Ready before departure: planning offshore load testing and mobilisation

Delays to offshore load testing can have knock-on effects across a project programme. Safe Lifting explores how early technical decisions, equipment compatibility and clear responsibilities help teams avoid last-minute issues and keep mobilisation on track.

A load test may take up only a short part of a vessel's schedule, but preparing for it starts much earlier. Equipment needs to be selected, rigging arrangements checked, test weights organised and the right people available. By the time the crane is ready, all of this should already be in place.

For offshore wind projects, this preparation belongs in the main programme. Testing and mobilisation sit between engineering decisions and operational delivery. Leaving either until the final stages can mean important questions are still unresolved when the equipment arrives at the quay.

The useful question is therefore broader than whether equipment can be delivered on a particular date. Can the complete package be assembled, checked and used for the intended operation, with the necessary information available to the people responsible? That is the point at which equipment availability becomes operational readiness.

Define the test before selecting the equipment

A request for test equipment should begin with what the test is intended to demonstrate. The required load, test configuration, loading sequence, acceptance criteria and reporting requirements need to be established by the responsible specialists under the applicable technical requirements. These decisions shape the equipment package and the work around it.

The location matters just as much. Available headroom, crane configuration, access, deck or quayside restrictions and the space needed for the suspended assembly can affect the proposed method. Where testing involves a vessel, the relevant vessel conditions and operational limits also need to be addressed in the approved procedure.

Suppliers need more than a target load to recommend suitable equipment. A drawing of the proposed arrangement, relevant dimensions and details of site conditions help establish what will actually work.

From Safe Lifting's perspective as a specialist rental provider, this is the important starting point: understanding the application before putting together the package. Its range includes water bags, solid test weights and load monitoring equipment. The choice should follow the test requirements rather than allowing the equipment available to dictate the procedure.

Water bags: plan beyond the suspended load

Water bags provide a practical way to create a test load at the location where it is needed. They can be transported empty and filled onsite, avoiding the need to transport an equivalent mass of solid weights. For some marine operations, that is a useful logistical advantage.

However, the bag is only one element of the system. The project also needs a suitable water supply, the necessary filling equipment, appropriate hoses and an agreed drainage arrangement. These supporting requirements should appear in the mobilisation plan alongside the bags and rigging.

The time needed to fill and drain the equipment belongs in the schedule too. A nominal test slot that overlooks these activities may bear little resemblance to the time actually required. Access to the water supply, hose routing and the location for controlled discharge all need to be resolved before work begins.

For an arrangement using multiple bags, preparation becomes more involved. The rigging geometry, clearances and intended sequence of loading must be addressed in the approved method. Teams need to understand how filling will be managed and monitored, and what action will be taken if the operation cannot continue as planned.

A photograph of a load test might show little more than water bags, slings, spreaders and a crane hook. What it doesn't show is the planning behind the operation, from checking compatibility and load distribution to organising measurement equipment and site logistics.

Select weights for the whole operation

Solid test weights remain a useful option where they suit the procedure and the site. They bring a different set of practical questions, including transport, unloading, storage, handling and the route to the test location. Those activities need to be considered together.

Choosing between water bags and solid weights involves more than comparing hire costs. Water availability, handling requirements, space and the time needed to move equipment on and off site can all influence the decision. A method that works well at one location may require considerable additional preparation at another.

This is a planning decision best made before transport is booked. Changing the method late can affect the rigging package, supporting equipment and test schedule. Comparing complete arrangements early gives the project a clearer basis for choosing an appropriate solution.

Make measurement part of the method

Applying a load and recording it are connected tasks. Where load measurement is required, the selected device must be suitable for its position and purpose within the arrangement. Its capacity, connections, calibration status and readout arrangements should be checked before mobilisation.





The test team also needs to agree who will observe the readings, how they will be recorded and how the results will be linked to the equipment tested. Without these arrangements in place, the physical test may be completed but the records needed for acceptance could still be missing.

A test record should make the relevant conditions and results understandable to someone who was not present. Equipment identification, the arrangement used and the required observations should be captured according to the agreed procedure. The aim is a traceable record of what was done, rather than a collection of disconnected readings.

A successful load test must also be understood within its scope. It provides evidence under the specified test conditions. It does not replace thorough examination, ongoing inspection or assessment of suitability for subsequent lifting operations. Keeping those distinctions clear helps prevent a test result from being used to support a conclusion it was never intended to establish.

Check the complete package before dispatch

Before equipment leaves the supplier, the complete package needs to be checked against the approved arrangement. Each item should be clearly identified, the relevant documentation available and its purpose understood. Similar-looking components should not leave the receiving team guessing which item belongs where.

Connections deserve particular attention. Capacity alone does not establish compatibility between a shackle, sling, beam and lifting point. Dimensions and permitted loading conditions need to be checked as part of the complete assembly, including the weight of the rigging itself.

Modular equipment can support different arrangements, but the selected configuration must remain within the manufacturer's instructions. Span, sling angles and component selection affect the arrangement. An approved drawing and matched component list provide a better handover than a list of equipment capacities alone.

Safe Lifting describes consultation and quality checks before dispatch and after return as part of its rental approach. For the project, that should be complemented by an agreed receiving check: who verifies the package, where assembly takes place and how any discrepancy is resolved before use.

Protect the programme at the handovers

Several organisations may contribute to one test: the equipment provider, engineering team, vessel operator, contractor and examining personnel. Preparation should establish their respective responsibilities, including approval of the method, equipment receipt, supervision, recording and acceptance of results.

The handovers are worth examining closely. Who confirms that the site is ready? Who provides the water and power? Who checks that the required measurement equipment is included? Even a relatively small task can delay the entire operation if everyone assumes someone else is responsible.

The programme should include assembly, checks, briefing, testing, drainage or removal of weights and demobilisation. Rental dates and transport arrangements need to reflect this sequence. Booking around the test itself can leave insufficient time for the work immediately before and after it.

Contingency planning should be equally practical. A schedule change may affect equipment availability or the attendance of essential personnel. An alternative arrangement may need a fresh technical review. Agreeing contacts and decision routes early helps the team respond without treating substitution as a purely logistical matter.

Use the return to improve the next job

Demobilisation closes the operation, but it also provides useful information for the next mobilisation. Alongside equipment condition, teams can record whether the packing sequence worked, documentation was clear and supporting equipment arrived when needed.

A short review after the equipment is returned can highlight simple improvements for the next job, whether that's a clearer equipment list, better identification, a revised hose arrangement or an earlier check of site readiness. Someone must then take responsibility for carrying those changes into the next package.

Offshore wind projects already face enough uncertainty without avoidable delays to lifting and testing operations. While weather, vessel availability and changing schedules cannot always be controlled, the preparation of equipment and supporting arrangements can.

Taking the time to agree the test requirements, check the complete package and establish responsibilities before mobilisation gives teams a better chance of carrying out the work safely and within the planned schedule.

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