



SAFETY ALERT

IOSHA Alert — Machine Guarding

RISK MANAGEMENT & SAFETY

Date: June 2019
Category: Machine Shop Safety
RMS Contact: MB Greendonner, mgreendo@nd.edu

Contact RMS:

Tel: 1-5037

Description

A recent (non-ND) fatality and amputation from the use of inadequately guarded drill presses prompted Indiana OSHA (IOSHA) to send an internal hazard alert to its employees, Voluntary Protection Programs (VPP) Participants and others calling special attention to this topic. Indiana has had 103 amputations during the first five months of this year. The following examples detail the recent events and provide requirements for machine guards and actions to take to prevent such an occurrence at the University.

Drill Press Fatality

- An Indiana employee's glove was caught in the drill press he was using when he reached around the installed guard and made contact with the rotating chuck. This resulted in his hand and body being drawn closer to the drill eventually entangling his hair and scalping him. He died as a result of his injuries.
- The employee was being trained on the equipment when the accident occurred. It was his first day using the machine. The trainer had just walked to the other side of the building when the incident occurred.
- **Photo 1** shows the machine and guard that were in place.

Drill Press Amputation

- A second Hoosier lost a finger due to inadequate guarding and wearing gloves while operating a drill press.
- The guard left a gap between the guard and the work tray allowing him to reach under the guard resulting in his gloved hand becoming caught by the rotating bit.
- **Photo 2** shows the machine and guard that were in place.

Guarding Requirements (see **Photo 3**)

29 CFR 1910.212 (Machinery & Machine Guarding) provides machine guarding guidance, which states that guards shall:

- Protect the operator and other employees from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks.
- Be affixed to the machine where possible.
- Be close enough that a finger cannot get around the guard.

Required Actions

- Inspect all drill presses to ensure adequate guarding is in place. If found lacking, install appropriate guards or contact RMS for assistance.
- Ensure that only trained individuals are permitted to use drill presses and other machines.
- Review and enforce proper shop attire with shop personnel:
 - No gloves, jewelry, or loose, long-sleeve shirts,
 - Tie back hair,
 - Wear appropriate personal protective equipment (e.g. safety glasses).

For additional information on the University's machine guarding and shop safety requirements, please click [here](#).

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Incident Photos

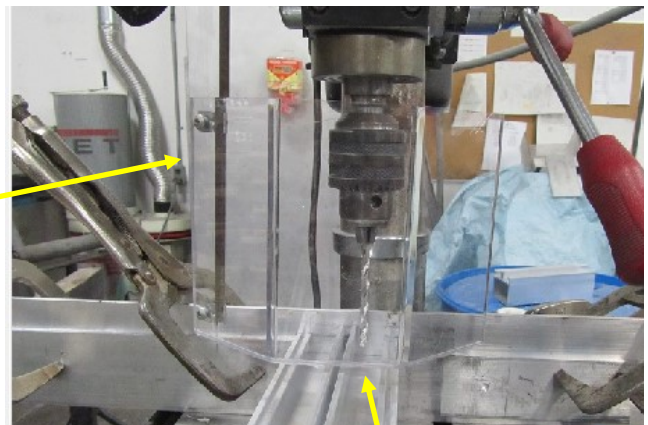
Photo 1:



Exposed rotating part

Can reach around guard

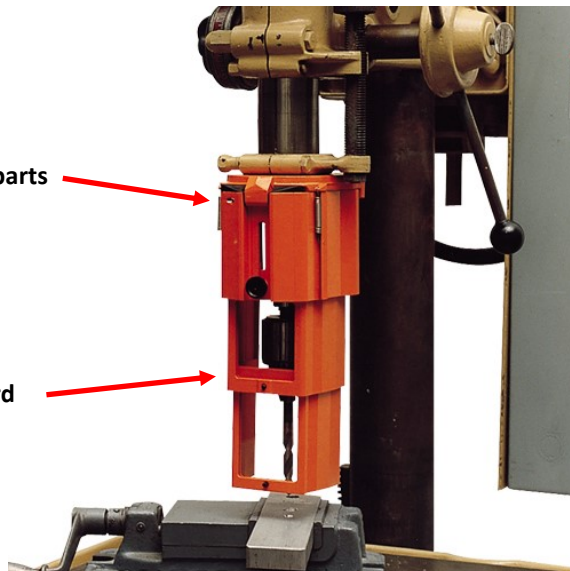
Photo 2:



Can reach around guard

Gap beneath guard and work tray

Photo 3:
Correctly Guarded Drill Press



Fully encases rotating parts

Telescoping guard