

Machine Guarding: Show Your Work Crews

Safety Talk

Instructions: Here's a Handout explaining machine guarding that you can distribute to your workers as part of the general machine safety training you provide to your work crews. Although the Handout deals with a particular type of machine—namely, mechanical power presses— it deals with machine guarding in a general way so that you can use it even if you don't have presses at your own workplace

Is This Machine Safely Guarded?



Do you think it's a good idea for the worker in this picture to be sticking his hand into that machine?

Sticking your hands into a machine is an excellent way to lose your fingers and maybe your whole hand.

The good news is that the machine in this picture, a mechanical power press, has a guard to prevent workers from reaching inside.

The bad news is that the guard obviously isn't narrow enough to keep a worker from reaching in.

So the story of why this photo exists should come as no surprise. A government safety inspector took the photo. And why was he at the worksite? Answer: He was responding to an actual incident in which a worker reached through the guard and into the machine and got his hand chopped off. The sad thing is that the accident wouldn't have happened if the guard had been narrow enough.

What's at Stake?

How Power Press Injuries Happen

Power presses are machines that shear, punch, stamp, form, or assemble metal or other material by means of tools or dies attached to slides. Of course, what works on metal works equally well on human flesh. That's why power presses cause so many workplace amputations and crushing injuries each year. 4 ways you can get mutilated by a power press:

1. You can get caught by the tool and die.
2. You can get trapped by other moving parts of the machine.
3. You can get hit by a metal object launched by the machine after the tool breaks down.
4. Your limbs, clothes, hair, or jewelry can get entangled in the rotating parts of the machine.

How Injuries are Prevented

4 Most Common Machine Guards

The principal method of preventing power press and other machine injuries is to use machine guards, or barriers that block workers' access to the danger areas. There are 4 basic kinds of machine guard:

Guards are physical barriers that block workers' access to the danger area. There are 4 basic kinds of guards:

1. **Fixed guards** that are a permanent part of the machine.



(**Note:** The machine guard in our "Spot the OSHA Violation" quiz above is also a fixed guard; but its openings are too wide to keep a worker from reaching into the guard and making contact with the point of operation).

2. **Adjustable guards** that allow for flexibility in accommodating different sizes of stock fed into the machine.



3. Interlocked guards that automatically shut off or stop the machine when a tripping mechanism is activated and keeping it stopped until the guard is put back in place.



4. Self-adjusting guards in which the size of the opening in the barrier adjusts to accommodate the stock, e.g., enlarges to allow larger stock to enter.

