API 580 - Introduction to Risk Based Inspection

What to Expect?

Get familiar with RBI basics, definitions & terms. Steps involved, how to collect and analyse data.

Apply risk management, optimized inspections, actual damage, damage modes and associated risks.

Understanding consequence effects and calculation of risk numbers with practical application of RBI for enhanced focus.

Methodology:

Course available in English.
25 hs Dedication, 45 days open
Available 24/7
“Learn by doing” concept
Self-paced course
Non-scheduled sessions
Campus Virtual: Schoology
Available on IPhone / Android

Resources Available

Study Notes
Introductory Videos
Multiple Choice Assignments
Virtual case study
Solved examples
Extra Material
Instructor Support

Risk Based Inspection: What is RBI?, Data Collection, Damage Modes, RBI Analysis, FFS Assessment, Risk Acceptance, RBI Reports & Communication.

Who Should Attend?

This course is intended for graduates (or soon to be), designers, freelancers, technicians and engineers from Petroleum, Petrochemical, chemical & food industries.

Previous knowledge of piping, vessels & storage tanks inspection methods will be an advantage for learning this course, but is not mandatory to attend this course.

Training Objectives

The main objective of this course is to transfer RBI concepts, data collection, analysis methodology to the participants, through exercises learn RBI skills required in projects, field inspection & asset management function.
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**Module 1:** Risk Based Inspection fundamentals, vocabulary, terminology.
**Module 2:** definition of POF, understanding damage mechanisms, modes of failure & optimizing inspection. Fitness for service assessment basics.
**Module 3:** definition of COF and understanding consequence effects, failure mode and consequence effects, estimation methods & trends.
**Module 4:** calculation of risk numbers, ranking at facility level & at equipment level.

Exercises for applying knowledge to field practice.

**Instructor**

Ganapathy Balasubramaniam, is a mechanical engineer with 30 years oil & gas experience with a leading Indian National oil company. He is a passionate trainer, has experience training staff members of leading oil firms Hindustan Petroleum, Qatar petroleum, KOC, QAPCO, ADNOC, Total, TUV, InIPED, etc. in India, Middle East, Europe & USA.

He is highly experienced in assets integrity management and has conducted several training programs in this subject for leading clientele.

He is certified by API in RBI, Storage tanks (API 653) & tank entry supervision (API-TES) and is an instructor with Arveng Training & Engineering, Spain.

He is member of SPE, API, ASME, ISA, Energy Institute, Hydraulic Institute & ATD forums.

He has a diploma in Management and certified in Industrial IOT from University of California. He is renowned for simplifying complex subjects and inspiring participants to learn & grow in their careers.

Related Courses

- API 650 Aboveground Storage Tanks
- API 653: Integrity Management of Storage Tanks
- QC Inspection of Mechanical Equipment