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Safety First

Case Studies: The Value of Proper Machine Guarding by Kelli Gabel

Do you need a refresher course in proper machine guarding for preventing safety hazards in your manufacturing operation?



Machine guarding is a major cause of death and amputation in the workplace. Crushed hands and arms, severed fingers, blindness—the list of possible machinery related injuries is as long as it is horrifying. There seem to be as many hazards created by moving machine parts as there are types of machines. Safeguards are essential for protecting workers from needless and preventable injuries.

A good rule to remember is: any machine part, function or process that may cause injury must be safeguarded. When the operation of a machine or accidental contact with it can injure the operator or others in the vicinity, the hazards must be either controlled or eliminated.

The following case studies involve incidents where proper machine guarding was not

implemented and as a result, "near miss," amputation and death materialized in these manufacturing operations.

CASE 1:

A truss plant was recently cited and fined for safety violations that led to an accident resulting in an amputation.

OSHA began the inspection after the accident occurred when an employee's arm was caught in a finish press with an unguarded ingoing roller. The worker was not able to free the arm because a safety bar, which should have stopped the machine, failed to work properly in the incident. As a result of the accident, the employee lost two fingers and the dexterity of his left hand.

"The company showed disregard for worker safety by failing to guard moving machine parts and fix the safety bar on the finish press even after employees and outside maintenance companies called attention to the need for repair," said James Borders, an area director of OSHA.

The plant was also cited for serious violations that included: failing to guard a saw; failure to have lockout/tagout program; failure to ensure that their forklift operators were properly trained and evaluated; and failure to have in place an adequate hazard communication program for chemicals used at this facility.

CASE 2:

A lumber company was recently issued several serious citations and proposed penalties for failing to protect workers from "caught and crush" hazards at the company's saw mill, which resulted in the death of one employee.

The employee died at the plant after feed rollers at a conveyor caught on his clothing and pulled him into the tree bark and removal machine. The citations included: failure to guard saw blades, rotary knives, belts, pulleys, chains, sprockets and points where raw material enters the machine; failure to use lockout/tagout procedures that would have rendered the machinery inoperative; and failure to label control switches.

"Machine guards could have prevented this tragedy," said Robert Sanchez, an area OSHA director.

CASE 3:

In another plant, a worker nearly lost his hand due to improper guarding. Now, the facility at which the event occurred faces citations and significant fines.

OSHA began its investigation after receiving a complaint that an employee was injured on a machine that was not guarded correctly.

As a result of the investigation, OSHA cited the business for machine guarding and energy lockout/tagout deficiencies, as well as failure to provide safety training and other electrical hazards.

VOLUNTARY INSPECTIONS WILL SAVE YOU TIME & MONEY

In order to steer clear of these types of fines and citations, preventative practices are the key. A free consultation service—largely funded by OSHA—can be used by employers to find out potential hazards at their worksites and improve their safety and health management systems. By utilizing this service, you could qualify for a one-year exemption from routine OSHA inspections.

This service is delivered by state governments, using well-trained professional staff. The majority of the consultations take place on-site; however, there are services away from the worksite, but they are limited.

The entire process and service is confidential. Your firm's name, a contact name, whatever information you provide about your workplace, and any unsafe or unhealthy work conditions that the consultant uncovers, will NOT be reported routinely to your local OSHA agency.

Your only obligation is to commit yourself to correcting job safety and health hazards—a commitment you are expected to make prior to the actual visit and carry out in a timely manner.

Be Prepared for a Visit from OSHA

By communicating the importance of cooperative compliance with OSHA to all employees, the daunting task of an inspection can run fluently by following these guidelines.

Be Polite, Respectful & Cooperative

- Be sure to always maintain a business-like manner.
- Any attempts to delay or display disrespectful behavior will only provoke the designated inspector.

Verify the Inspector's Credentials

- Official credentials should always be displayed and authorized prior to the inspection.
- Inspections should always be done during normal business hours.
- The inspector will first look to see if there is a functioning and acceptable safety program in place.

- If the visit is a result of a complaint, fatality or referral, the inspector has to first respond to that.

Participate in the Pre-Investigation Conference

- Upon arrival, the designated inspector will explain how the plant was chosen, the purpose of the visit, the scope of the inspection, and the standards that apply.
- During this time, the inspector may choose to view workplace records.

Select a Representative

- Before the inspection begins, choose a company representative who will serve as the chief liaison with the inspector.
- It is a best practice to have this person delegated before an inspection to avoid confusion.

Participate in a Walk-Around

- The inspector will determine the length, route and duration of the inspection.
- The inspector should make every effort possible to minimize workplace interruptions.
- They will also view MSDS and point out any unsafe or unhealthy work conditions.

Take Notes & Pictures

- The inspector will take photos or a video and notes. It is recommended that you also take notes and photos from every angle.

Participate in a Post-Investigation Conference

- The inspector will hold a post-investigation conference, describing the alleged violations and standards that may have been violated.
- During the conference, you should produce any records that show compliance with OSHA standards.
- Any citations or penalties will be received later via certified mail.
- If you receive a violation, it must be posted at or near the site of the violation for three working days or until it is corrected— whichever is longer.
- If you decide to appeal the citation, you have 15 working days after the citation was issued to appeal.

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