

Crane Safety

The Top 3 Crane Hazards and Preventative Measures

Inadvertent Electrical Contact

- Usually, the person who is electrocuted is touching the crane when it comes into contact with the power line but the danger is not just limited to the operator. Annually, nearly 200 people die from power line contact and about three times as many are seriously injured. Most victims are guiding the load at the time of contact, but risks extend to everyone present at a job site.
- Power line contacts most often occur because safety planning isn't considered and preventative measures haven't been taken to avoid hazards. Planning is one of the biggest accident deterrents available and it is essential to establish who is in charge of pre-job safety planning before any cranes arrive at a worksite

Overload

- When a crane is overloaded, it is subject to structural stresses that may cause irreversible damage. Swinging or sudden dropping of the load, using defective components, hoisting a load beyond capacity, dragging a load and side-loading a boom can all cause overloading. OSHA estimates that one crane upset occurs for every 10,000 hours of crane use. Nearly 80 percent of these upsets can be attributed to predictable human error when the operator inadvertently exceeds the crane's lifting capacity.
- Overloading most often occurs when poorly trained personnel are allowed to operate cranes. Oftentimes, operators mistakenly believe they are able to rely on their instinct or experience to determine whether a load is too heavy. It's crucial that any crane operator know the weight of a load and the capacity of the crane. The outriggers or stabilizers must be either fully extended or, if manufacturer procedures permit, deployed as specified in the load chart because using technologies such as load-measuring systems for training and planning can greatly reduce the hazard of overloading and operator incompetency.

Falling Materials

- If materials are not properly secured the load can slip and land on workers in the vicinity or cause damage to property. Undesired movement of material can pinch or crush workers involved in the rigging process. Statistics show that nearly 20 people died in 2012 as a result of accidents with overhead hoists. One way to reduce the risk of falling materials is to perform regular maintenance of hoists. Load testing maintenance ensures that the equipment remains in good working order and that all operations run smoothly.
- Mechanical failure can also cause machinery to malfunction unexpectedly and drop a heavy load. To reduce the risk, OSHA mandates that operators make daily crane inspections. When mechanical problems do arise, operators should use the lockout/tagout procedure to prevent accidental startup or movement of the crane until the problem has been repaired. Employees working around overhead cranes should always wear proper head, foot, hand, and eye protection.

The following is a video from WorkSafeBC available on YouTube illustrating the dangers and proper safety procedures if inadvertent electrical contact should happen:

Electrical Safety: Crane Truck



#Equipment