

# API 653

## Exam Preparation Presentation

5 DAY  
•  
CLASSROOM  
TRAINING

### Contact us

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#### Who should attend?

This training course is recommended for:

- Inspectors
- Engineers
- Technicians
- Asset Integrity Engineers
- Engineering Management
- Statutory or Regulatory Representatives
- Inspection Management

Involved in or responsible for the maintenance and inspection of above ground storage tanks.

#### Course Outcomes:

- Comprehensive review of all key elements of the API ICP Body of Knowledge approved for the targeted API ICP Authorized Inspectors examination.
- Review and practice on all elements which require code work and calculations within the targeted exam.
- Detailed understanding on the principles, practices, and application of API 653.
- The course prioritizes all areas most commonly encountered within the API ICP Exam to assure the best possible preparation of the student for the API 653 Examinations.
- Creates a solid foundation for further development as an API 653 Authorized Inspector.



### Primary Course Objectives:

- Review and apply the objectives identified in the ICP BOK
- Review in-depth critical areas commonly encountered within the API ICP 653 Examination.
- Review recommended examination practices.
- Perform general review of repair and inspection strategies related to pressure vessels, pipework, and above ground storage tanks.
- Development of Open Book and Closed Book Skills
- Preparation for API ICP Examinations
- Mock Examination
  - Course includes: 5 weeks access to our eLearning platform for homework assignments & mock examinations; and
  - Final skype Q & A session with lecturer prior to API ICP examinations

### Course Schedule:

#### Basic Schedule Monday (Day 1 08:30 – 16:30)

Registration & Tea/Coffee

Introduction, Course Objectives & ICP Exam Overview

Review of API ICP Examination

- Publications Effectivity Sheet
- Body of Knowledge
- Exam Details
- Test Recommendations Preparations

Overview on Homework Sheets

Calculations and Code Work

- Basic Math & manipulation of formula
- Corrosion rate and inspection intervals
- Joint efficiencies

Maximum fill height (Hydrostatic testing)

Homework Distribution

#### Basic Schedule Tuesday (Day 2 08:00 – 16:30)

Registration & Tea/Coffee

Calculations and Code Work (cont.)

- Weld sizes for shell and roof openings
- Hot tapping
- Settlement evaluation
- Impact Testing.
- Existing Tank Shell & Reconstructed Tank Shell

Question & Answer session

Homework Distribution

### Basic Schedule Wednesday (Day 3 08:00 – 16:30)

Registration & Tea/Coffee

Calculations and Code Work (cont.)

- Tank shell – Corroded area & pitting
- Replacement plates & Lap welded patch plates

Welding

- ASME IX
- General welding requirements API 650 & API 653
- API RP 577 (Overview related to Welding)

Question & Answer session

Homework Distribution

### Basic Schedule Thursday (Day 4 08:00 – 16:30)

Registration & Tea/Coffee

NDT

- ASME V
  - Art. 1, General Requirements
  - Art. 2, Radiographic Examination
  - Art. 6, Liquide Penetrant Examination
  - Art. 7, Magnetic Particle Examination
  - Art. 23, Ultrasonic Standards, Section SE-797
- General NDT requirements API 650 & API 653
- API RP 577 (Overview related to NDT)

API RP 651 (General Overview)

API RP 652 (General Overview)

API RP 571 (General Overview)

Question & Answer session

Homework Distribution

### Basic Schedule Friday (Day 5 Overview)

Registration & Tea/Coffee

API 653 (General Overview)

API 575 (General Overview)

Mock Exams

- Closed Book (30 Questions 11:10 ~ 12:00 – 50 Min.)
- Open Book (22 Questions 12:45 ~ 14:30 – 100 Min.)

Review Punch Items

Final Remarks and Certificate Hand Out & Close Out



### **Information on our Course Developer / Trainer:**

Our course developer and lead lecturer, Mr. Kevin R. Maley is a 41-year-old Senior Inspection Engineer / Authorized Inspector of pressurized equipment and Quality Assurance / Control Specialist for the inspection, testing and certification of new and in-service equipment.

He has 21 years' experience in fabrication shops, in-service condition inspection and repair of equipment within petrochemical, power, utility, pulp, and nuclear environments (Currently focussed mainly within the petrochemical field).

He is an experience and patient lecturer that has been directly involved in and responsible for the development of effective and professional training material for API ICP 510, 570 and 653 inspector examinations since 2007 and currently maintains his certification in all the primary API ICP certification and holds ASNT NDT Level III certification in the MT, PT, RT & VT methods.

### **Key Qualifications & Certifications**

- IEng MInstNDT (EngC reg. no. 608847)
- BSc (hons) NDT (University of Northampton)
- API 653 Authorized above ground storage tank Inspector (Cert no: 33577)
- API 570 Authorized Pressurized Piping inspector (Cert no: 33340)
- API 510 Authorized Pressure Vessel Inspector (Cert no: 31035)
- API 571 Supplementary certification, Advanced knowledge of corrosion and materials (Cert no: 35833)
- API 580 Supplementary certification, Advanced knowledge of Risk-Based inspection practices (Cert no: 35875)
- API 577 Advanced knowledge in welding and metallurgy (Cert no: 37575).
- API 936 Refractory personnel certification (Cert no: 37502)
- IIW International Welding Inspector Diploma Comprehensive Level (Cert no: ZA/IWI-C00032)