



API 570 - Piping Inspection Exam Preparation Training

7 DAYS CLASSROOM

COURSE OVERVIEW

This course is designed to train individuals who are interested in obtaining the API 570 Piping Inspector Certification as well as the delegate will gain knowledge from API 571, 574, 578, 576, 577, ASME B31.3, ASME PCC2, ASME Section V, ASME B16.5 and ASME Section IX. The Inspector Certification Programs of API are based on industry-developed standards that are globally accepted and used. This exam preparation course will cover the fundamental Piping Inspection with the priority on the syllabus published by the API Organization for the said examination.

This course will define the underlying intents of all code sections, teach participants how to read code rules in order to make “Run, Repair, Replace” judgments.

LEARNING OBJECTIVES

By completing this course, participants will be able to:

- Explain the principles of piping design. To compute the thickness of a pipe's wall.
- Find out the MAWP, flange ratings, and scrap thickness for pipes, fittings, and valves.
- Help participants understand the key concepts of the decline mechanism.
- Introduce students to different ways of evaluating and decision making.
- Identifying cost-effective approach towards making the 3'R' decisions.
- How to perform repairs, alterations and re-evaluation of piping systems.
- Assessment of future remaining life, Life extension methods for piping systems.
- Broad knowledge about Materials, Metallurgy, Welding and NDE

COURSE OUTLINE (API 570):

DAY 1	Session 1, 2 & 3	Detailed Overview of API 570 Piping Inspection Code: In-service Inspection, Rating, Repair, and Alteration of Piping Systems
	Session 4	Case studies calculations for corrosion rates and inspection intervals
DAY 2	Session 1 & 2	Detailed Overview of ASME B31.3 Process Piping Code Requirements
	Session 3	Detailed Overview of ASME B16.5, Pipe Flanges and Flanged Fittings
	Session 4	Case studies calculations for weld joint quality factors and casting quality factors, internal pressure / minimum thickness of pipe, pressure testing, impact test, preheating and heat treatment requirements, thermal expansion, minimum required thickness of a permanent blank & minimum wall thickness & working pressures for flanges.
DAY 3	Session 1 & 2	Detailed Overview of API RP-574, Inspection Practices for Piping System Components
	Session 3	Detailed Overview of ASME PCC-2, Repair of Pressure Equipment and Piping
	Session 4	Detailed Overview of API RP 578, Material Verification Program for New and Existing Assets
DAY 4	Session 1 & 2	Detailed Overview of API RP 571, Damage Mechanisms Affecting Fixed Equipment in the Refining Industry
	Session 3	Detailed Overview of API RP 576, Inspection of Pressure-relieving Device
	Session 3 & 4	Detailed Overview of ASME Sec V, Non- Destructive Examination
DAY 5	Session 1 & 2	Detailed Overview of API RP 577, Welding Processes, Inspection, and Metallurgy
	Session 3 & 4	Detailed Overview of ASME Sec IX, WPS, PQR & Welder Qualification requirements
DAY 6	CASE STUDY	
DAY 7	MOCK-UP TEST & DISCUSSION	