



# **Tank Cleaning Hazards and Confined Space Safety Course**

18 – 22 October 2027  
Kuala Lumpur

## Tank Cleaning Hazards and Confined Space Safety Course

**Ref:** 1400\_203370 **Date:** 18 – 22 October 2027 **Location:** Kuala Lumpur **Fees:** 5200 Euro

### Overview

Tank Cleaning Hazards and Confined Space Safety Course is a one-week advanced course for safety leaders, operations teams, maintenance functions, entry supervisors, contractors, and rescue planners who leave with a Tank Cleaning Entry Control Pack. Participants connect hazard analysis, isolation, product removal, degassing, ventilation, atmospheric testing, permits, entry roles, cleaning methods, continuous monitoring, rescue, and recommissioning. The course addresses invisible atmospheres, residual energy, ignition, toxic residues, and improvised rescue. Agile Leaders Training Center treats tank cleaning safety as a controlled lifecycle.

### Who Should Attend

- Functions responsible for tank cleaning safety and confined-space programmes
- Operations teams preparing tanks for inspection, maintenance, or repair
- Entry supervisors, attendants, and authorized entrants
- Contractor-management functions coordinating hazardous work
- Teams responsible for atmospheric testing and ventilation
- Emergency and rescue planners supporting permit-space work

The course assumes participants already support industrial operations, maintenance, safety, or emergency response and leaves out vessel design, process engineering calculations, and hands-on rescue certification.

### Departments and Industries

The course serves departments and industries that clean, inspect, repair, or recommission enclosed tanks.

- Oil, gas, refining, and petrochemical operations
- Marine, terminals, transport, and bulk storage
- Manufacturing, utilities, and water treatment
- Maintenance, inspection, and reliability functions
- Occupational safety and emergency-response teams
- Contractors providing cleaning, waste, and industrial services

### Learning Objectives

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



- Analyze tank residues, atmospheres, energy, and task hazards
- Apply isolation, degassing, and ventilation controls
- Build permit and role-accountability arrangements
- Use atmospheric testing and continuous monitoring
- Evaluate cleaning methods, equipment, and protective controls
- Prioritize rescue, close-out, and recommissioning checks

## **Course Agenda**

### **Day 1: Hazard Profile and Planning**

- Tank Cleaning Hazard Profile
- Permit-Required Confined Space Assessment
- Residue and Chemical Exposure Inventory
- Fire and Explosion Pathway Map
- Pre-Cleaning Work Coordination Plan

### **Day 2: Isolation and Atmosphere Control**

- Tank Isolation and Lockout Plan
- Product Removal and Drainage Sequence
- Gas Freeing and Degassing Method
- Ventilation Equipment Selection Matrix
- Ignition Source and Static Control Check

### **Day 3: Entry and Monitoring**

- Confined Space Tank Entry Permit
- Atmospheric Testing Order and Sampling Plan
- Acceptable Entry Condition Register
- Entrant, Attendant, and Supervisor Role Cards
- Continuous Monitoring and Evacuation Triggers

### **Day 4: Cleaning and Emergency Control**

- Tank Cleaning Method Risk Assessment
- PPE and Respiratory Protection Decision Matrix
- Sludge, Waste, and Pyrophoric Residue Controls
- Communication and Accountability Protocol
- Non-Entry Rescue and Emergency Plan



## **Day 5: Tank Cleaning Safety Practice**

- Exercise: Build a Tank Hazard Profile
- Exercise: Verify Isolation and Atmosphere Controls
- Exercise: Authorize and Monitor Tank Entry
- Exercise: Respond to an Entry Alarm
- Capstone Exercise: Tank Cleaning Entry Control Pack

## **Practical Exercises**

The course uses suggested activities drawn from storage, process, marine, utility, and industrial-service operations.

- Suggested activity: identify residue, energy, atmosphere, access, heat, equipment, and contractor hazards in a pre-cleaning survey.
- Suggested activity: sequence isolation, drainage, degassing, ventilation, tank atmospheric testing, and permit authorization.
- Suggested activity: assign entry roles, interpret monitor readings, and act on evacuation triggers without improvising rescue.
- Suggested activity: combine permits, controls, tests, rescue arrangements, close-out, and recommissioning evidence in the capstone pack.

## **FAQs**

### **Who suits tank cleaning safety training, and what does it assume?**

Tank cleaning safety training suits experienced operations, maintenance, contractor, safety, testing, and emergency-response personnel who already support hazardous industrial work.

### **How does tank cleaning safety differ from general confined-space training?**

Tank cleaning safety applies confined-space controls to residues, product removal, degassing, ventilation, ignition, cleaning equipment, sludge, waste, tank isolation, and return-to-service decisions.

### **Why is atmospheric testing essential before confined space tank entry?**

Atmospheric testing verifies oxygen, flammable, and toxic conditions at representative locations and supports entry decisions, ventilation changes, continuous monitoring, and evacuation triggers.

### **What does safe tank isolation require before cleaning?**

Safe isolation requires identifying every energy and material pathway, applying effective disconnection or controlled isolation, locking and tagging sources, controlling adjacent systems, and verifying the condition before entry.



## **Why must tank cleaning rescue be planned before entry?**

Preplanned rescue defines capability, response time, communications, equipment, access, retrieval, medical support, and conditions that prevent untrained personnel from making impulsive entries.

## **Conclusion**

The course links preplanning, isolation, atmosphere control, permits, roles, cleaning methods, monitoring, rescue, and return-to-service verification. Participants take back a Tank Cleaning Entry Control Pack containing hazard, isolation, testing, permit, role, rescue, and close-out tools. The pack helps teams replace fragmented precautions with traceable controls across the entire tank-cleaning lifecycle.