

Overhead Travelling Crane Operations and Maintenance Training Course

4 – 8 October 2027
Singapore

AGILE LEADERS
Training Center

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Ref: 1888_240765 **Date:** 4 – 8 October 2027 **Location:** Singapore **Fees:** 6500 Euro

Overview

Overhead Travelling Crane Operations and Maintenance Training Course is a one-week intermediate programme for operators, maintenance technicians, lifting supervisors, inspectors, and HSE personnel who need an Overhead Crane Readiness Pack. Participants connect bridge, trolley, and hoist arrangements with controls, limit devices, rated capacity, pre-use checks, load handling, communication, wire ropes, hooks, runway interfaces, preventive maintenance, safe isolation, fault evidence, and return-to-service decisions. The course does not provide operator licensing, inspection certification, engineering approval, or employer authorization. Agile Leaders Training Center delivers this overhead-crane lifecycle course.

Who Should Attend

- Overhead crane operators working under employer authorization
- Maintenance technicians supporting hoists, controls, brakes, and travel systems
- Lifting supervisors coordinating operators, signal persons, and work areas
- Inspectors reviewing equipment condition and maintenance evidence
- HSE personnel supporting isolation, exclusion, and stop-work controls

Participants should understand basic lifting terminology and workplace safety. Equipment-specific practical authorization, specialist inspection, load testing, and engineering decisions remain outside this course.

Departments and Industries

The course supports manufacturing, workshops, warehouses, steel plants, power facilities, maintenance operations, and industrial production sites.

- Operations and production
- Mechanical and electrical maintenance
- Lifting supervision and rigging support
- Inspection and technical assurance
- Health, safety, and contractor management

Learning Objectives

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

- Distinguish overhead crane arrangements, motions, controls, and operating boundaries
- Complete structured pre-use and operating-condition checks
- Control hoisting, trolley travel, bridge travel, communication, and load movement
- Review hooks, wire ropes, brakes, limit devices, runways, and electrical interfaces
- Plan preventive maintenance, safe isolation, fault escalation, and return to service
- Build a documented Overhead Crane Readiness Pack

Course Agenda

Day 1: Crane Arrangement, Controls, and Operating Envelope

- Bridge, Trolley, Hoist, Runway, and End-Carriage Configuration Map
- Pendant, Cab, Radio, and Remote-Control Function Checklist
- Rated Load, Duty, Travel, Clearance, and Operating-Limit Register
- Warning Device, Emergency Stop, Brake, and Limit-Switch Review
- Operator, Signal Person, Supervisor, and Maintenance Responsibility Matrix

Day 2: Pre-Use Inspection and Readiness Decisions

- Hook, Latch, Block, Sheave, Drum, and Rope Condition Checklist
- Bridge, Trolley, Hoist, Brake, and Control Functional Check
- Runway, End Stop, Bumper, Power Supply, and Pendant Inspection
- Load Marking, Area Condition, Access, and Exclusion-Zone Review
- Defect Classification, Stop-Work, Tag-Out, and Escalation Record

Day 3: Controlled Operation and Load Handling

- Load Information, Attachment, Balance, and Trial-Lift Check
- Hoisting, Lowering, Trolley Travel, and Bridge Travel Sequence
- Swing, Drift, Side-Pull, Snag, Collision, and Overtravel Controls
- Hand Signal, Radio, Visibility, and Communication-Loss Protocol
- Parking, Unloading, End-of-Shift, and Abnormal-Condition Response

Day 4: Preventive Maintenance and Fault Evidence

- Maintenance Plan, Service Severity, Interval, and Work-Order Matrix
- Rope, Hook, Brake, Gear, Bearing, Wheel, and Rail Evidence Review
- Contactor, Motor, Cable, Festoon, Control, and Limit-Device Fault Map
- Noise, Heat, Vibration, Wear, Misalignment, and Repeated-Trip Log
- Repair Boundary, Parts Traceability, Adjustment, and Test Evidence

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Day 5: Isolation, Verification, and Return to Service

- Crane Position, Stored Energy, Electrical Isolation, and Lockout Plan
- Same-Runway Interference, Stop, Barrier, and Warning-Sign Control
- Guard Restoration, Tool Removal, Safety-Device Reactivation, and Area Check
- Operational Function Test, Defect Closure, and Release Authorization Record
- Capstone Exercise: Overhead Crane Readiness Pack

Practical Exercises

Guided exercises turn crane condition, operating limits, and maintenance evidence into controlled decisions.

- Map an overhead crane arrangement and operating envelope
- Complete a pre-use inspection and stop-work decision
- Plan a controlled load movement and communication method
- Diagnose a hoist, travel, control, or limit-device fault from evidence
- Prepare isolation and return-to-service records

FAQs

Is this a mobile crane course?

No. It focuses on overhead travelling cranes with bridges, trolleys, hoists, fixed runways, pendant or remote controls, and industrial maintenance interfaces.

Does the course license an overhead crane operator?

No. Practical authorization, equipment-specific instruction, competence assessment, and licensing remain the responsibility of the employer and applicable system.

Does the course include inspection and maintenance?

Yes. It covers pre-use checks, condition evidence, preventive maintenance, fault escalation, isolation, verification, and records without granting specialist inspector authority.

How is maintenance work controlled?

Participants review crane positioning, hazardous-energy isolation, same-runway interference controls, restoration checks, operational tests, and authorized release.

What will participants take back to work?

An Overhead Crane Readiness Pack containing configuration, inspection, operating, maintenance, isolation, defect, and return-to-service records.

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Conclusion

Participants return able to support disciplined overhead-crane operation, identify readiness concerns, coordinate maintenance controls, interpret fault evidence, and document safe return-to-service decisions.