

# API 510 Certification Preparation



**Course Length:** Six full days (60 hrs)  
**Cost:** \$1300  
**Instructor:** Mark Smith, Reggie Thomson or Keith Devall

---

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:

- |                       |          |           |          |
|-----------------------|----------|-----------|----------|
| • Using Section VIII  | 1 day    | • API 510 | 1.5 days |
| • Vessel Calculations | 1.5 days | • Other   | 0.5 day  |
| • Section IX Welding  | 1 day    | • Exam    | 0.5 day  |

## 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 at the class hotel. To obtain application for API 510 certification, see: [www.api.org/icp](http://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](http://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

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

**Note:** See API website [www.api.org/icp](http://www.api.org/icp) to determine which editions are used on the exam.