JUPITER PRIME

Consulting • Training • Advisory

جوبيتر برايم للاستشارات والتدريب

COURSE BROCHURE

Mobile Crane Operation, Inspection and Upkeep Training Course

28 March – 1 April 2027
Muscat

Mobile Crane Operation, Inspection and Upkeep Training Course

Ref: 1687_61854 **Date:** 28 March – 1 April 2027 **Location:** Muscat **Fees:** 6500 GBP

Mobile Crane Operation, Inspection and Upkeep is a 1-week training course for crane operators, lifting supervisors and maintenance staff who set up, run and look after mobile cranes, producing a crane lift and inspection file. Busier construction sites, tighter outage windows and ageing crane fleets mean a single misread load chart or missed crack can halt a project. Jupiter Prime Training runs this course to strengthen safe lifting and crane care on site.

Why Mobile Crane Operation, Inspection and Upkeep Matters Now

Three forces shape mobile crane work today: larger modular loads on construction and energy projects, mixed fleets of owned and hired cranes arriving with uneven records, and site owners asking for proof that every lift was planned and every crane examined. Crews that read duty charts and grade defects consistently lift safely; crews that improvise risk overturning and dropped loads. The course rests on manufacturer load charts and manuals, recognised rigging practice, wire rope discard criteria and periodic thorough examination by a competent person.

Who Gains Most from Mobile Crane Operation, Inspection and Upkeep

- Operators responsible for setting up and driving telescopic and crawler cranes
- Supervisors approving lift plans and lifting areas
- Slingers and signallers who rig loads and direct crane movements
- Technicians who service hydraulics, hoists and slew systems
- Coordinators who keep crane examination and defect records current

Lifting crews gain most when operator, supervisor and technician attend together.

Mobile Crane Operation, Inspection and Upkeep Capabilities

Participants leave able to judge a crane set-up, a rigging arrangement and a defect report with the same rules:

- Calculate crane duty at the planned radius from the load chart — lift approval
- Assess ground bearing pressure and outrigger mat sizing — set-up sign-off
- Specify slings, shackles and spreader beams for awkward loads — rigging selection
- Apply pre-use and periodic inspection checklists to boom, hook and hoist — fitness for service
- Grade crane defects and decide whether to run, restrict or stand down — site management
- Build a servicing schedule from engine hours and duty cycles — fleet maintenance planning

Key Mobile Crane Operation, Inspection and Upkeep Terms

- Rated capacity — the greatest load a crane may lift in a stated configuration, radius and boom length.
- Load chart — the manufacturer's table linking boom length, radius, counterweight and outrigger setting to permitted load.
- Rated capacity limiter — an onboard system that warns and cuts motions as the load approaches the permitted duty.
- Thorough examination — a periodic detailed check by a competent person confirming a crane or accessory remains safe to use.
- Ground bearing pressure — the force each outrigger or track applies to the ground per unit area during a lift.
- Discard criteria — the measurable signs that mean a wire rope must be replaced.

Mobile Crane Operation, Inspection and Upkeep Day by Day

Day 1: Crane Configurations and Duty Forces

- Telescopic, Lattice Boom and Crawler Configurations — Choosing the Crane for the Lift
- Rated Capacity and Radius Relationships — Setting Safe Working Envelopes
- Ground Bearing Pressure and Outrigger Mats — Approving the Set-Up Area
- Wind, Side Loading and Dynamic Effects — Deciding When Lifts Stop
- Roles of Appointed Person, Operator and Slinger — Assigning Lift Accountability

Day 2: Load Charts and Lift Planning

- Manufacturer Load Charts and Counterweight Tables — Reading Duty Limits Correctly
- Rated Capacity Limiter and Moment Indicator Checks — Trusting Onboard Warnings
- Lift Plans and Method Statements — Matching Lift Category to Paperwork
- Exclusion Zones and Banksman Signals — Controlling Movement Around the Load
- Tandem and Pick-and-Carry Lifts — Approving Higher-Risk Crane Duties

Day 3: Rigging Gear and Accessory Care

- Wire Rope Discard Criteria and Sheave Wear — Retiring Hoist Ropes
- Slings, Shackles and Spreader Beams — Selecting Accessories for Load Shape
- Hook Throat Opening and Safety Latch Checks — Rejecting Damaged Hooks
- Centre of Gravity and Sling Angle Factors — Rigging Balanced Loads
- Accessory Colour Coding and Quarantine Racks — Keeping Unfit Gear Out of Use

Day 4: Inspection, Examination and Defect Control

- Pre-Use Operator Walkaround Checklists — Catching Faults Before the First Lift
- Periodic Thorough Examination by a Competent Person — Confirming Fitness for Service
- Boom Weld, Pin and Slew Ring Inspection — Spotting Structural Cracking
- Hydraulic Cylinder Drift and Hose Condition — Planning Seal and Hose Renewal
- Defect Grading and Lock-Out Tags — Deciding Run, Restrict or Stand Down

Day 5: Practising the Crane Lift and Inspection File

- Site Set-Up and Duty Chart Review — Applying Day 1 and 2 Methods
- Rigging Selection and Accessory Inspection — Applying Day 3 Checks
- Walkaround and Defect Grading Drill — Applying Day 4 Defect Rules
- Planned Servicing Intervals and Engine Hours — Scheduling Crane Upkeep
- Crane Lift and Inspection File — Completing the Work Product

Applying Mobile Crane Operation, Inspection and Upkeep After the Course

- Run a walkaround and defect grading review on one crane in the fleet and close out every open defect tag.
- Rebuild the lift plan template for the site so every plan cites the load chart duty and ground bearing check.

Mobile Crane Operation, Inspection and Upkeep Questions FAQ

What is mobile crane operation, inspection and upkeep, and why does it matter now?

It is the set of skills to plan lifts, check cranes and keep them in service safely. Heavier loads and mixed hired fleets raise the stakes.

Which roles gain most from mobile crane operation, inspection and upkeep training?

Crane operators, lifting supervisors, slingers and maintenance technicians gain most. Crews that attend together share one way of planning and reporting.

How does mobile crane operation, inspection and upkeep differ from a heavy lift engineering course?

It focuses on everyday crane duties, rigging and inspection carried out by site crews. Heavy lift engineering covers multi-crane studies and module moves.

What do you bring back from mobile crane operation, inspection and upkeep training?

You bring back a crane lift and inspection file ready for your next site.

Mobile Crane Operation, Inspection and Upkeep: The Way Forward

The crane lift and inspection file brings together the duty check, rigging choice, walkaround sheet and servicing schedule. Its first use is approving the next routine lift on site, by the supervisor and operator together, with technicians feeding in defect grades. After the first month, revisit the defect grading rules against the faults actually found and tighten the servicing intervals where wear appeared early.