Pipeline Integrity Issues, Mitigation, Prevention and Repair Methods using ASME B31.8S

A Practical, Case Study-based Training Program
Led by:

Dr. Keith Leewis

15 Hours • 1.5 CEUs • 15 PDHs

About this Master Class *(MC143)*

This two-day MasterClass provides the requirements for improving the integrity of gas pipelines using ASME B31.8S, which is the most widely used Code for pipeline integrity management. The course focuses on Table 7.1-1 in ASME B31.8S Code, and how it should be used to create a program that more than meets the minimum requirements of US and other regulations. Table 7.1-1 lists all 22 threats to pipelines and provides two pages of various technologies and proven solutions to address each one.

For more information and to register, visit
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ASME MasterClass Series

The ASME Master Class Series focuses on applications and case studies of a particular topic. Each Master Class is led by an ASME Master, an expert in his professional discipline, who brings a wealth of knowledge and practical examples to the forum. Participants are expected to have prior knowledge of the topic area to gain the most from this interactive environment.

Sessions are focused on real world examples and case studies, with active class discussion and analysis.

About this MasterClass

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This course explains how to develop and execute an IMP using both of the ASME B31.8 and B31.8S Codes, as well as other relevant standards. It discusses the best practices for use in system design, operations for and maintaining integrity, and discusses the appropriate technologies for pipeline repairs. It provides details and examples of alternatives, as well as alternate preventive and mitigation measures.

Complementing the ASME B31.8 code, this course covers the design, operation, maintenance, and repair of natural gas distribution and transmission pipelines and ASMEB31.8S which covers Integrity Management.

Upon completion, attendees will be able to

- Explain the many prevention and detection practices to ensure pipeline safety
- Describe how the use of certain prevention and detection practices from the ASME B31.8S Standard, as well 49CFR192 regulations, interact for improved performance and ensure maximum safety
- Specify prevention and repair solutions for each threat and improve the IMP performance for gas pipelines
- Explain the reasons why one prevention and repair solution may be better than another; or why both together can be even more effective

About this ASME Master

Dr. Keith Leewis brings over forty years of extensive and comprehensive experience in pipeline engineering, design, materials, operations, and integrity management, in the operations and engineering sectors of the energy industry.

As an integrity engineer he provides technical assessments that assist clients in achieving comprehensive and timely regulatory approvals. As Member of ASME B31.4 and B31.8 Standards Executive Committees, he is involved in the improvement of the ASME international standards for the design and integrity management of natural gas pipelines, including those API & NACE standards related to integrity assessment.

In prior years, Dr. Leewis was a tenured professor - TUNS, Director of Technology - Welding Institute of Canada, Project R&D Manager at PRCI, GTI & GRI, Senior Engineer - TCPL, and an R&D engineer – DOFASCO.

Who Should Attend

This MasterClass is intended for pipeline personnel who have the responsibility for integrity and safety, including senior pipeline managers, pipeline engineers, operations and maintenance personnel as well as others involved in the training for and implementation of integrity management programs.

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AGENDA

The contents are presented in the sessions tentatively organized as shown below. The two-day schedule allows for ample discussion and interaction with attendees. The instructors reserve the right to modify the content to address the audience's needs and preferences.

Course Outline

1. Integrity Management Overview including the Pipeline and Hazardous Materials Safety Administration (PHMSA) Regulations
2. Pipeline Integrity Issues Threat Susceptibility and Management for Gas Transmission Pipelines
3. Prevention techniques required for the Integrity Management Process
4. Pipeline repair techniques for multiple or specific needs
5. Where to find supporting knowledge and examples
6. Putting All the Prevention and Repair Pieces Together
7. Class exercises to support the instruction materials