

LEARNING

Flow Line Inspection, Maintenance & Integrity Management For The Oil & Gas Industry

18 – 22 / 11 / 2024

**citizenM Los Angeles Downtown Hotel
Los Angeles, CA, USA**



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Hawalli - Block 11 - Street 172 - Parcel 013521 - Amar Complex - Floor 1 - Flat 1 - PACI Unit No. 18121758

Abar Solutions Petroleum Consultancy Invite Your Employee To Participate With Us In Special Training Course As Under Details:

Course Name		Flow Line Inspection, Maintenance & Integrity Management For The Oil & Gas Industry			
Language	Period	Start	End	Location	Fees
English	5 Days	18/11/2024	22/11/2024	citizenM Los Angeles Downtown Hotel, Los Angeles, CA, USA	2500 KD
** The fees includes: lecturer, training material, training room with one coffee break, certificate of attendance in last day training course **					

Course Overview:

This comprehensive course covers the essential aspects of **flow line inspection, maintenance, and integrity management** in the oil and gas industry. The course is designed to provide participants with the skills and knowledge required to effectively inspect, maintain, and ensure the integrity of flow lines, which are critical to the safe and efficient transport of hydrocarbons.

Course Objectives:

- Understand the key components and operational principles of flow lines.
- Learn industry standards and best practices for inspecting and maintaining flow lines.
- Identify common flow line defects and failure mechanisms.
- Implement effective maintenance strategies to maximize flow line integrity and minimize downtime.
- Understand risk assessment techniques and integrity management systems.
- Gain hands-on experience with flow line inspection tools and techniques.

Course Outline:

Day 1: Introduction to Flow Lines in Oil & Gas Operations

- Overview of flow lines and their role in upstream and downstream processes.
- Flow line materials and construction standards.
- Types of flow lines: production, injection, and transportation flow lines.
- Flow line design considerations for integrity and performance.



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Day 2: Flow Line Defects and Failure Mechanisms

Common flow line defects: corrosion, erosion, fatigue, and cracking.

External and internal threats to flow line integrity.

Case studies of flow line failures and their causes.

Understanding flow-induced vibration and its impact on flow lines.

Day 3: Inspection Techniques for Flow Lines

Non-destructive testing (NDT) methods: Ultrasonic Testing (UT), Magnetic Particle Testing (MPT), and Radiography.

Visual inspection techniques and tools.

Inline inspection (ILI) tools: smart pigs and pipeline inspection gauges.

Remote monitoring and diagnostics technologies.

Scheduling and planning inspection programs.

Day 4: Maintenance Strategies for Flow Lines

Preventive, predictive, and corrective maintenance approaches.

Cathodic protection for corrosion control.

Coatings, linings, and chemical inhibitors for flow line protection.

Flow line cleaning techniques: pigging and flushing.

Real-time monitoring and integrity tracking systems.

Day 5: Flow Line Integrity Management and Risk Assessment

Integrity Management Systems (IMS) for flow lines.

Risk-based inspection (RBI) approaches.

Regulatory compliance and industry standards (API, ASME, ISO).

Emergency response and contingency planning for flow line failures.

Case study: Developing a comprehensive integrity management program.

Learning Methodology:

Classroom Lectures: Foundational knowledge and theoretical principles of flow line inspection and maintenance.

Practical Exercises: Hands-on training with inspection tools and integrity management software.

Case Studies: Analysis of real-world incidents and application of best practices.

Group Discussions: Engaging in collaborative discussions to share experiences and solutions.



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Course Agenda:

Flow Line Inspection, Maintenance & Integrity Management For The Oil & Gas Industry Los Angeles, CA, USA - From 18/11/2024 To 22/11/2024

Day	9.00 AM To 11.30 PM	30 M.	12.00 PM To 2.00 PM
MONDAY 18/11/2024	Introduction to Flow Lines in Oil & Gas Operations: <ul style="list-style-type: none"> Overview of flow lines and their role in upstream and downstream processes. Flow line materials and construction standards. 	Break	Introduction to Flow Lines in Oil & Gas Operations: <ul style="list-style-type: none"> Types of flow lines: production, injection, and transportation flow lines. Flow line design considerations for integrity and performance.
TUESDAY 19/11/2024	Flow Line Defects and Failure Mechanisms: <ul style="list-style-type: none"> Common flow line defects: corrosion, erosion, fatigue, and cracking. External and internal threats to flow line integrity. 		Flow Line Defects and Failure Mechanisms: <ul style="list-style-type: none"> Case studies of flow line failures and their causes. Understanding flow-induced vibration and its impact on flow lines.
WEDNESDAY 20/11/2024	Inspection Techniques for Flow Lines: <ul style="list-style-type: none"> Non-destructive testing (NDT) methods: Ultrasonic Testing (UT), Magnetic Particle Testing (MPT), and Radiography. Visual inspection techniques and tools. Inline inspection (ILI) tools: smart pigs and pipeline inspection gauges. 		Inspection Techniques for Flow Lines: <ul style="list-style-type: none"> Remote monitoring and diagnostics technologies. Scheduling and planning inspection programs.
THURSDAY 21/11/2024	Maintenance Strategies for Flow Lines: <ul style="list-style-type: none"> Preventive, predictive, and corrective maintenance approaches. Cathodic protection for corrosion control. Coatings, linings, and chemical inhibitors for flow line protection. 		Maintenance Strategies for Flow Lines: <ul style="list-style-type: none"> Flow line cleaning techniques: pigging and flushing. Real-time monitoring and integrity tracking systems.
FRIDAY 22/11/2024	Flow Line Integrity Management and Risk Assessment: <ul style="list-style-type: none"> Integrity Management Systems (IMS) for flow lines. Risk-based inspection (RBI) approaches. Regulatory compliance and industry standards (API, ASME, ISO). 		Flow Line Integrity Management and Risk Assessment: <ul style="list-style-type: none"> Emergency response and contingency planning for flow line failures. Case study: Developing a comprehensive integrity management program.



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