

KSU Facilities Safety Bulletin

VOLUME 13, ISSUE 8

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Machine Guarding

Methods of Machine Safeguarding

- Barrier guards
- Presence-sensing and physical restraint devices
- Guarding by location/distance
- Feeding and ejection methods
- Miscellaneous aids

August Vivid Courses:

All:
Machine Guarding

Operations:
Hot Work

Machines that are not properly safeguarded can cause serious injury, such as crushed or severed fingers, hands and arms, eye injuries, and even blindness.

If you've ever seen the gruesome result of a complex machinery accident, then you will appreciate the need for machine safeguards. When we talk about safeguards, we're talking about simple devices or methods that make it difficult for workers to injure themselves while working on a machine, like a shield or guard to protect from sparks, or a grate that keeps them away from the churning part of a rotary blade.

Shortcuts around machine safety features are a frequently cited cause for many machine related accidents, occurring when workers decide to forego the normal protocol of working with a safeguard and bypass it altogether, leaving them with considerable risk of harm and injury. Workers should never ignore the engineered controls or safety features of machinery—these devices exist for a reason.

Source: <https://vividlearningsystems.com/courses/osha/machine-guarding>

Hot Work

Purpose. To eliminate or control potential ignition sources resulting from welding, flame cutting, soldering or similar activities which may produce flames or sparks. Provide a safe work/learning environment in University buildings where temporary hot work may be performed. Potential health, safety and property hazards can result from the fumes, gases, sparks, hot metal and radiant energy produced during hot work. These, and other hazards, can be reduced through the implementation of effective controls as outlined in this Policy.

Definitions:

Hot Work: Operations including cutting, welding, Thermit welding, brazing, soldering, grinding, thermal spraying, thawing pipe, installation of torch-applied roof systems or any other similar situation.

Hot Work Area: The area exposed to sparks, hot slag, radiant heat, or convective heat as a result of the hot work.

Hot Work Equipment: Electric or gas welding or cutting equipment used for hot work.

Hot Work Permit: A document issued by the supervisor to the employee performing the Hot Work that outlines the procedure(s) to be followed, dates, and times of the procedure(s).

Responsible Person: A person trained in the safety and fire safety considerations concerned with hot work. Responsible for reviewing the sites prior to issuing permits as part of the hot work permit program and following up as the job progresses.

Qualified Individual: Supervisory personnel, such as welding superintendents, maintenance foremen, plant engineers or master mechanics, who have specific training, knowledge, experience, or are certified as competent to carry out and oversee welding operations.

[See Full Policy](#)