



Tool Box Safety Topic

Working Around Heavy Equipment

Introduction:

Heavy equipment, such as cranes, excavators, and sidebooms are essential part of construction/pipeline work. All non-essential workers should remain outside of the working area of heavy equipment while the machine is in operation. This working area is also known as the “danger zone”. Before working around heavy equipment, you should know the potential hazards and how to avoid them

Definition:

Danger Zone: The working area where contact could result in personal injury or damage during operations.

Heavy Equipment Danger Zone:

Unless it is essential to the task, all personnel should stay away from all sides of heavy equipment while it is in use.

Danger zones include (but are not limited to):

- Blind spots and/or areas of limited visibility
- Rotating machinery
- Swing radius
- Travel path
- Under suspended or overhead loads

- Overhead hazards (i.e. overhead utility lines, and overhead piping/cable trays, etc.)
- Working over or around existing underground facilities
- Close proximity of moving equipment

When working near heavy equipment, remember these important safety points:

1. Only qualified and authorized personnel are permitted to operate heavy equipment.
2. Stay alert at all times.
3. Establish communication before starting work – hand signals, whistles, radios, air horn, audible alarm, or other means of effective jobsite communication. The spotter/swamper must maintain line of site or communication with the equipment operator.
4. Anyone entering the danger zone must first establish communication, preferably eye contact, with the operator or swamper.
5. Prevent unauthorized workers or bystanders from entering a danger zone. When appropriate, install barricades and signs around the danger zone.
6. The use of cell phones and other communication devices is prohibited except for job-required or emergency situations.
7. Wear high-visibility clothing and other appropriate personal protective equipment.
8. Watch for shifting or unstable loads and working surfaces.
9. NO RIDERS. Only equipment that is designed to carry multiple persons shall have more than one occupant.

Working Around Heavy Equipment

Test Questions

1. Equipment operators and spotters may allow personnel under suspended loads, loads being transported, or equipment working overhead.

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2. When an operator's visibility is limited or obstructed, it does **not** affect the safety of workers on the jobsite.

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3. The definition of a danger zone is: "working area where contact could result in personal injury or damage during operations."

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4. Heavy equipment is a hazard to all personnel in the danger zone.

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5. Workers and other personnel can ride on the equipment as long as the operator allows it.

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6. All personnel must establish communication, preferably eye contact, with the operator or swamper before entering the danger zone.

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Answers:

1-F; 2-F; 3-T; 4-T; 5-F; 6-T

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