

Before you begin

Identify where your facility uses conveyors and the benefits and hazards they pose to your employees. Evaluate injury data at your facility to determine if any injuries or near misses have occurred due to conveyors. On the Occupational Safety and Health Administration (OSHA) website, search the [Fatality and Catastrophe Investigation Summaries](#) with the keyword “conveyor” to see recent injury reports involving OSHA inspections.



Introduction

There are hazards and potential for injury when working on or around conveyors. Amputations are common injuries for workers using conveyors. Workers may not have time to react to prevent losing a body part or being pulled into a conveyor.

Definitions

Conveyors are permanently mounted or mobile devices used for transporting bulk material, packages, or objects in a predetermined path. Conveyors can significantly reduce material handling for employees

Nip points are an area between two rolling parts, or a rolling part and a stationary part, where these parts come together and all or part of the human body could become trapped.

Discussion

When using conveyors, workers have the potential for a variety of injuries. Potential injuries include caught in nip points, being struck by falling material, falling off or tripping over, contact with head or other body parts, electrical exposure, ergonomic concerns, and exposures to transported chemicals. A focus on engineering and administrative controls can prevent these serious, life-altering injuries.

Include and maintain all safety equipment on conveyors. Guards are usually the main safety feature, including barrier guards on chain drives and other moving parts, protective end caps on rotating shafts and even guarding by location of 8 feet off the ground or more. Provide guards where conveyors pass over work areas or aisles to keep falling material from striking employees. If workers can duck under a conveyor, mark the guard with a warning sign or paint it a bright color. If necessary, guard a low conveyor to prevent workers from walking on or over it.

Another safety measure is to install emergency stop buttons or pull cords designed to stop the conveyor at the employee's workstation. Install emergency stop cables that extend the entire length of continuously accessible conveyor belts so you can access the cables from any location along the conveyor. Design emergency stop switches that must be reset before a worker restarts a conveyor. A conveyor should not restart automatically.

Because the risks are high, it makes sense to perform periodic inspections of all conveyors. Do regular walkarounds for all conveyors, checking the guarding, emergency stops, and housekeeping. Review and inspect electric connections and equipment. Follow all manufacturer recommendations for inspection or preventative maintenance. Only an authorized, trained mechanic should service a conveyor.

To prevent or reduce the severity of an injury, employers should adopt the following rules and train all employees working with or near conveyors on the rules.

- Allow only authorized and trained employees to operate conveyor systems.
- Make sure guards are in place before operation and never remove or alter guards without permission.
- Ensure appropriate personnel inspect the conveyor and clear the stoppage before restarting a conveyor that has stopped due to an overload.
- Prohibit employees from sitting, riding, or walking on a materials-handling conveyor.
- Do not allow workers to walk over, on, or duck under conveyors.
- Use proper lockout/tagout procedures when there is an exposure to accidental startup while working on a conveyor.
- Use proper housekeeping practices to reduce dust and debris accumulation.
- Never wear loose clothing, hair, jewelry, or other loose items around conveyors.
- Ensure conveyor controls are working properly.
- If a conveyor is broken or stops, alert management to the malfunction. If materials need unloaded, use caution, paying close attention to lifting techniques, body mechanics, and housekeeping

Conclusion

At the conclusion of this safety talk encourage employees to pay special attention to conveyors in their work area, looking for guarding or other safety concerns. Ensure workers know how to report all hazards they find so that all problems are corrected.

Group activity

Take the training group to look at a few conveyors in the facility to inspect for safety concerns and point out any concerns. You may also take pictures before the training and use them to do the inspection.

Resources

[29 CFR 1910 Subpart O](#) OSHA Regulation - Machinery and Machine Guarding

[29 CFR 1910.147](#) OSHA Regulation -The control of hazardous energy (lockout/tagout)

[OSHA publication 2236](#) Material Handling and Storage