

Crane Safety for General Industry

Scenario – Answer Key

An important part of crane operator training is safe lifting capacity.

It happened like this

Jack was a stickler for details, which is a good thing, because he operated various cranes that lift from 20 tons to 150 tons. On this day, Jack was more particular than usual. He was to hoist a large air conditioning unit to the top of a new office building. He was using a telescopic crane with a load limit of 40 tons. The air conditioning unit was only 12 tons. Philip, the foreman for the job, wanted the lift done immediately. "Jack, can you hurry up and get that up on the roof?"

"I checked the load chart and there's a problem. If I use this crane, the load could cause the crane to tip or the telescopic boom to fail."

"Why is that? The crane is rated for 40 tons."

"That's true, but the telescopic boom is going to be extended the full length and the load chart says it's too much weight hanging up and out there. Plus, the wind is at 15 mph and that's going to put even more strain on the boom."

"It's going to get even windier later. We need to get that up now!" Philip put the pressure on Jack.

"I'm responsible for the lift. I'm not going to do it!" Jack replied, standing his ground.

What are the issues?

- Weather conditions.
- Load capacity.
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What did Jack do right?

- Checked the load chart to confirm rated load capacity.
- Told Philip that the lift would be unsafe and refused to do it.

What did Philip do wrong?

- Didn't understand the importance of the load chart, even though he's the foreman for the job.
- Failed to select the proper crane to perform the lift.
- Tried to pressure Jack into making the lift.



What do you think should happen next?

- If the lift is to be made, they need to get a crane that can handle it safely.
- Philip should receive training on overhead crane handling requirements and crane load charts.
- Jack should be commended for not making the lift.

Employee training

29 CFR 1926.20(b)(4) says, “The employer shall permit only those employees qualified by training or experience to operate equipment and machinery.”

Training tips

Talk about the various types of cranes that your company uses. If possible, tour the site and indicate where cranes have been used and where they will be used in the future. Discuss any company specific crane rules.

