

Greetings, today's safety bulletin is about 'Pinch Points'.

A pinch point is a spot or area where two or more objects, parts, or surfaces create a narrow space in which a person can be caught or crushed. The simple rule of "don't stand between two objects harder than you."

These areas are called "pinch points" because they pose a risk of pinching, squeezing, or crushing injuries to workers, tools, or equipment. Pinch points are common in construction sites and can be found in various situations, such as between heavy machinery components, moving equipment parts, or even between materials being handled.

Pick the pinch points

To mitigate the risks associated with pinch points, it's important to identify potential pinch point locations and take appropriate precautions.

Multiplex has created a helpful resource for identifying pinch points, which is available from the CICA website [here](#).

Pinch points related to crane operations can vary depending on the type of crane and the tasks being performed. Some common pinch points to watch out for when using cranes:

1. **Load and Hook:** The area where the load connects to the crane's hook or other attachment points is a significant pinch point. When raising or lowering loads, it's crucial to keep hands and body parts away from this area to prevent crushing injuries.
2. **Wire Rope:** The wire rope used for lifting loads can create pinch points when it wraps around the drum, hook block sheaves or snatch block. Keep a safe distance from the drum or components and ensure the rope is properly wound to avoid entanglement and potential injuries.
3. **Counterweights:** The areas where counterweights are attached or moved can create pinch points, and it's essential to maintain safe distances when working near them.
4. **Outriggers:** The deployment and retraction of crane outriggers or stabilisers can create pinch points between these components and the

surrounding structure or equipment. Keep a safe distance and ensure that personnel are clear of these areas during setup and operation.

5. **Boom and Mast Sections:** For cranes with telescopic booms or mast sections, there can be pinch points where these sections extend or retract. Operators and workers should exercise caution when operating these motions.
6. **Cab and Control Panels:** The crane operator's cab and control panels may have pinch points when doors or access panels are opened or closed. Workers should be cautious when operating these components and avoid placing hands or body parts in these pinch point areas.
7. **Rigging Equipment:** When attaching or detaching accessories to the load, such as hooks, spreader bars, or lifting slings, there can be pinch points. Use caution and follow proper procedures when handling these components.
8. **Maintenance and Inspection Areas:** During maintenance and inspection of cranes, certain parts, such as sheaves, blocks, or pulleys, may create pinch points. Technicians should exercise care and follow safety protocols to avoid accidents.

Make sure to isolate the crane during service or an inspection so that an operator doesn't accidentally power the crane.
9. **Cable Reel Areas:** In cranes with cable reels for electrical power or control signals, the cable reel area can be a pinch point when cables are being wound or unwound.

By being aware of pinch-point risks and taking appropriate precautions, those working around cranes can reduce the likelihood of accidents and injuries related to these hazards.

Most common pinch point injuries

For workers who come into contact with pinch points, crush and amputation risks are high.

Hands are often the part of the body closest to a hazard, and according to Skiba (2020) "most research advises the selection and use of gloves as the primary



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risk management for avoiding hand injuries is the least desirable control option” because while gloves provide protection for some injuries (i.e. burns, lacerations, chemicals) the risk of fractures, crush injuries or amputations does not decrease.

Employers can increase crush injury awareness by ensuring hazard awareness and control measures are front of mind for workers.

In his article [Crush Injury Risk Awareness, Prevention and Minimisation in Load Shifting Operations](#), Richard Skiba goes into more detail on how to involve workers in hazard identification, risk assessment, risk controls and reviewing of the process. He also suggests a couple of basic toolbox talk quizzes helpful for engaging on this topic and consolidating worker’s knowledge.

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Remember: Safety is everyone's responsibility.

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