

API 510 Certification Preparation



Course Length: Six full days (60 hrs)
Cost: \$1400
Instructor: Mark Smith, or Reggie Thomson

This class is designed for pressure equipment inspectors and engineers working in refineries, chemical plants, gas plants, pipeline terminals, and oil fields.

Course Overview

The course prepares the student for the API 510 exam. The course is an intensive one-week course with a heavy emphasis on the use of the codes and mathematical calculations.

This course content includes:

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|-----------------------|-------|-----------|-----------|
| • Using Section VIII | 1 day | • API 510 | 1.5 days |
| • Vessel Calculations | 1 day | • Other | 1.5 days |
| • Section IX Welding | 1 day | • Exam | Take Home |

Objectives

The course provides participants with the knowledge necessary to:

- Successfully pass the API 510 pressure vessel inspector certification exam.
- Effectively use major codes: ASME B&PV Sections V, VIII, & IX
- Perform all basic vessel calculations needed for the API exam (e.g. t_{min} , test pressure, MAWP, static head, MDMT, corrosion rates, remaining life, etc.)
- Use API's requirements during inspection, repairs, & alterations of pressure vessels
- Review welding procedures (WPS/PQR) & welder performance qualifications (WPQ)

Class Participants

Those taking the API exam should have 3 years of experience at a petrochemical facility and have at least 1 year of inspection experience. There are no required class prerequisites.

Notes

This is an intense course with daily homework and a final exam (similar to the API 510 exam). We recommend the student stay nearby to minimize travel times. To obtain application for API 510 certification, see: www.api.org/icp

Bring to Class

Students should bring to class: a calculator, a straight edge (or triangle), pencils, highlighters, lots of questions, and a "can-do" attitude. Also, participants must bring the appropriate codes required for the API exam (see API web-site: www.api.org/icp)

Required Codes for Exam

ASME Sect V - Non-Destructive Examination

ASME Sect VIII - Construction of Pressure Vessels

ASME Sect IX - Welding Qualifications

ASME PCC-2 - Repair of Equipment & Piping

Note: See API website www.api.org/icp to

determine which editions are used on the exam.

API 510 In-Service Pressure Vessel Code

API 571 Degradation Mechanisms

API 572 Inspection of Pressure Vessels

API 576 Inspection of Pressure-Relieving Devices

API 577 Welding Inspection

API 578 Material Verification