Applicable Forms:
→ Lift Planning Checklist
→ Personnel Hoisting Authorization Form
→ Personnel Lift Platform Inspection Form

Mechanical Lifting

Field Reference Tool

Life Critical Expectations

MECHANICAL LIFTING

Plan lifting operations and control the area

- I confirm that lift equipment and rigging have been inspected and are fit for purpose
- I only operate equipment that I am qualified to use
- I establish and obey buffer and exclusion zones
- I never walk under a suspended load or lift loads over personnel

Life Critical Failure Examples

- A crew member operates a crane that they are not qualified to use.
- A roustabout walks underneath a suspended tank while attempting to retrieve a tag line.
- An electrician ignored the established buffer zone and walked into the barricaded area where a lift was taking place.
- A lift is conducted with equipment that is not certified for the weight of the lift.

Mechanical Lifts

Minimum Clearance Approach While Lifting Load	
Voltage*	**Minimum Clearance Distance**
Up to 50	10’
Over 50 to 200	15’
Over 200 to 350	20’
Over 350 to 500	25’
Over 500 to 750	35’
Over 750 to 1,000	45’
Over 1,000	As established by the utility owner/ operator or registered Professional Engineer who is a Qualified Person with respect to electrical power transmission and distribution.

Covered by Procedure	Not Covered by Procedure
Cranes	Rig hoisting with draw works
Hoists	Man lifts
Gin Pole Trucks	Scissor lifts
Articulating Trucks	Aerial lifts
Service truck cranes and auto cranes	Powered industrial trucks
Heavy equipment that is manufacturer-designed to perform lifting operations	Manual handling

*If voltage is unknown, default the minimum clearance distance to 45’.

Lift Equipment and Rigging Inspections Must be Verified Using the Forms Below

‘O’ is optional and ‘X’ is required	Non-Critical Lifts	Critical Lifts
Lift Planning Checklist (Attachment B—or Contractor Equivalent Process)	O	X
Job Safety Analysis (Refer to RP Job Safety Analysis and Pre-Job Safety Meeting Procedure)	O	X
Personnel Hoisting Authorization Form (Attachment C) and Personnel Lift Platform Pre-lift Inspection Form (Attachment D)		X

⇒ A CMO Equipment Inspection Checklist is available for optional use in CMO for Critical and Non-Critical Lifts.

Ensure the Following Steps are Completed for Every Lift

- Equipment Operators have proof of training, certification, an licensing (if required.)
- Make sure buffer or exclusion zones are in place to prevent personnel or traffic from entering the lift area. The following methods could be used to establish a buffer zone or exclusion zone:
  - ⇒ Barriers
  - ⇒ Warning Lines
  - ⇒ Spotters
- When using heavy equipment (backhoes, excavators) complete Appendix B - Lifting Operations Using Heavy Equipment.

Applicable Forms:
→ Lift Planning Checklist
→ Personnel Hoisting Authorization Form
→ Personnel Lift Platform Inspection Form

Mechanical Lifting
Field Reference Tool

KEY DEFINITIONS

Critical Lift – A lift which meets one of the following criteria:

- Weight of lift exceeds 75% of the lifting capacity of the equipment at the maximum angle of lift.
- Lifts conducted by multiple cranes.
- Personnel lifts or hoisting of personnel.
- Lifts presenting an increased level of risk and complexity or an increasing level of control is required including but not limited to the following examples:
  - Lifting in confined work areas with limited clearance.
  - Lifts at heights that make control of the load difficult.
  - Lifts near power lines, over active work areas, or occupied buildings (See Working Near Power Lines (Appendix A)).
  - Lifts utilizing specially engineered load rigging systems.
  - Lifts within or over a sensitive or restricted area.
  - Load is fragile or of high value.
  - Load required to be overturned.
  - Blind lifts.
  - Load with unknown or difficult to estimate weight or center of gravity.

Non-Critical Lift - A lift that does not meet any of the criteria for a Critical Lift.

Blind Lift - Lifts where the load cannot be seen by the Equipment Operator during the lift and requires the use of a Signal Person who has an unrestricted view of the load and communication methods to provide load -maneuvering instructions during the lift.

SIMOPS – Simultaneous Operations conducted by two or more disciplines (drilling, completion, flowback, facilities, production operations, etc.) in the same work space at the same time.

Lifting with Excavators, Backhoes, Service Trucks or Auto Cranes – See Lifting Operations Using Heavy Equipment (Appendix B).