



*Flow Measurement in Oil and Gas Operations*

*Madrid - Petit Palace Alcalá Torre*

*14-10-2024*

# Flow Measurement in Oil and Gas Operations

Course code: SC218 From: 14-10-2024 Venue: Madrid - Petit Palace Alcala Torre Course Fees: 4750 £

## Introduction

Accurate flow measurement is essential in the oil and gas industry to ensure proper allocation of resources, monitor production processes, and meet regulatory requirements. This training program is designed to provide participants with a comprehensive understanding of flow measurement techniques and technologies specific to oil and gas operations. Participants will learn how to select, install, and maintain flow measurement devices, ultimately improving efficiency and accuracy in their work.

## Course Objectives of Flow Measurement in Oil and Gas Operations

Upon completing this program, participants will be able to:

- Understand the importance of flow measurement in oil and gas operations.
- Identify various flow measurement technologies and their applications.
- Select appropriate flow measurement devices for specific scenarios.
- Install and calibrate flow measurement instruments accurately.
- Troubleshoot common flow measurement issues.
- Enhance operational efficiency and resource allocation through accurate flow measurement.

## Course Methodology of Flow Measurement in Oil and Gas Operations

This program will employ a combination of engaging learning methods, including:

- Lectures and Expert Insights: Leading industry experts will share their insights and best practices.
- Case Studies: Analyze real-world talent acquisition challenges and solutions.
- Group Discussions: Engage in meaningful discussions and share experiences with peers.
- Role-Playing and Simulations: Practice scenarios to enhance skills.

## Organizational Impact of Flow Measurement in Oil and Gas Operations

This training program will have a positive impact on organizations by:

- Improved accuracy in resource allocation and production monitoring.
- Enhanced compliance with regulatory requirements.
- Reduced downtime and operational inefficiencies due to accurate flow measurement.
- Greater cost savings through optimized flow measurement strategies.
- Increased confidence in managing flow measurement systems.

## Personal Impact of Flow Measurement in Oil and Gas Operations

Participants will experience personal growth and development, including:

- In-depth knowledge and expertise in flow measurement techniques.
- Enhanced problem-solving abilities in flow measurement-related tasks.

- Improved career prospects in instrumentation and process engineering roles.
- Greater ability to contribute to process optimization within the organization.
- Enhanced understanding of the critical role of flow measurement in oil and gas operations.

## Who Should Attend

This training program is ideal for:

- Instrumentation and Control Engineers and Technicians
- Process Engineers
- Maintenance Personnel
- Production Supervisors and Managers
- HSE (Health, Safety, and Environment) Professionals
- Anyone involved in flow measurement within the oil and gas industry.

## Course Outline

### Day 1

#### Introduction to Flow Measurement in Oil and Gas

- Importance of Accurate Flow Measurement
- Fluid Properties and Behavior
- Basics of Flow Measurement

### Day 2

#### Flow Measurement Technologies

- Differential Pressure Flowmeters
- Positive Displacement Flowmeters
- Coriolis Flowmeters

### Day 3

#### Flow Measurement Instruments and Installation

- Ultrasonic Flowmeters
- Vortex Flowmeters
- Installation and Calibration Best Practices

### Day 4

#### Troubleshooting and Maintenance

- Common Flow Measurement Issues and Solutions
- Preventive Maintenance Strategies
- Flow Measurement Audits and Compliance

### Day 5

#### Advanced Topics and Applications

- Multiphase Flow Measurement
- Custody Transfer and Fiscal Metering
- Course Review