Best Technology Solutions (BTS)

API 570 Training--Piping Inspector Course Training program

Description

American Petroleum Institute (API) Piping Inspection Code 570 Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems is recognized and used with confidence worldwide. The Piping Inspector Certification Program (PICP) is developed for the continual high level of efficiency and safety through emphasizing professional credibility and process integrity.

Process piping system is one of the critical production assets in process industry. Organizations recognize the need to maintain authorized inspection agency and technically assess qualified piping engineers and inspectors to ensure facilities are at top performance. Therefore, API 570 certification is one of the most sought after professional competency that enables inspectors to be actively involved in the improvement of industry & environmental health and safety performance, reinforcement management control, compliance of inspection capabilities.

This 5 day Piping Inspector course is based on API 570/574, API RP 577/ 578, ASME B16.5/ B31.3 and ASME BPVC Section V/ Section IX. It is to promote the recognition of fitness-for-service concepts to evaluate in-service degradation of piping system. With our approved trainers extensive involvements in the facilities inspection, as well as the practical coaching and mentoring approaches, this course not only prepare the candidates to pass API 570 examination with confident, it will also advance the appreciation of piping facilities and thus to broaden the technical knowledge base in order to avoid unplanned shutdown and reduce expenses!

Each attendee must bring a Laptop computer with Microsoft operating system

Who should attend?

This course will specifically benefit Engineers, Supervisors, and Managers from the following disciplines:

- Mechanical Engineering
- Inspection
- Maintenance & Operations
- Technical & Engineering
- QAQC
- and technical personnel with 2-3 years of experience in the management and planning of inspection and maintenance activities of piping system at upstream oil & gas facilities, refineries, process plants and petrochemical facilities.

Scientific Calculator

Course Objectives:

By the end of this course delegates will learn about:

- **API 570:** Inspection methodologies, remaining life calculations, degradation mechanisms, repair & re-rating of in-service piping system and relations to ASME codes (1.5 day)
- **ASME Section V:** Principles and application of Non-Destructive Examination (0.5 day)
- **ASME section IX:** Welding & brazing requirements and procedures (0.5 day)
- **ASME B31.3:** Design review, welding & heat treatment, inspection, leak testing of process piping (1 day)
- **ASME B16.5**: Design & repair of pipe flanges and flanged fittings (0.5 day)
- **API RP 571:** Damage Mechanisms affecting fixed equipment in refineries, eg. fractures, fatigue, corrosion, sulfidation, MIC, HTTA etc (0.5 day)

- **API 574:** Inspection practices for piping system components (¼ day)
- **API RP 577:** Welding inspection and metallurgy recommended practices (¼ day)
- **API RP 578:** Material verification program for new and existing alloy piping systems (¼ day)

Course Outline

Day 1

- BENCH-MARK QUIZ INTRODUCTION TO API 570 CERTIFICATION
- ASME B 31.3 (Process Piping)
- ASME B16.5 (Pipe Flanges and Flanged Fittings)

Day 2

- ASME B16.5 (Pipe Flanges and Flanged Fittings)
- API 570 (Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems)

Day 3

- API 570 (Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems)

Day 4

- ASME Boiler and Pressure Vessel Code Section IX (Welding and brazing Qualifications)
- ASME Boiler and Pressure Vessel Code Section V (Non-Destructive Examination)
- API Recommended Practice 574

Day 5

- API RP 571 (Damage Mechanisms in the Refining Industry