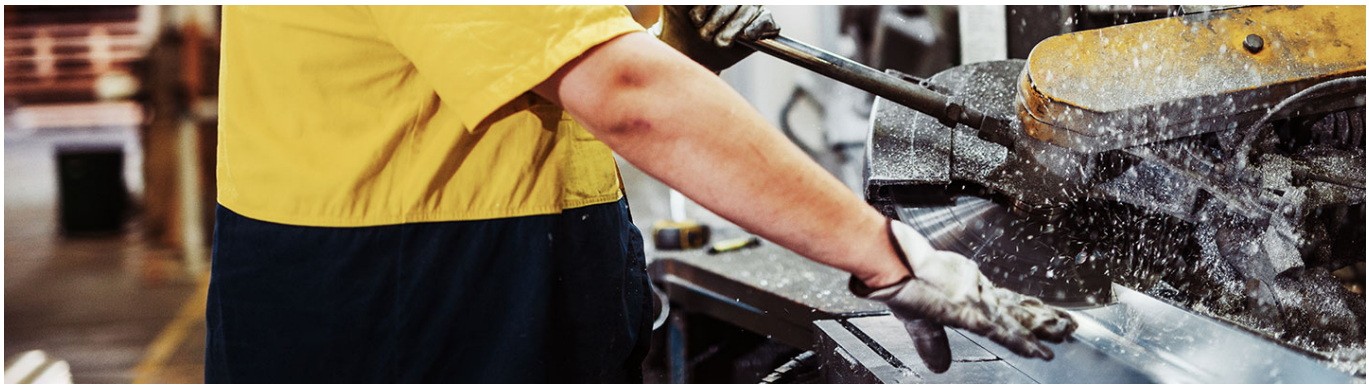

Safety

High Frequency and High Risk: Protecting Workers from Pinch-Point Hazards

James Langford | Mar 30, 2023

The term "pinch-point hazards" may sound innocuous enough to mislead you into thinking the risks involved are trivial.

They aren't. With the high-powered equipment used in manufacturing facilities and machine shops, pinch-point hazards can be debilitating and even deadly.

While pinching a finger at home might be no more than a painful nuisance, "there is no comparing the power of a slammed screen door with the force of industrial machinery," the Texas Department of Insurance's Division of Workers' Compensation warns.

Amputations are among the disabling workplace injuries commonly linked to pinch-point accidents, four dozen of which have occurred in the past 10 years, according to data from the U.S. Occupational Safety and Health Administration, the nation's top workplace safety regulator.

OSHA's Machine Guard Recommendations

Machine guards are the first line of defense against injuries caused by equipment operation, according to the U.S. Occupational Safety and Health Administration, which recommends five general safeguarding methods:

- **Guards:** Physical barriers that prevent contact. They can be fixed, interlocked, adjustable or self-opening.
- **Devices:** Equipment that limits or prevents access to hazardous areas. Examples include presence-sensing devices, restraint straps, safety-trip controls, two-hand controls and gates.
- **Automatic Feed and Ejection Mechanisms**: Devices that eliminate exposure to the hazardous point for operators.
- **Machine Location/Distance:** Removing the hazard from the operator's work area.
- **Miscellaneous:** Tactics and tools that protect both equipment operators and others in the area, from shields to contain chips and sparks to holding tools that an operator uses to handle materials going into an operations point and awareness barriers that warn passersby.

And the hazards are everywhere, a point underscored by the frequency of OSHA citations.

Regulations covering pinch-point injury prevention, including lockout/tagout and machine-guarding requirements, are among the agency's ***most often violated rules***, leading to a combined $23 million in fines to manufacturers in the year through September 2021.

Almost any piece of equipment in a machine shop "has the potential to injure you," ***safety gear supplier MCR Safety*** says. "One of the first safety initiatives in any machine shop is safeguarding equipment, followed by training and personal protective equipment."

What is a Pinch Point, Anyway?

Pinch points, which occur in any place where body parts might be trapped between moving pieces of equipment, are especially hazardous to entry-level manufacturing workers or employees new to a worksite.

"Often, pinch-point injuries are the result of workers who are not properly trained, don't realize the dangers of machinery or take shortcuts to get the work done more quickly," the Texas Division of Workers' Compensation notes.

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"Under normal operating conditions, workers tend to remain within the parameters of safe operation," the division adds. "It is when upset or abnormal operations are encountered that workers have a tendency to unnecessarily expose themselves to pinch-point hazards."

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To keep employees safe, regulators require businesses to identify pinch-point hazards and either

eliminate them or establish protective safeguards. Worker training is covered, too.

Pinch Point Safety

Businesses in the state of ***Michigan***, for instance, must inform employees of the reasons for the safety measures as well as teach them about the hazards of pinch points and the types of injuries they might cause.

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Such injuries can range from comparatively minor cuts, bruises and blisters to lacerations, broken bones and even death, says consultant ***Safety International***.

To prevent them, here are some ***recommendations*** from both the consulting firm and safety resources provider ***Clarion Safety***:

For Employers:

- **Conduct a risk assessment and document it.** A thorough assessment should identify hazards and estimate the severity of injury possible from each one as well as the probability of occurrence.
- **Outfit equipment with appropriate warning labels, making sure to place them in visible areas.**
- **Implement an effective machine safeguarding review and make policy revisions as needed.**
- **Properly train employees on pinch-point safety.** Hold training sessions on recognizing and responding to hazards. Regularly review training topics and encourage proper communication between workers.
- **Conduct regular inspections.** Inspections should ensure that both operators and machines have safety accessories suitable for the job, that machines and safety equipment are functioning correctly and that operators have been properly trained.

For Workers:

- **Never place your hands where you can’t see them.** If your view is obstructed, stop until you can see what you’re doing.
- **Pay close attention around moving parts.**
- **Check machine and tool safety guards.** Make sure the guards are working correctly before starting a job. Never tamper with or disable them.
- **Follow lockout/tagout procedures.** Make sure equipment is turned off before starting repairs or maintenance work.
- **Never walk away from machines that are turned on or in motion.** Doing so creates a hazard for other workers.
- **Securely block equipment where stored energy may be released.**
- **Avoid shortcuts.** Stress the importance of doing the job right rather than using unauthorized workarounds to save time. Shortcuts can often lead to careless mistakes and costly injuries.
- **Wear appropriate personal protective equipment.** Types of PPE that protect against pinch points may include safety gloves and forearm guards. Workers should also wear snug clothing, remove their jewelry and secure long hair so that it doesn’t get caught in pinch points.

