

This is an extract from IOGP Report 577 - Fabrication site construction safety recommended practice - Hazardous activities, version 1.2 published November 2018. IOGP Reports are subject to regular review and update. In all cases only the current version of Report 577 is authentic.

## 8. Lifting and hoisting

**Lifting equipment includes lifting appliances (equipment performing the lifting), lifting accessories (devices that connect the load to the lifting appliance).**

**Definitions for Routine and Non-Routine lifts are found in the 'Glossary' section at the end of this document.**

- 1) The recommended practices below (e.g. task planning, SME input, competency verification, procedure review, barricades) apply equally to lifting equipment setup, lift execution, and lifting equipment take-down.
- 2) A lift plan is required that represents every lift, the detail of the lift plan is scaled based on the level of risk. Generic plans may represent multiple occurrences of routine lifts. Specific plans are needed for non-routine lifts:
  - a) For non-routine simple crane and lifting operations the lift plan is prepared by a person assessed as competent, e.g. a slinger, rigger, Person in Charge of the Lift
  - b) For complex/critical/tandem lifting operations the lift plan is prepared and reviewed by an assured qualified engineer.
  - c) For heavy lifts the lift plan is reviewed with input from an assured qualified engineer.
  - d) Lifting of personnel is carried out in accordance with a specific personnel lift plan.
  - e) Blind lifts require additional planning and communication before the work starts.
- 3) Site Management is responsible to verify to the Client Team the competency of the lifting and hoisting Subject Matter Expert (SME) and the qualified engineer. The lifting and hoisting SME verifies the competency of the Person In Charge and the lifting crew.
- 4) All persons involved in planning, performing, lifting and maintaining lifting equipment are trained and assessed as competent for their role. A person 'assessed competent' has been assessed as competent by an industry recognized authority.
- 5) Initial and refresher training and periodic assessment to assure competence are required, typically at 3 yearly intervals.
- 6) If the lift, operational or weather conditions deviate from the agreed lift plan, the activities are stopped safely, and either risk is re-assessed, controls identified and represented in a revised plan, or wait until conditions match the agreed lift plan.
- 7) An assessment is required of the lift, lift method, equipment, ground stability and number of people involved in the lifting operation.

This is an extract from IOGP Report 577 - Fabrication site construction safety recommended practice - Hazardous activities, version 1.2 published November 2018. IOGP Reports are subject to regular review and update. In all cases only the current version of Report 577 is authentic.

- 8) All personnel involved in the lifting operation have their individual responsibilities clearly defined and communicated.
- 9) One person in the lift team is designated as the Person In Charge of the lifting operation.
- 10) The Person In Charge reviews the lift plan and ensures that the required controls are in place and the lift is carried out following the agreed lift plan.
- 11) The Person In Charge ensures that the lift team has tested and understood the lift plan as well as visual and/or radio communications prior to the lift.
- 12) The person directing the lift (= banksman/flagman/dogman/signaler/spotter) is easily identifiable.
- 13) All people are kept clear of overhead loads & lifting equipment and areas of potential impact including the counter weight swing radius
- 14) Potential for falling objects and the extent of the exclusion zone is evaluated to include deflected falling objects.
- 15) Manual load handling is never used to stop a swinging load. If control of the load is required, tag lines or other means of hands-free practice are used. The safe use of taglines has been part of the training.
- 16) Equipment is used for its intended purpose and operating conditions as by Original Equipment Manufacturer's (OEM) specification and is designed to a recognized standard.
- 17) All safety and monitoring devices installed on lifting equipment are operational and not by-passed or disabled.
- 18) Inspection and maintenance activities are carried out by persons assessed and documented as competent.
- 19) Lifting devices and equipment undergo documented verification of inspection and maintenance required before first use and thereafter as stipulated by OEM guidance or recognized industry practice.
- 20) Color coding or labelling for lifting accessories can be an effective administrative control to ensure inspection of rigging.
- 21) All lifting devices and equipment are visually examined before use.
- 22) Mechanized lifting equipment and rigging apparatus that does not pass visual, periodic, or annual inspections are immediately taken out of service, repaired or destroyed and removed from the site
- 23) A load does not exceed the dynamic and/or static capacities of any individual item within the lifting assembly.

This is an extract from IOGP Report 577 - Fabrication site construction safety recommended practice - Hazardous activities, version 1.2 published November 2018. IOGP Reports are subject to regular review and update. In all cases only the current version of Report 577 is authentic.

- 24) Manlift/mobile access platforms is the preferred method for lifting people. Lifting of personnel with cranes is prohibited unless the risk has been demonstrated as being as low as is reasonably practicable (ALARP). Work baskets are designed, certified and used according to recognized international standards. Cranes involved in lifting of personnel are certified for man-riding operations.
- 25) Lifted personnel are secured with approved harnesses and lanyards unless written procedures and risk assessment require otherwise.
- 26) Lifting equipment is only left unattended in a safe condition that follows the OEM recommendations, site operating procedures and considers the forecasted environmental conditions.
- 27) Work zone boundaries are identified to prevent contact with overhead power lines.

### Relevant IOGP Life-Saving Rules, Report 459



Plan lifting operations and control the area



Keep yourself and others out of the line of fire