

Army *Safety* Gram

Leading on the Edge for Safety *Excellence*

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Controlling Machine Hazards

Machines make our jobs easier and are responsible for our quality of life. As beneficial as they are, machines are potentially hazardous for a number of reasons. They almost always include moving parts that may accidentally come into contact with a worker's body. Many incorporate other hazards, such as hydraulic and pneumatic systems, electrical circuits, hot exhausts or surfaces and toxic chemicals. When workers come into contact with moving, or otherwise hazardous machine parts, the results can be tragic. It takes only a second for a worker to be killed or maimed.

Controls prevent access to moving parts while they are in motion, prevent parts from moving while the worker is in a danger zone, or contain fragments of particles thrown off by the process or pieces of broken machinery should the machine itself break.



Controls, whether factory-installed or custom, must meet the following criteria:

- ♦ **Protection for everyone in the workplace:** Not only the operator, but all those who pass through the work area must be protected.
- ♦ **Security:** Machine guards should be designed so as to make it difficult for anyone to tamper with them.
- ♦ **No new hazard:** Any guard that presents a new hazard of its own, or interferes with the machine operator, may be counterproductive. Guards that interfere with the operation of a machine are likely to be altered, bypassed or removed.
- ♦ **Training:** Workers must be trained to use guards properly. They must understand the hazard being guarded and know how the guard functions.
- ♦ **Preventive maintenance:** Regular lubrication, repair, and adjustment of both the machine and the safeguarding systems are essential.
- ♦ **Temporary removal:** When a guard is removed for maintenance or adjustment, temporary controls must be used to protect workers from machine hazards. These controls often include lockouts.

Machine guarding and controls are vital to every workplace using machinery. It is an essential for leaders to know when these controls are not in place.

Report any problems

- ♦ Report any problems around machines and guards, like broken or missing parts and guards
- ♦ Loose parts, unusual noise, leaks, or vibration.
- ♦ Strange odors, heat, smoke, dust, fumes.
- ♦ Messy work area and floor, not enough light.
- ♦ Damaged or dirty PPE or PPE that fits badly.
- ♦ Unhealthy reactions, skin rashes, dizziness, hearing problems.



GUARDING is one of the best ways to manage the health and safety risks of a machine. Make sure yours are in place and your workforce knows how to use them!