



# Training Course: API 653 above Ground Tanks Inspection-Exam Prep

26 October - 6 November 2025 Dubai (UAE) Residence Inn by Marriott Sheikh Zayed Road, Dubai



# Training Course: API 653 above Ground Tanks Inspection-Exam Prep

Training Course code: EN236163 From: 26 October - 6 November 2025 Venue: Dubai (UAE) - Residence Inn by Marriott Sheikh Zayed Road, Dubai Training Course Fees: 8400 

Euro

#### Introduction

This 12-day training program is designed by Global Horizon Training Center to provide a deep understanding of the API 653 standard, which governs the inspection, repair, alteration, and reconstruction of aboveground storage tanks ASTs. The program will help professionals develop advanced competencies for compliance with API 653, enhance their inspection planning and execution skills, and prepare for the API 653 certification exam. Through theoretical sessions and practical case studies, participants will gain the expertise needed to ensure tank integrity, environmental safety, and operational efficiency.

## **Objectives**

By the end of this training, participants will be able to:

- Interpret and apply API 653 standard requirements for tank inspection and maintenance.
- Understand tank design, construction, and relevant material properties.
- Identify corrosion mechanisms, inspection techniques, and repair strategies.
- Analyze relevant API codes including API 650, API 571, API 577, and ASME Section IX.
- · Perform calculations related to minimum thickness, remaining life, and re-rating.
- Prepare for and successfully pass the API 653 certification examination.

### **Target Audience**

- · Mechanical and inspection engineers
- · Tank inspectors and field engineers
- · Maintenance and reliability engineers
- Quality assurance/control personnel
- Individuals preparing for the API 653 certification exam



# **Training Outline**

#### Day 1: Introduction to API 653 and Code Overview

- Purpose and scope of API 653
- · Definitions and terms
- API 653 vs API 650 vs API 620
- Overview of related codes and standards

#### Day 2: Design and Construction Review

- Tank design basics roof, shell, bottom, nozzles
- Welding joints and tank components
- Design considerations affecting inspection

#### Day 3: Inspection Planning and Techniques

- Types of inspections in-service, out-of-service
- External and internal inspection requirements
- Visual inspection and NDE methods UT, MT, PT, RT
- Inspection intervals and risk-based inspection RBI

#### Day 4: Evaluation of Corrosion and Damage Mechanisms

- Types of corrosion pitting, general, MIC
- Coating and lining inspections
- · Corrosion rate calculation
- Remaining life evaluation

#### Day 5: Thickness Calculations and Evaluation

- Shell, roof, and bottom thickness requirements
- · Minimum acceptable thickness and MAWP



- Joint efficiency and corrosion allowances
- Tank re-rating concepts

#### Day 6: Repair, Alteration, and Reconstruction Requirements

- API 653 requirements for repairs and alterations
- Welding procedures and qualifications ASME IX
- Patching, bottom replacement, and shell repairs
- Recordkeeping and documentation

#### Day 7: Welding, WPS, PQR, and Welder Qualification

- · Review of ASME Section IX
- Welding process fundamentals
- Welder qualifications and essential variables
- · Welding defects and inspection criteria

#### Day 8: Brittle Fracture, Hydrotesting, and Leak Testing

- · Causes and prevention of brittle fracture
- Hydrostatic testing procedures
- Pneumatic and vacuum box testing
- Safety precautions during testing

#### Day 9: API 571 - Damage Mechanisms

- Overview of API 571 structure
- Damage mechanisms relevant to tanks
- Identification and mitigation strategies
- Integration with API 653 assessments

#### Day 10: API 577 - Welding Inspection and Metallurgy

· Welding defects and discontinuities



- Visual weld inspection techniques
- Base metal and filler metal properties
- Impact of metallurgy on repair quality

#### Day 11: Inspector Responsibilities and Ethics

- Responsibilities of authorized inspectors
- Code of conduct and ethics
- Recordkeeping and reporting practices
- Pre- and post-inspection documentation

#### Day 12: Certification Preparation

- Exam-taking strategies and tips
- Review of formula sheet and key equations
- Practice questions
- Final Q&A and feedback session



+201095004484 to

provisionally reserve your place.

# Registration form on the Training Course: API 653 above Ground Tanks Inspection-Exam Prep

Training Course code: EN236163 From: 26 October - 6 November 2025 Venue: Dubai (UAE) - Residence Inn by Marriott Sheikh Zayed Road, Dubai Training Course Fees: 8400  $\ \square$  Euro

Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

registration

	Delegate In	formation	
Position:	r / Eng):		
	Company In	formation	
Address:			
Person Responsible for Training and Development			
Position:	r / Eng):		
Payment Method			
Please find enclo	esed a cheque made payable to Glob	bal Horizon	
Please invoice m	y company		
Easy Ways To Register			
Telephone:	Fax your completed	E-mail to us :	Complete & return the

form to: +20233379764 or training@gh4t.com to:Global Horizon 3 Oudai street, Aldouki, Giza, Giza Governorate, Egypt.

info@gh4t.com

booking form with cheque