

Toolbox Talks 2

086: Unsafe Conditions: Cranes and Hoists

Discussion leader duties for this session:

Review company policies related to cranes and hoists.

What this Safety Talk covers:

This Safety Talk addresses unsafe conditions around cranes and hoists.

Discussion notes:

Unsafe conditions involving cranes and hoists

- Clearances not properly allowed for. Review the methods used to determine that there's adequate clearance in all directions for the crane to operate. This includes accounting for grade variations as the crane moves, the effect of wind on the boom and overhead lines, and the actual overhead line height at lowest point of sag. Never use the line height at the point of attachment, as that produces a higher number than actual height of the middle.
- Nobody checking actual clearances vs. those on drawings. Walk down the entire area of crane operation, and make actual measurements.
- Area not properly roped off. Hoist and crane operations are inherently dangerous. Ensure the entire area is roped off with red tape to keep out people who don't need to be in it.
- Slipping hazards in crane area. Once you rope off the area, walk it down to remove any slipping hazards.
- Unauthorized people inside roped off area. Don't gesture at these people to leave, and don't yell at them. Doing so may confuse the hoist or crane operator. Most probably, the operator will have to stop until those people are out of the area.
- People distracting crane crew. Ask these people to leave. A good crane operator will likely lower the load and stop all work, rather than continue to work with such unsafe behavior going on.
- Undersoil problems. Make sure the crane crew has accounted for undersoil items, such as shallow-burial pipe and cable.
- Inadequate footings or riggings for crane. Make sure the crane crew has put down the plywood or whatever else is needed for a reliable crane tread surface. Make sure the riggings are in place.
- Lifting eyes not inspected. Don't trust these to chance. For example, open the transformer casing and ensure the lifting eyes are properly secured.
- Inadequate lifting means. The operator of the crane or hoist may assume the load has been attached by qualified personnel. Verify that the proper attachment means is being used and the method of attachment is correct. For example, is the strap rated for this load? Is the strap eye being used correctly? Is the load being supported in a balanced manner?

Review and discussion

1. What can go wrong if clearances to overhead lines are not enough?
2. How can you make sure the clearances to overhead lines are enough?
3. What are some errors that people make when determining clearances?
4. Why do you need to rope off the area of crane or hoist operations, rather than trusting people to use good judgment and walk around?

5. What should you do if people ignore the barriers?

6. When should you look for, and remove, slipping hazards in a crane or hoist operations area? Why not wait until the actual operation?

7. How do you prevent problems with buried items an outdoor crane might run over?

8. How do you ensure the crane will run on a stable surface?

9. What do you need to know about crane riggings?

10. What are some issues with properly securing the load? Why are these important? How do you prevent problems?

Participant's Signature and Date

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