

Jason Mechanical Corp

Tool Box Safety Talk

Mobile Cranes

A mobile crane is an indispensable piece of equipment on certain job sites. Its ability to lift massive weight to extreme heights allows work to be done that would be impossible without it. If you are not directly involved in crane or hoisting operations, stay clear! Crane safety involves the integrity of the crane itself, the knowledge and skill of the operator, & the actual hoisting procedures including setup, inspection, & operations. It should be noted that most common crane accident involves crane or boom contact with energized power lines. However, all the below safety items are important and should be included in any safety audit. A review or inspection of:

- a. the entire construction area to determine how the crane operation affects other operations and crafts working with or around the crane.
- b. operator training and qualification.
- c. all crane records including frequent (performed by the operator at the start of each shift) and periodic (at 1 to 12 month intervals) inspections used to determine the need for repair or replacement of components to keep the machine in proper operating condition. Inspection and maintenance records, the operator's manual, and load charts must be readily available.
- d. the actual crane set-up to include proximity of electrical power lines; leveling; clearance for rotation; outriggers, if applicable; and stability (the relationship of the load weight, angle of the boom, & its radius to the center of gravity of the load).
- e. the structural integrity of the crane's main frame, crawler, track and outrigger supports, boom sections, and attachments.
- f. all wire ropes, cables, hydraulic lines, chains, hooks, etc.

Because working around or near electrical power lines is identified as the leading cause of crane accidents, there must be a minimum clearance of 10' from lines and:

- a. cranes should not handle materials or loads stored under electric power lines.
- b. operation of mobile cranes near de-energized electric power lines is not recommended until the following steps have been taken:

1. the power company or owner of the power line has deenergized the lines.
2. the lines are visibly grounded and appropriately marked at the job site.
3. durable warning signs are installed at the operator's station and on the outside of the crane identifying the clearance requirements between the crane/load and electric power lines.
4. a qualified representative of the power company or owner of the electric power line is on the job site to verify that the power lines have been
5. de-energized or properly grounded.

Safety Concerns:
