Systems of Fiscal Metering

Crucial Data Capturing and Monitoring Flow

Introduction

Every day, transactions involving oil and gas are carried out all around the world. To execute this as precisely as feasible is the goal. While the user has access to many approaches, it is a well-known fact that reading differences in an incorrect gadget (or one that displays a measurement that is less than precise) can result in millions of dollars being lost by the vendor or the buyer.

This Systems of Fiscal Metering training course goes above and beyond by examining every measuring equipment that can satisfy the current high international standards, since not all measuring devices can match the strict specifications needed for fiscal flow monitoring. These instruments function in accordance with strict standards of accuracy, repeatability, and auditability and are internationally recognised.

This training session on Course N Carry Systems of Fiscal Metering will emphasise:

- Everything that is unique and pertinent to the flow circumstances at the measurement spot, including the currently used fiscal measuring technologies (from differential pressure to Coriolis)
- The working principle of every technology in terms of its attributes, capabilities, applications, installation, calibration, benefits, and drawbacks, among other things.
- How to choose the appropriate gadget for the job at hand
- Recognise the proving, calibration, upkeep, metre runs, and other related parts of measuring fiscal flow.

Objectives

The goal of this training course on Systems of Fiscal Metering is to impart knowledge in an approachable and significant way that is considered pertinent to fiscal metering systems. The instructor's participation and engagement with the delegates are centred on their talents, which are taken into account at all times.

After completing this training programme on Systems of Fiscal Metering, you will be able to:

- Gain a thorough understanding of the recognised tools and technologies in use today.

- Examine every particular circumstance and offer a workable solution that conforms with rules and regulations.
- Put in place a comprehensive fiscal flow metering system, from conception to implementation.
- Use calibration and auditing techniques that adhere to international best practices.
- Create a fiscal flow metering system that is compliant and fully operational.

Training Methodology

There are several training methods used. Small portions of theoretical material are presented to maximise information transfer and retention. Included is the utilisation of multimedia content to support theoretical comprehension. The seminar is built around practical tasks, which can be completed in a group or individual setting depending on what would have the biggest impact. This Systems of Fiscal Metering training course includes an online assessment at the conclusion of each chapter to gauge individual learning, as well as pre- and post-course evaluations.

Organizational impacts

Each delegate will go having gained extensive knowledge and comprehension of the subject, knowledge that will undoubtedly be advantageous to the company hiring them. The following are some ways that the organisation will be impacted by the delegate's knowledge:

- There will be a full explanation of the principles of gas laws and fluids.
- Everything related to globally recognised fiscal metering systems is discussed.
- A thorough discussion of international standards relevant to widely used fiscal metering systems is provided.
- Systems of Fiscal Metering will be covered, but so will other measurement-related topics like chromatography and analysers'.
- Systems for proving will be thoroughly discussed.

Personal Imapct

Candidates will find the following extremely valuable on a personal level:

- They will acquire specific expertise in the area of fiscal metering.
- They will become more assured in their ability to identify the ideal gadget for a given use.
- They will gain more understanding and proficiency, enabling them to talk about every facet related to measuring fiscal flow.
- They will gain respect as a contributing voice to debates and choices pertaining to financial measurement.
- When speaking with experts who share their interests, they will feel more at ease themselves.

Who should attend:

Many different types of people will benefit from this workshop. From management to employees, everyone involved in fiscal flow measurement systems has a lot to learn from the information being offered.

A wide number of professionals can benefit from this Course N Carry Systems of Fiscal Metering training course, but the following are particularly noteworthy:

- Supervisors, Engineers, and Process Workers
- Commissioning Supervisors of Staff
- Employees in Finance, Auditing, and Maintenance Employees (from all fields)

Course Outline

Day 1

Characteristics of Fluids and Relevant Gas Laws

- Essential Ideas for Flow Measurement
- Bernoulli's Laws, Formulas, and Equations Particular to Flow
- Changes in the Profile of Flow
- The Reynolds Number, Viscosity, and Everything Related Information Associated with Perfect Gases
- Different Gas Laws

Day 2

Measurement and Metre Performance Aspects and Features of Fiscal Metering Systems, and Features Associated with Them

- Examining the Possible Ranges for the Flow to Advance
- Theoretical Aspects Important to Flow: Sensitivity, Linearity, Performance, Stability, Accuracy, and Reliability, among Others
- Measurement of Fiscal Flow in the Real World: Examining Several Installations
- Choosing the Appropriate Size for a Flow Measuring Device
- Fiscal Flow Metering System Calibration

Day 3

Turbine flow metres, positive displacement metres, and differential pressure metres

- Detailed Understanding of Differential Pressure Flow Metres, with Particular Focus on Venturi Tubes, Orifice Plates, Pitot and Averaging Pitot Tubes, and Fow Nozzles
- The International Standard for Orifice Plates (AGA 3)
- Complete Understanding of Positive Displacement Flow metres, with a focus on rotating paddle devices, rotors, oscillating pistons, and oval gears
- Slippage as well as Volume Shift
- Complete Understanding of Turbine Flow Metres
- Circumstances that might result in obstructions and blockages, such as cavitation, erosion, and corrosion
- The International Standard for Turbine Devices (AGA 7)

Day 4

Complete Understanding of Ultrasonic Flow Metres

- Turbine, Electromagnetic, Coriolis Mass Flow Systems, and Ultrasonic Flow Metres
- Straight Line Pipe Run Specifications
- The International General Assembly (AGA 9) Governing Ultrasonic Devices
- Complete Understanding of Magnetic Flow Metres
- Complete Understanding of Coriolis Flow Metres
- The International Standard for Coriolis Devices (AGA 11)

Day 5

Systems of Measurement, Sampling, Proof, and Flow Computing-Specific Equipment

- How Metre Factors Affect Fiscal Measurement
- The Connection between Metre Runs and Fiscal Measurement
- Developing Systems with a Focus on Master Metre, Direct, Indirect, Volume, and Displacement Providing Systems
- Children's Chromatography Sampling Systems
- Time Delays' Effect on Specific Systems
- Flow Computers, Serial Data Transfer, and Additional Measurements Related to the School Flow Assessment