Flow Measurement and Custody Transfer

Venue Information

Venue: London UK

Place:

Start Date: 2026-11-17

End Date: 2026-11-21

Course Details

Net Fee: £4750.00

Duration: 1 week

Category ID: METC

Course Code: METC-4

Syllabus

courses Introduction

Every operational process in industries like refineries, chemical plants, and pharmaceutical companies revolves around the precise measurement of raw materials and finished products. This ensures accurate financial transactions between parties involved in custody transfer scenarios. Additionally, emerging applications such as greenhouse gas emissions and CO2 trading demand precise flow measurement. However, even a slight error in measurement accuracy can lead to substantial financial losses for companies. The Custody Transfer courses offered by Skilllinx delves into the intricacies of flow measurement and transfer in various industrial settings, providing participants with indispensable knowledge and skills.

Objectives

The courses aims to equip participants with a comprehensive understanding of flow measurement technologies and systems crucial for custody transfer applications. Participants will learn about differential pressure (DP) measurement, turbine meters, positive displacement meters, Coriolis flow measurement, magnetic and ultrasonic

fluid laws.

courses Content

Day 1 - Basic Fluid and Gas Laws

- Introduction to pressure, flow volume, and continuity principle.
- Understanding energy law (Bernoulli's equation) and pressure change equation.
- Exploring flow configurations, laminar and turbulent flow, Reynolds number, flow losses, viscosity, and ideal gases.

Day 2 - General Characteristics and Performance of Flow-Meters

- Understanding system characteristics, flow and viscosity range, accuracy, stability, repeatability, sensitivity, noise, linearity, and reliability.
- Exploring flow meter applications, sizing, and calibration.

Day 3 - Types and Applications of Flow-Meters

- Detailed study of differential pressure (DP) flow meters, including orifice plates, Venturi tubes, and flow nozzles.
- Comprehensive overview of positive displacement (PD) flow meters and turbine flow meters, including types, systems, performance, properties, characteristics, uses, applications, installation, and calibration.

Day 4 - Types and Applications of Flow-Meters

- In-depth exploration of ultrasonic flow meters, magnetic flow meters, and Coriolis flow meters, including operating principles, performance, properties, characteristics, uses, applications, installation, and calibration.

Day 5 - Flow Measurement systems and other considerations

- Understanding meter factor, meter runs, proving systems, time delay, quality systems, custody transfer skids, flow computers, communication, temperature, and pressure measurements.

By segregating the courses content over five days, participants can grasp each topic thoroughly without feeling overwhelmed, ensuring effective learning and retention.