



## Dynamics of Petroleum Depot Operations

# *Dynamics of Petroleum Depot Operations*

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## **Introduction**

This BTS training course is designed for personnel working in the petroleum depot operations seeking to acquire more knowledge on effective handling of depot operations, storage, design standards, depot automation and warehouse control.

Most organisations with growth aspirations have invested significant time and resources in planning their expansion strategies but have not devoted commensurate attention to developing and executing an internal management model along the business chain that has to handle and deal with depot operations management.

This BTS training seminar will highlight:

- Evaluate the different custody transfer standards in use today
- Analyse the methodology for monitoring and controlling production losses
- Value the dynamics of oil product storage and distribution
- Learn the safety, health and environment aspects of depot operations

## **Training Objectives**

This BTS training course has been critically designed to address performance challenge in the various segments of the corporate value chain using a new approach that will insight a new thinking of resolving depot operational complexities.

At the end of this BTS training seminar, you will learn to:

- Understanding the various functions within a petroleum depot
- Understanding the principles governing depot operations
- Stocks taking, Accounting and control
- Product receipts and transfer, custody transfer
- Tank farm operations, calibration and management

# Target Audience

This BTS training course is suitable to a wide range of professionals but will greatly benefit:

- Depot Personnel Managers and supervisors
- Facility Operatives
- Engineers
- Site managers
- Anybody that has an interest in depot operations or running of a depot

## Daily Agenda

### Day One - Depot Design Standards

- Depot Design Standards
- Storage Depot Equipment Selection
- Storage Profiles and Layouts
- Storage techniques
- Fire Prevention and Protection
- Depot Emergency Preparedness Planning

### Day Two - Product Receipts and Transfers

- Loading and receipts
  - Compartment and Products Marine Receipts
  - Quantity / Cargo Grade
  - Normal Loading/ Discharge Flow Rate
  - Pump Performance/Rate
- Tank Gauging and Sampling
- Sampling Monitoring During Discharge
- Product quality control

### Day Three - Procedures

- Methods of tank calibration
- Equipment & Calibration
- Flow calibration
- Trends in calibration
- Types of calibration test rigs
- Tank gauging techniques

## **Day Four - Custody Transfer**

- Custody transfer
- Stocks Accounting and Control
- Tank management systems
- Leak detection
  - API 1130
- Depot Automation
- Warehouse Controls
- Monitoring and controlling production losses
  - Physical leaks
  - Control valves
  - Meter proven performance

## **Day Five - HSE & Effective Handling of Depot Operations**

- Risk incurred by flammable products
  - Flash points
  - Flammability
  - Explosive limits - LEL & UEL
- Ignition sources
  - Flames
  - Self-ignition temperature
  - Sparks and static electricity
  - Pyrophoric products
- The Permit to Work system
- Confined Space operations
  - Atmospheric Testing
  - Oxygen deficiency
  - The dangers of Nitrogen