

# API 510

# PRESSURE VESSEL INSPECTOR

**FUNDAMENTAL PRESSURE VESSEL DESIGN** 

FOR ALL PRESSURE VESSEL INSPECTORS, MANAGERS, PLANT OPERATIONS QA/QC, MAINTENANCE ENGINEERS, MANAGERS & TECHNICIANS

### PART TIME & FULL TIME AVAILABLE

Preparatory Course	Seminar Fee	
API 510	SGD 2000 + 7% GST	
	(Course Materials & Standard Codes)	

<sup>\*</sup>TOP UP REQUIRED FOR EXAMINATIONS

Singaporeans & SPRs enjoy IMMEDIATE \$900 FUNDING SUPPORT



# **CONTACT US**

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## **ENHANCE YOUR CAREER WITH US**



#### Fee Details:

Seminar & Exam Fee			
Foreigner	Locals (Post-Funding)		
SGD 2850 + GST	SGD 2100 + GST		

Training Duration: 60 hours

Examination: 7 hours

Open Book 4 Hours

Closed Book 3 hours

#### **Brief:**

Expect to learn about Basic Pressure Vessel Design engineering i.e. ASME Sec VIII Div.1, In-service inspection techniques (API 510/572/576/577), and In-service degradation mechanisms (API 571).

Review main concepts and technical terms of API 510 Inspection Code & understand basic design and rules for correct fabrication, inspection and testing of Pressure Vessels.

#### **Modules:**

1	Concepts related to new Vessels, ASME Sec. VIII.	20	Welding Inspection and Metallurgy (API RP 577)
2	Design of Cylindrical shells,	21	Introduction to API 510 Certification & Guidelines
3	Design of Dished heads - Hemispherical, Ellipsoidal, Tori-spherical	22	Calculation of vessel MAWP Static head calculations
4	Impact testing requirements	23	Calculate MAWP given vessel parts & elevations
5	Writing hydro test Procedure & pneumatic test procedure	24	How to conduct and certify Pressure tests
6	Inspection requirements for Pressure Vessels	25	Key concepts of Nozzle reinforcement
7	Fabrication and Heat treatment requirements	26	NDT of Pressure Vessels
8	Testing practices for In-Service Vessels as per API 510	27	Concepts related to Inspection of in-service Vessels
9	Monitoring degradation mechanisms	28	Typical degradation mechanisms in Pressure vessels
10	Inspection Plans	29	Pressure vessel inspection External & Internal
11	On-stream Inspection	30	Inspection and testing of Pressure relieving devices
12	Corrosion Rate Determination	31	Remaining Life Calculations
13	Frequency and Time of Inspection	32	Evaluation of Locally Thinned Areas
14	Evaluation of Pitted surface	33	Correction of Weld joint
15	Efficiency, Repairs, alterations & rerating of Pressure Vessels	34	Reports and Records & Sample Inspection Record
16	Discussions on Damage Mechanisms (API 571)	35	Introduction to ASME Sec IX & requirements
17	Understanding of PQR and WPS	36	Welding procedure qualification & welder qualification
18	ASME Sec V regulations for various NDE techniques	37	Inspection of pressure relief devices (API RP 576)
19	Safety valves, Relief valves, Safety Relief valves, Balanced Safety Relief valves	38	Inspection & Test Procedures of pressure relief devices

