API CALCULATION TO DETERMINE OIL VOLUME PRD042

COURSE DESCRIPTION

This course covers aspects of measuring & handling oil movements in large tank farms, hands on calculation of standard volumes, natural volumes and weight calculations and performing reconciliations, tank dip volume calculations, importance of accuracy in measurement of flow, levels, density, temperatures and their importance in relation to losses. It will inspire the participants to learn and handle large oil movements accurately, learn current trends in level, flow and density measurements, apply them to day to day plant operations and bring benefits to their employers and contribute for reducing losses and enhance cost savings.

COURSE GOAL

To enhance the participants' knowledge, skills, and attitudes necessary to understand oil volume calculations, transactions commonly done in day to day operations, including density conversion and volume reduction factors, API gravity conversions and volume calculations and conversions.

COURSE OBJECTIVES

By the end of this course, participant will be able to:

- Explain how to take accurate readings of levels, density, temperatures readings.
- Perform dip-volume calculations.
- Explain the density conversion.
- Read volume reduction factor from petroleum / API tables.
- Convert volumes to standard from natural quantities and estimate temperature variations.
- Confidently handle oil transfer operations accurately and understand, contribute for losses reduction and increase revenue savings.
- Calculate oil transfer quantities for tank to tank transfers, pipeline transfers and ship to shore transfers, etc.
- Learn more about oil volume measurements and contribute for enhancing revenue savings.

WHO SHOULD ATTEND

- Plant operators and supervisors involved in oil movement and storage in large tank farms and handling ship loading operations
- Accounting staff who wish to understand oil volume conversions and their impact on revenues.

COURSE DURATION

5 Working Days

COURSE OUTLINES

- Introduction
  - Oil measurement
  - Accuracy in level measurement
  - Density measurement
  - Temperature measurements
  - The impact on revenues.
- API Gravity, Density Conversions, Volume Reduction Factors and Conversion of Oil Volumes from Natural to Standard Volumes.
- Oil Movement and Storage Calculations, Operation of Large Tank Farms. Current Trends and Developments in Measurements.
- Oil Volume Losses, Reconciliations, Tank Dip Volume Calculations.
- Correct Use of API Tables, Petroleum Tables, Calculate Volumes Accurately.