

# **Weekly Safety Meeting**

## **Overhead Crane Safety**

Overhead shop cranes move heavy items in manufacturing and production areas. Although shop cranes are useful, "overhead" can sometimes be "out of sight and out of mind" when it comes to safety. Workers need training on crane hazards and operation, and they should never forget the safety hazards moving overhead. Only trained operators should use overhead shop cranes. They should always be inspected and tested before operation. Shop cranes require audible warning devices when moving unless a floor worker using a suspended controller operates the crane. Everyone on the worksite should be trained on the crane warning signals.

A 10-year OSHA study ending in 2007 analyzed the costs of approximately 250 OSHA reported crane accidents over the 10-year period. The report outlined the human impact as well as the financial impact of the 270 reported injuries and fatalities. The economic loss averaged two million dollars per incident. The most enlightening finding is that 70% of the incidents would have likely been prevented if proper training of the operators had been conducted. In 74% of the cases, the cranes were being used in routine operations where OSHA requires that specific training be provided to properly prepare and protect employees.

Operators must know the load capacity of their shop crane; loads that exceed the limits of the crane should not be moved. Before moving loads, the crane operator should inspect the path of the crane for obstacles and people; the path must be clear before starting any crane movement.

The load rigging requirements need special attention. Loads that cannot be safely rigged should not be lifted.

Controls for overhead cranes should be clearly marked with their function. It is ideal if control handles operate in the direction that the crane will be moving. Whether operating a crane from an overhead bridge or the floor, the operator always needs a clear view of the crane pathway.

Crane safety features may include spring-return controllers that return the operating switch to a default off position, momentary contact buttons that cause the crane to stop when it hits an obstacle, or reset buttons in the event of power loss.

Operators must be familiar with the shop crane they use and never operate it without the equipped safety features.

#### Safety Tips for Overhead Crane Operation:

• Before use, ensure the crane is suitable for the planned hoisting task. Confirm it has appropriate travel, lift, and capacity.

- Visually and physically inspect the crane before use.
  - Check for damage, wear, and proper operation of all functions.
- Confirm the load weight.
  - Check the capacity of all equipment including the hardware, rope, and slings.
  - Do not exceed these capacities.
- Select the right sling for each lift.
  - Inspect slings and other rigging hardware before use for wear, stretch, or other damage.
  - Do not use damaged or defective slings.
  - Use softeners around sharp corners.
  - Do not splice broken slings.
- When communicating with a crane operator, use clear, agreed-upon signals.
  - Except for the stop signal, the crane operator should follow instructions from only one person, a designated signaler.
  - Where a wired or remote controller is used, the operator should become familiar with all of its functions before lifting the load.
- Warn all people in the load lift area before starting the lift.
  - $\circ$   $\;$  Ensure that the path of the load is clear of persons and obstructions.
  - $\circ$   $\;$  Do not lift loads over anyone.
  - Center the crane hoist over the load before hoisting to prevent swinging of the load.
- Slide the sling fully onto the hoisting hook and ensure the safety latch is closed.

Do not load the hook tip or hammer a sling into place.

- Secure unused sling legs.
  - Do not drag slings or leave loose materials on a load being hoisted.
  - Keep hands and fingers from being trapped when slack is taken out of a sling.
    - Step away before the lift is started.
- Move the load and controls smoothly.
  - Minimize load swing.
- Walk ahead of the load during travel and warn people to keep clear.
  - $\circ$   $\;$  Use a tagline to prevent rotation or other uncontrolled motion.
  - Raise the load only as high as necessary to clear objects.
  - Do not ride on the hook or load.
- Set loads down on blocking, never directly on a sling.
  - $\circ$   $\;$  Do not pull or push loads out from under the hoist.
- Do not leave the load (or the crane) unattended while the load is suspended.
- Where crane operation by other personnel must be restricted, employ lockout and tagging procedures.
- Store slings off the floor in a clean, dry location on hooks or racks.
  - $\circ$   $\,$  Do not leave slings, accessories, or blocking lying on the floor.

Only qualified crane operators should operate a crane for lifting loads. No one should operate a crane until he has read the operator's manual for that crane and is familiar with the particular traits of that crane.

#### **Remember:**

Crane accidents can be catastrophic, but they can also be prevented. From initial training to preoperation inspections, employers are responsible for implementing preventive measures and arming employees with the knowledge and equipment they need to stay safe on the job. It is important to first understand the kind of crane that is being operated; this might have an effect on the hazards taken into account.

LOWER THE BOOM ON SAFETY... USE CRANES SAFELY!!

### Safety Meeting Sign-In Sheet

Supervisor:	Subject:
Location:	Date:
Conducted By:	Trainer Signature:

Name (print clearly)	Signature	Comments / Safety Concerns / Training Requests