BLACKBIRD FOR TRAINING

Pipelines & Piping Inspection: Comprehensive 1-Week Course

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Düsseldorf (Germany)

UK Traininig
PARTNER



Pipelines & Piping Inspection: Comprehensive 1-Week Course

Ref: 20221609_138825 Duration: 5 days Location: Düsseldorf (Germany) Fees: 5900 GBP

Why This Course

Ensuring the safety and reliability of pipelines and piping systems is critical in the oil, gas, and process industries. Professionals responsible for inspection and maintenance must be equipped with practical knowledge of industry standards, corrosion mechanisms, and integrity assessment techniques to prevent failures and optimize asset performance.

This intensive 1-week course provides participants with the skills and frameworks needed to implement effective inspection, maintenance, and integrity management programs. Through a combination of theoretical learning and practical applications, attendees will gain the confidence to assess, maintain, and repair pipeline and piping systems in compliance with ASME and API standards.

What You'll Learn and Practice

By attending this program, you will be able to:

- Apply ASME and API codes to pipeline and piping inspections.
- Conduct a range of inspection techniques, including non-destructive testing and in-line pigging.
- Evaluate corrosion mechanisms and implement effective mitigation strategies.
- Perform fitness-for-service assessments to determine repair needs.
- Develop comprehensive inspection, maintenance, and integrity management programs.

The Program Flow

Day 1: Introduction and Fundamentals

- Overview of pipeline and piping systems
- ASME and API codes, standards, and best practices
- Material properties and specifications
- Pipe manufacturing and fabrication processes

Day 2: Inspection Techniques

- Visual inspection methods and protocols
- Non-destructive testing NDT techniques
- In-line inspection tools and pigging technology
- Data interpretation and analysis for decision-making



Day 3: Corrosion and Degradation Mechanisms

- Common corrosion types in pipelines and piping
- Environmental and operational factors affecting corrosion
- Corrosion prevention, monitoring, and control strategies
- Assessment of mechanical damage

Day 4: Fitness-for-Service and Integrity Assessment

- ASME B31G and API 579 methodologies
- Calculating remaining life and assessing system reliability
- Risk-based inspection RBI principles and implementation
- Designing and managing integrity programs

Day 5: Maintenance, Repair, and Documentation

- Repair techniques and their appropriate applications
- Hot tapping, in-service welding, and other specialized methods
- Planning and scheduling inspection and maintenance activities
- Documentation, reporting, and regulatory compliance

Individual Impact

Participants will leave the course with:

- Practical skills to develop and implement robust inspection and maintenance programs.
- Enhanced ability to conduct accurate fitness-for-service assessments.
- Knowledge to make informed, standards-compliant decisions on repair methods.
- Tools to create comprehensive integrity management plans that optimize pipeline and piping performance.

Organizational Impact

Organizations will benefit from:

- Reduced risk of pipeline and piping failures.
- Improved compliance with ASME and API standards.
- More effective maintenance planning and resource allocation.
- Enhanced safety, reliability, and operational efficiency.



Training Methodology

- Interactive lectures and technical discussions
- Case studies of real-world pipeline and piping scenarios
- Hands-on exercises in inspection, assessment, and repair planning
- Group problem-solving and peer learning sessions

Beyond the Course

By the end of the one week, participants will be prepared to:

- Lead inspection and maintenance programs for pipelines and piping systems.
- Conduct integrity assessments and make informed repair decisions.
- Implement risk-based inspection strategies to maximize asset reliability.
- Ensure long-term operational safety and compliance with industry standards.

