

Scandinavian Academy Training Center

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# Course: API 653 ABOVE GROUND STORAGE TANK INSPECTOR

| Code | City | hotel | Start | End | price | Language - Hours |
|---|---|---|---|---|---|---|
| OG-816SA | Dammam | Hotel Meeting Room | 2027-07-11 | 2027-07-15 | 12950 SR | En - 25 |

## PROGRAMME SUMMARY

The API 653 Above Ground Storage Tank Certification Preparation course is designed to provide individuals with a basic understanding of above ground storage tank inspection, repair, alteration, and rebuilding.

This training session is meant to provide a thorough overview of the engineering knowledge required for In-Service Storage Tanks, with a focus on the API (Body of Knowledge) syllabus for the stated test.

It contains all of the code parts alluded to by the API 653 committee to the extent that they are required from an inspection standpoint. This preparatory course will define the core purposes of all codes required for study, teach participants how to read code rulings, and build confidence in their ability to make decisions.

## OBJECTIVE

- Prepare for the Certification Exam by learning the primary concepts and technical content of the API 653 Code and other reference codes.
- Reduce the risk of inspection delays caused by regulatory requirements by improving management control of storage tank inspection, repair, alteration, and rebuilding.
- Learn the fundamentals of storage tank design (API 650).
- Learn the valuation of tank shell, bottom, and roof integrity.
- Know how to calculate the thickness based on expected or amended design conditions.

- Know the importance of cathodic protection and tank bottom liner.
- Evaluate and decide on a course of action for the Tank settlement.
- Estimate the tank’s remaining life and determine inspection intervals.
- Select the right inspection tools and intervals
- Calculations for re-rating, remaining life, and retirement thickness
- Develop the skills of the trainees and raise their competence in the understanding of the basic principles of API 653 standard for storage tanks testing theory & quality & its applications.
- Development skills in the field of the ( NDT ) testing for materials & welding operations and various derivatives and their physical and chemical specifications and Chemical.

## WHO SHOULD ATTEND

- Applicable to all personnel working in the oil, gas and petrochemical industry, and who are involved in the design, procurement, engineering construction, operation, maintenance and inspection of storage tanks and related facilities.
- The training will be extremely valuable to all maintenance engineers, inspectors, managers, corrosion engineers, plant operation engineers, design personnel involved in integrity assessments of in-service tanks, repairs and replacement of old tanks, and preventative maintenance of storage tanks and those who wants to take API 653 certification examination
- Managers, engineers and technicians, and all involved and work-related to inspection & laborites in oil refinery operation of various public institutions and private companies and various ministries.

## Outline

### Module (1) Storage Fundamentals, Design and Construction of a tank (API 650):-

- Stress levels that are acceptable Design of the shell, roof design, and bottom

design
- Shell thickness calculations, bottom plate thickness, roof plates, and nozzle apertures
- Material selection, API 650 impact test requirements, and impact test results
- API 650 Tank Fabrication, Erection, NDT, and Leak Testing Requirements

**Module (2) Getting to Know the Storage Tank Inspection Code (API 653):-**

- API 653: Introduction, Scope, Definitions, and Organization
- Inspection intervals and inspection scope
- Roof, Shell, and Bottom data review and corrosion assessment
- API 653 Inspection and Testing Practices, Estimation of Corrosion Rate
- Checking for brittle failure
- Various decomposition-prevention measures
- Inspection frequency and scope, data analysis

**Module (3) Getting to Know the Storage Tank Inspection Code (API 653):-**

- Storage tank repairs, renovations, and reconstruction
- Tank relocation and re-erection, as well as tank bottom replacement
- Using a hot tap on the tank`s shell
- Extensive coverage of material corrosion and degradation (API 571)
- Non-destructive testing (NDT) of tank repairs and leak testing
- Checking for bottom settlement

**Module (4) Inspection of the storage tank (study of other codes and standards):-**

- Discussions on soil corrosion cathodic protection methods (API RP 651)
- Storage tank inspection techniques that should be followed (API RP 575)
- Discussions on the lining of storage tank bottoms (API RP 652)
- An overview of ASME Section IX and its provisions
- Qualification of welding procedures and welders, as well as case studies of PQR

and WPS inspections

## Module (5) Discussions on Corrosion Protection & Quality of Welding

- Discussions on Lining of bottoms of storage tanks (API RP 652)
- Discussions on API RP 577, welding inspection
- Understanding the difference between Inspection and Examination
- Various NDE methods to detect flaws in metals
- Understanding rules imposed by ASME Sec. V for various NDE techniques
- Final examinations Conclusion and Recommendation

**The Scandinavian Academy for Training Center** adopts the latest scientific and professional methodologies in training and human resource development, aiming to enhance the efficiency of individuals and organizations. Training programs are delivered through a comprehensive approach that includes:

- Theoretical lectures supported by PowerPoint presentations and visual materials (videos and short films).
- Scientific evaluation of participants before and after the program to measure progress and knowledge acquisition.
- Brainstorming sessions and practical role-playing to simulate real-life scenarios.
- Case studies tailored to align with the training content and participants work nature.
- Assessment tests conducted at the end of the program to evaluate the achievement of training objectives.

Each participant receives the training material (both theoretical and practical) in printed form and saved on a CD or flash drive. Detailed reports, including attendance records, final results, and overall program evaluations, are also provided.

Training materials are prepared professionally by a team of experts and specialists in various fields. At the end of the program, participants are awarded a professional attendance certificate, signed and accredited by the Scandinavian Academy for Training Center.

**Program Timings:  9:00 AM to 2:00 PM**

**The program includes:**

- A daily buffet provided during the sessions to ensure participants comfort.
- A closing ceremony on the final day to distribute certificates and celebrate participants achievements.
- **Note: All prices are exclusive of 15% Value Added Tax (VAT).**

# Our Success Partners

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