS and COSHH
- Characteristics of hydrocarbons
- Electrostatic charges
- Safety equipment
- Work site control

Day Two: Vessel Construction and Pollution Prevention

- Effects of pollution
- Vessel Types
- Oil Tanker Construction
- Chemical Tanker Construction
- Liquefied Gas Tanker Construction

Day Three: Oil Tanker Cargo Operations

- Cargo system Components
- Loading and Discharging Cargo
- Cargo care and tank cleaning
- Loading and discharging
- Crude Oil Washing
- Purging, Gas freeing and Inerting
- Inert Gas system

Day Four: Chemical Tanker Operations

- Cargo care and compatibility
- Monitoring techniques
- Tank cleaning
- Cargo hazards
- Loading and discharging
- Flammability and Corrosivity
- Toxicity
- Emergency procedures

Day Five: Liquefied Gas Carrier Operations

- Defining LNG and LPG
- Properties and hazards
- Cryogenic safety
- Electrical safety
- Brittle fracture
- Loading and discharging
- Cargo care and compatibility
- Managing hazards