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EMERGENCY SHUTDOWN & LEAK DETECTION IN PIPELINES

Start Date:	25/01/2027	**End Date:**	29/01/2027
Categories:	Oil & Gas	**Venues:**	Amsterdam
Formats:	In Person	**Instructors:**	

OVERVIEW

This course provides in-depth training on emergency shutdown systems (ESD) and leak detection technologies in pipeline operations. It equips professionals with the skills to implement safety protocols, configure monitoring tools, and coordinate emergency responses in compliance with global standards.

OBJECTIVES

By the end of this course, participants will be able to: • Understand the role of ESD systems in pipeline safety and risk management. • Identify and configure leak detection technologies suitable for various pipeline types. • Integrate ESD and leak detection systems with control and SCADA platforms. • Respond effectively to leak events through planning, drills, and communication protocols. • Align operational safety strategies with industry regulations and best practices.

COURSE OUTLINE

1. Fundamentals of ESD Systems in Pipeline Operations 2. Leak Detection Technologies: Acoustic, Fiber Optic, and Flow-Based Methods 3. Integration of ESD and LDS with SCADA Systems 4. Emergency Response Planning and Execution 5. Compliance, Documentation, and System Testing

TARGET AUDIENCE

Pipeline operators, control room staff, instrumentation engineers, and HSE personnel responsible for pipeline safety, emergency response, and monitoring systems.

METHODOLOGY

System walkthroughs, fault scenario simulations, leak detection demos, and coordinated drill exercises.

CONCLUSION

Participants will develop the expertise to operate and manage integrated ESD and leak detection systems, ensuring rapid response and safe pipeline operations.

DAILY AGENDA

Day 1: Introduction to ESD Systems and Safety Protocols

Understanding system architecture, triggers, and operational roles of ESD systems.

Day 2: Leak Detection Technologies and Applications

Exploring acoustic, fiber optic, and mass balance systems for leak detection.

Day 3: System Integration and Automation Platforms

Interfacing LDS and ESD systems with SCADA and control infrastructure.

Day 4: Emergency Response Planning and Drills

Designing and executing emergency procedures and inter-team coordination.

Day 5: Compliance and Operational Readiness

Regulatory standards, documentation practices, and system testing protocols.

For more information, please contact us:
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