



Machine Guarding Safety Policy

GENERAL

The UNCW Environmental Health & Safety Department (EH&S) is authorized by UNCW Policy 05.600 (http://uncw.edu/policies/documents/05_600_EHandSPolicy_5Feb2010.pdf) (Environmental Health & Safety Policy) to develop and manage comprehensive environmental, health and safety programs. Additionally, they are tasked to identify and address regulatory requirements. In that spirit, this Machine Guarding Policy has been developed to protect employees by ensuring that machines and equipment are guarded from all potentially hazardous activities. This policy is intended to meet the Occupational Safety and Health Requirements for General Industry outlined in 29 CFR 1910.212 (http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9836).

SCOPE

This policy applies to all university employees regardless of status or type of employment. It may be used as minimum guidelines for contractors and/or vendors that are expected to maintain their own safety program.

APPLICATION

This written policy outlines responsibilities, training and specific requirements with regard to Machine Guarding.

RESPONSIBILITIES

Each Department shall be responsible for the implementation of the Machine Guarding procedures. Employees shall have training in understanding the significance of implementing the procedures. Employees will use the Machine Guarding procedures when working on or near machinery or on equipment where there is a danger of injury because of hazards created by points of operation, ingoing nip points, rotating points and flying chips, sparks, etc. Department Supervisors shall be responsible for training record keeping and record retention.

TRAINING

Each department shall provide training so employees understand the purpose and function of the program (knowledge, skills, application, use, etc.)

Retraining:

Retraining shall reestablish proficiency and introduce new or revised control methods

1. There shall be retraining with any change in job assignments, change in machines, equipment or process that presents a new hazard or a change in procedures
2. Retrain when inspection reveals a need, or whenever the employer sees a need
3. Retraining shall be completed no less than every three (3) years

SPECIFIC REQUIREMENTS

There shall be one or more methods of machine guarding provided to protect the operator and other employees in the machine area from hazards. Examples of guarding methods are:

- Barrier guards
- Two-hand tripping devices
- Electronic safety devices

Types of guards:

Fixed guard – provides a barrier between a person and the point of operation, power train or other moving parts. These include fences, gates and protective covers for blades, presses and all moving parts.

Interlocked guard – when opened or removed, disengage the machine's power source. It cannot be restarted until the guard is replaced.

Adjustable guard – provide a barrier that can be adjusted to many different operations, such as varying sizes of stock.

Self-adjusting guard – barriers that move or self-adjust according to the size or position of the workplace. The guard returns to its resting position when no material is passing through.

Affix guards to the machine where possible or secure it elsewhere if for any reason attachment to the machine is not possible. The guard shall be such that it does not offer an accident hazard in itself.

Point of operation is the area on a machine where work is actually performed upon the material being processed. The point of operation of machines whose operation exposes an employee to injury shall be guarded. The guarding device shall conform to any appropriate standards. If no specific standard exists then the design and construction of the guard will prevent the operator from having any part of his body in the danger zone during the operating cycle.

The following are some examples of machines requiring point of operation guarding:

- Guillotine cutters
- Shears
- Alligator shears
- Power presses
- Milling machines

- Power saws
- Jointers
- Portable power tools
- Forming rolls and calendars

Revolving drums, barrels and containers shall be guarded by an enclosure that is interlocked with the drive mechanism so the barrel, drum or container cannot revolve unless the guard enclosure is in place.

When the periphery of the blades of a fan is less than seven feet above the floor or working level, the blades shall be guarded. The guard shall have openings not larger than one-half inch.

Machines designed for a fixed location shall be securely anchored to prevent walking or moving.

Simple Rules to Maximize Worker Safety

1. Always be sure that moving mechanisms are clear of people and objects
2. Ensure that workers are not wearing any jewelry or loose clothing that could get snagged in the machine
3. Keep an eye on overhead moving parts, like pulleys, for potential hazards
4. Check that guards are in place at all points where you could contact moving parts before turning the machine on
5. Be aware of how to turn power on and off if you should have to do so quickly
6. Read the manufacturer's instructions on how to operate the machine safely and correctly
7. Feed material into the machine with push sticks, not your hands
8. Take it easy. Rushing through a job is one of the major causes of accidents
9. Make sure maintenance is performed when required. If you think your equipment might have missed its scheduled maintenance let your supervisor know.