

# API 510

## Exam Preparation eLearning Course

**3 Month  
eLearning  
Course**

### Contact us

Olenca Barnard

**Intertek**

Office +27 16 422 2870  
Mobile +27 79 515 1884

Carike Maley

**CKRC Training**

Mobile +27 83 387 4428  
Mobile +27 83 556 7662



#### 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 pressure vessels.

#### 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 510.
- 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 510 Examinations.
- Creates a solid foundation for further development as an API 510 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 510 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: > 3 months access to our eLearning platform for reading assignments, quizzes, modules, discussions, announcements & mock examinations; and
  - Skype Q & A sessions with lecturer throughout the course.

Intertek Consulting and Training in collaboration with CKRC Training Solutions cc have developed API Examination Preparation courses for the inspector who cannot take time off work, is working a shut-down or is on rotation. Our courses are three-month blended eLearning programs with instructor lead Q&A Skype sessions. The courses contain a series of modules, assignments, announcements & quizzes that are released as per course schedule. Our recommended daily participation by the learner is  $\pm$  1.5hours, this will ensure your success.

Weekly Progress Reports are sent out to individuals and support via email and our eLearning platform is available throughout the three-month period. We offer support & assistance with the API ICP application process to all our students.

We strongly recommend that students complete their reading assignments before attempting the quizzes, which they can attempt multiple times and are instantly graded so they can self-monitor their progress. Throughout the three-month program students will have access to discussion forums where they can interact with other students on the course and ask the instructor(s) questions and have debates to help the learning process. We strongly recommend that students make use of the discussion forums and freely ask any questions that will help their learning experience and exam preparation.

Reviewing the Codes & Standards (in PDF) regularly during the course will help students prepare for the examination as they will be writing at a computer station where no hard copies of the Codes & Standards are allowed, Codes are available on the testing station in PDF format, so the more practice the better before the exams.

After completion of our 3-month eLearning course, each candidate is issued with a Certificate of Completion.

## Course Syllabus > 3 months eLearning

<i>Module 1</i>	Introduction & Overview
<i>Skype 1</i>	<i>Opening Skype Session</i>
Module 2	General – API 510, Pressure Vessel Inspection Code
Module 3	General - API RP 572, Inspection of Pressure Vessels
Module 4	General - API RP 571, Damage Mechanisms
Module 5	General - API RP 576, Inspection of Pressure Relieving Devices
<i>Skype 2</i>	<i>Module 2 – 5 (General Q &amp; A)</i>
Module 6	General – ASME V Article 1, General Requirements
Module 7	General – ASME V Article 2, Radiographic Examination
Module 8	General – ASME V Article 6, Liquid Penetrant Examination
Module 9	General – ASME V Article 7, Magnetic Particle Examination
<i>Module 10</i>	General - ASME V Article 23, Ultrasonic Standards, Section SE-797 only
<i>Module 11</i>	NDE - ASME Section VIII, Div. 1 & API 510. General non-destructive examination requirements
Module 12	General - API RP 577
<i>Module 13</i>	Welding - ASME IX
Module 14	Welding - ASME VIII-I
Module 15	Student Revision
Module 16	Basic Math & Manipulation of Formula
<i>Module 17</i>	Code Calculation Questions - Corrosion rates and inspection intervals
<i>Skype 3</i>	<i>Module 6 - 17 (General Q &amp; A)</i>
Module 18	Code Calculation Questions - Joint efficiencies
Module 19	Code Calculation Questions - Static head
Module 20	Code Calculation Questions - Internal pressure
Module 21	Code Calculation Questions - External pressure
Module 22	Code Calculation Questions - Pressure testing
Module 23	Code Calculation Questions - Impact testing
Module 24	Code Calculation Questions - Weld size for attachment welds at openings
Module 25	Code Calculation Questions - Nozzle reinforcement
Module 26	Code Calculation Questions - Revision
Module 27	Exam Preparations
Test A	General - Open Book #1
Test C	Code Calculation Questions – Open Book #2
Test E	Welding - Open Book #3
Test G	NDE - Open Book #4
Test B	General - Closed Book #1
Test D	Code Calculation Questions – Closed Book #2
Test F	Welding - Closed Book #3
Test H	NDE - Closed Book #4
<i>Skype 4</i>	<i>Student Final Revision</i>



### 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)