1. Course Details:

Course Code : APIQ-005
Course Title : API 579 Fitness for Purpose (FFP)
Course Duration : 5Days

2. Course Overview

- Course is designed to provide delegates with a broad understanding of the failure mechanisms of pressure equipment. Delegates are taught the role of construction codes (ASME BPVC Section V111/B31.1) in FFP assessment of pressure equipment and the principles of "out-of-code" FFP assessments and selected methodologies of API 579. The course is tailored to the specific needs of offshore and onshore engineers who work in the field of integrity assessment.

3. Learning Outcomes:

- The course gives insight of piping design, fabrication installation and testing of new process piping according to ASME B 31.3. The course further dwells upon the concepts of Fitness for Service.
- A Fitness for Service assessment shows whether damaged or aged components critically affect the present fitness of a piping system for a safe use. And if it is safe, it provides an estimate of how long it is likely to stay safe.

4. Course Contents:

ASME B 31.3:

- Piping Codes and Standards
- Design Philosophy of B 31.3 for Piping Systems
- Design for Internal Pressure
- Design of permanent blanks
- Selection of Fittings and Flanges, Pressure-temperature ratings
- Materials Review, Listed, unlisted materials
- Impact testing for low temperature service
- Welding of piping including branch welds
- Preheat Temperature and Post Weld Heat Treatment
- Non-Destructive Examination Requirements
- Leak testing-Hydrostatic and Pneumatic
- Case studies and exercises

API RP 579:

- Application of API 579 to run or Repair Decisions
- Fitness for Service Assessment Procedures
- Introduction of Damage Mechanisms
- Corrosion of piping – General, localized and pitting corrosion
- Repair Techniques for Metal Loss
- Repair Techniques for Mechanical Damage
- Fractures Cracks and Fatigue Failure
- Case Studies and exercises

5. Our Methodology:

- Make coaching and monitoring innovative and using modern
- Media training also using on the go training by using interactive means and focusing on
- The exercises, practical applications and real situations study.
- Live delivery method, instructor-led training.
- Experienced consultant, trainers, and professional.
- Qualified trainer with high-level experience

6. Attendance Reports:

- Send daily attendance reports to trainingdep
- Send full attendance report to training dep. by the end of thecourse
- Attend 100 % from the course days also providedaily
- Issue attendance certificate for participant who attend minimum 80% from the course duration

7. Pre/Post Reports:

- Pre- assessment before starting training.
- Post assessment after finish training
- Full report for the deferent between Pre-& Post assessment

8. Who Should Attend?

- Inspectors, Design, System
- Operations and Maintenance Engineers
- Others responsible for safe operation, repair and Maintenance and Repair of Process Piping