

TOOLBOX TALK: CRANES AND RIGGING

Job or site _____

Date _____

Led by _____

Open with this

Before anything gets picked today I want everyone to tell me where the fall zone is. Not where the crane is. Where the load ends up if the rigging lets go.

The talk

A crane lift looks like the operator's job. It is not. The operator can only see what the signal person shows him, and the load only knows one direction, which is down.

The fall zone is the area the load would land in if it came off the hook right now. It is not a line on the ground and nobody paints it. It moves with the load, the whole way across the site.

The rule is that while the load is hanging and not moving, nobody is in that zone. There are exceptions and they are short: the people hooking it, unhooking it, guiding it, making the first connection, and whoever is running a concrete hopper or bucket. That is the whole list.

If you are one of those people, the load has to be rigged so it cannot shift, and the hooks have to latch by themselves. A hook that is open at the top is a load that is waiting for a bump.

The other thing that kills on crane jobs is the power line. It does not take contact. It takes getting close enough, with a boom, a load line, a tag line, or a piece of rigging.

Before the first pick, somebody has to work out whether any part of this machine or its load can get within twenty feet of a line at full radius. If the answer is yes, the line gets deenergized and visibly grounded, or the twenty feet gets enforced. Standing there hoping is not one of the options.

Point at these before anybody starts

- The power line nearest this pick, and how far the boom reaches at full radius.
- Where the load will travel, from where it sits now to where it lands.
- The fall zone under that whole route, and who is currently standing in it.
- The hook, and whether the latch closes by itself when you let go of it.

- The tag line, and who is holding it and where they will be standing.
- The signal person, and whether every one of you can see the same person.

The rules that apply

- While a suspended load is not moving, nobody is in the fall zone except the people hooking, unhooking, guiding or making the first connection, or running a concrete hopper or bucket.
- Materials being hoisted must be rigged so they cannot shift on the way up.
- Hooks used in the fall zone must have self closing latches or the equivalent. J hooks are allowed only for setting wooden trusses.
- Where more than one hoisting route is available, the one that keeps people out from under the load is the one used.
- Before operations start, the employer must work out whether any part of the equipment, load line or load can get closer than 20 feet to a power line at maximum working radius.
- If it can, the line is deenergized and visibly grounded, or the 20 feet is maintained by the measures the standard requires. Nothing else clears it.

Ask the crew

- Point at where the fall zone is for the first pick today.
- Who is the signal person, and what do you do if you lose sight of them?
- How close does the boom get to that line at full radius?

Close with this

If you are under it, you are in it. The load does not care whose fault it was.

Attendance

Everybody who was present signs, including subcontractors and anybody visiting the site.

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This talk is general safety information for a crew briefing, not legal advice and not a substitute for the training your employees are required to have. Standards are quoted for orientation only. Check the current text of the standard and your own state plan, which may be stricter than the federal rule.