

Course Overview:

Systematic risk-based inspection can assess the likelihood and potential consequences of the failure of pressure equipment. Risk-based inspection provides an opportunity for companies to prioritize inspection equipment; improve methods of inspection, frequency resources, develop specific plans inspection equipment, and enable the implementation of reliability centered maintenance.

Course Objective:

- understanding of the key aspects of Risk Based Inspection, its advantages and limitations
- understanding of how it is linked to reliability-centered maintenance
- Understand how fitness-for-service assessment affects the Risk
- Provide you with the practical and effective methods you need to perform practical likelihood and consequence analysis
- Learning how to develop optimum Inspection intervals for individual equipment based on the assessment of the active degradation

Course Outline:

- Preparing for the hazard evaluation (risk review or PHA)
- Quantitative & qualitative hazard
- Hazardous materials (flammable & combustible • substances)
- Preliminary hazards analysis
- HAZOP technique
- Common Inspection Strategies and Their Limitations
- Risk-Based Decision-Making Fundamentals and Tools
- Understanding and Managing Risk
- Risk Based Inspection Definitions
- Risk Based Inspection Evolution
- Reasons for implementing Risk Based Inspection
- Inspection planning guidance
- Inspection History, Interpretation
- Equipment Data Base
- Inspection Interval Optimization Based on Assessed Risk
- Evaluation of Inspection Results
- Estimation of Consequences of Failures

Who Should Attend:

- Operations Engineers
- Maintenance Engineers
- Engineering managers and supervisors
- Technical staff with responsibilities for inspection, maintenance, assessment and mitigation of plant equipment degradation

Training Language:

EN / AR

Training Methodology:

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation