

Marine Deck Equipment Operation and Maintenance Training Course

1 – 5 February 2027
Porto

AGILE LEADERS
Training Center

Marine Deck Equipment Operation and Maintenance Training Course

Ref: 1826_236843 **Date:** 1 – 5 February 2027 **Location:** Porto **Fees:** 6500 Euro

Overview

Marine Deck Equipment Operation and Maintenance Training Course is a one-week intermediate course for deck operations and maintenance personnel who leave with a Deck Equipment Operations and Maintenance Workbook. The course connects marine deck equipment operation, mooring equipment inspection, preventive deck machinery maintenance, and fault response through equipment evidence, controlled procedures, and competence boundaries. Agile Leaders Training Center delivers this course on marine deck equipment operation and maintenance.

Who Should Attend

- Functions responsible for windlass, winch, and capstan operating readiness
- Teams responsible for deck machinery inspection and preventive maintenance
- Groups responsible for crane, lifting appliance, and rigging condition checks
- Marine crews responsible for mooring equipment and line-management controls
- Supervisors responsible for defect records, isolation, and technical escalation

The course assumes participants already support vessel or offshore deck operations and leaves out vessel-specific authorization, lifting certification, and intrusive repair beyond approved competence.

Departments and Industries

The course supports departments responsible for safe deck operations, asset condition, and marine equipment reliability.

- Merchant shipping and vessel operations
- Offshore energy and marine support services
- Ports, terminals, and harbor operations
- Marine engineering and planned maintenance
- Ship management and technical assurance

Learning Objectives

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

- Analyze deck equipment functions and operating limits.
- Apply isolation, permit, guarding, and stored-energy controls.
- Build inspection and preventive maintenance routines.
- Diagnose hydraulic, electrical, braking, and control faults.
- Evaluate wire-rope, chain, corrosion, and lubrication evidence.
- Prioritize defects, records, and competent-person escalation.

Course Agenda

Day 1: Frame Deck Equipment Systems

- Windlass, Mooring Winch, and Capstan Functional Map
- Crane and Lifting Appliance Operating-Boundary Diagram
- Hydraulic and Electrical Drive Energy-Flow Model
- Safe Working Load, Equipment Marking, and Limit Register
- Manufacturer Instruction and Maintenance-Plan Evidence Matrix

Day 2: Control Deck Operations

- Pre-Use Readiness and Operating-Area Inspection Checklist
- Permit, Isolation, Lockout, and Stored-Energy Verification Sequence
- Guard, Brake, Emergency Stop, and Control-Function Test Card
- Mooring Arrangement, Snap-Back Zone, and Communication Plan
- Deck Lifting Appliance Setup and Operating-Limit Decision Guide

Day 3: Inspect and Maintain Equipment

- Wire-Rope, Chain, Sheave, Drum, and Fairlead Inspection Card
- Bearing, Gear, Seal, and Lubrication Condition Route
- Corrosion, Cracking, Distortion, and Wear Assessment Matrix
- Hydraulic Hose, Cylinder, Valve, and Leakage Check Sheet
- Daily, Periodic, and Condition-Based Maintenance Schedule

Day 4: Diagnose and Escalate Faults

- Slow, Erratic, Noisy, and Overheating Symptom-Cause Matrix
- Hydraulic Pressure, Flow, Temperature, and Contamination Fault Tree
- Motor, Cable, Sensor, Interlock, and Control-Circuit Evidence Log
- Brake Holding, Load Control, and Emergency-Function Assessment
- Defect Priority, Repair Boundary, and Competent-Person Escalation Record

Day 5: Practice Deck Equipment Decisions

- Exercise: Complete a Winch and Windlass Readiness Inspection
- Exercise: Build a Deck Machinery Isolation and Permit Plan
- Exercise: Diagnose a Hydraulic Drive Performance Fault
- Exercise: Evaluate Wire-Rope Wear and Defect Escalation
- Capstone Exercise: Build the Deck Equipment Operations and Maintenance Workbook

Practical Exercises

The course uses suggested activities to connect marine deck equipment evidence with safe, role-appropriate decisions.

- Suggested activity: trace mechanical, hydraulic, and electrical energy through a deck machinery system.
- Suggested activity: inspect wire rope, chain, brakes, guards, and controls using a condition card.
- Suggested activity: compare symptoms and readings to select fault checks and escalation actions.
- Suggested activity: develop a maintenance schedule and defect record for a mixed deck-equipment set.

FAQs

Who suits marine deck equipment operation and maintenance training, and what does it assume?

Marine deck equipment operation and maintenance training suits personnel who already operate, inspect, maintain, or supervise vessel and offshore deck machinery within approved procedures and competence limits.

How does deck equipment maintenance training differ from lifting certification training?

Deck equipment maintenance training addresses operation, inspection, preventive tasks, fault evidence, isolation, records, and escalation, while lifting certification training addresses formal examination or authorization requirements under applicable rules.

What should a mooring winch and windlass inspection check?

A mooring winch and windlass inspection checks markings, guards, brakes, controls, emergency functions, drums, foundations, wires, chains, fairleads, lubrication, corrosion, leakage, unusual sound, and recorded defects against manufacturer information.

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How are hydraulic deck machinery faults diagnosed?

Hydraulic deck machinery faults are diagnosed through pressure, flow, temperature, contamination, leakage, motion, load response, noise, component condition, operating history, and comparison with approved equipment information.

When should a marine deck equipment defect be escalated?

A marine deck equipment defect should be escalated when safe limits, braking, guarding, structure, controls, lifting integrity, competence boundaries, or approved repair criteria are uncertain or exceeded.

Conclusion

Participants take back a Deck Equipment Operations and Maintenance Workbook. The workbook connects readiness checks, isolation controls, inspection routes, preventive tasks, fault evidence, defect priorities, and escalation records. It changes separate operating and maintenance actions into a documented workflow for safer deck activity, reliable equipment condition, and controlled technical intervention.