

Machine Guarding

5-Minute Talk

Overview of topic

The main machine guarding requirements for construction companies are found in Subpart I, Tools, Hand & Power, 1926.300(b)-Guarding. That regulation contains extensive requirements for machine guarding of moving parts of equipment and tools. The requirement to use such guarding, as well as various types of guards and specific machines requiring those guards, are described in this section.

Hazardous moving parts such as belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating, or moving parts of equipment, must be guarded if such parts are exposed.

Guards, as necessary, should be provided to protect the operator and others from:

- Point of operation hazards.
- In-running nip point hazards.
- Rotating parts.
- Flying chips and sparks.

Such safety guards should never be removed when the tool is being used.

For example, portable circular saws must be equipped with guards. An upper guard must cover the entire blade. A retractable lower guard must cover the teeth except when it makes contact with the work material. The lower guard must automatically return to the closed position when the user is done making the cut.

Machine guarding protects employees from the danger of cuts, punctures, and other injuries from moving parts on tools and equipment. Unfortunately, sometimes employees try to bypass or remove guards, believing they are safe without them, or sometimes guards fall off or lose effectiveness. These types of situations are the ones your training can help employees avoid, by teaching them: about the need to keep guards on machines, the specific guards on the machines they work on, and the hazards of bypassing guards.



Employee training

As with many construction regulations, there is no specific call in this section of the regulations for employee training, but the only way to ensure compliance with the regulations is to train employees on:

- The intent of machine guards.
- The need to keep guards on tools and machines.
- The specific types of guards they will encounter on the tools and machines with which they work.

Training tips

Use the demonstration technique for machine guarding training. Choose your best operator of a specific machine if there is a particular point you want to emphasize regarding that machine's guards.

You may want to combine machine guarding training with power tool training. The two topics are a natural fit with each other. They go together because most machine guarding is on power tools and equipment. Machine guarding, and power tool training can easily be combined into one training session.

To create a dramatic effect or to get a serious point across on the dangers of not using or bypassing machine-guarding, use a true story of an accident. An example of the loss of a finger or limb, or other significant accident, can really get the point across about dangers from not using machine guards. If it's an example from your own company or even the site itself, the point can be that much more effective.

Where to go for more information

Construction regulatory text: 29 CFR 1926 Subpart I-Hand & power tools.

Construction regulatory text: 29 CFR 1926.300(b)-Guarding.

General industry regulatory text: 29 CFR Subpart P-Hand and portable powered tools and other hand-held equipment.

