

UNIVERSITY OF WISCONSIN-STEVENSON POINT
MACHINE SAFEGUARDING PROGRAM



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MACHINE SAFEGUARDING

1.0 PURPOSE

The purpose of the Machine Safeguarding Program is to protect the machine operator and other employees in the work area from hazards created during the machine's normal operation and to comply with applicable state SPS 332.33 and federal standards OSHA 29 CFR 1910.212.

2.0 TYPES OF GUARDING

One or more methods of machine guarding should be provided to protect the operator and other employees in the work area from hazards such as those created by

- Point of operation,
- Ingoing nip points,
- Rotating parts,
- Flying chips and sparks.

Examples of guarding methods are-barrier guards, two-hand tripping devices, electronic safety devices, etc.

3.0 GENERAL REQUIREMENTS OF MACHINE SAFEGUARDING

Guards should be affixed to the machine where possible. If for any reason attachment to the machine is not possible, the guard can be secured somewhere else that does not represent an accident hazard in itself.

4.0 POINT OF OPERATION GUARDING

Point of operation is the area on a machine where work is actually performed on the material being processed.

The point of operation of machines that operation exposes an employee to injury should be guarded. The guarding device should meet the standards to prevent the operator from having any part of his body in the danger zone during the operating cycle.

Special hand tools for placing and removing material should permit easy handling of material without the operator placing a hand in the danger zone. Such tools can only be used as additional protection and should not be used instead of other required guarding.

The following are some of the machines that usually require point of operation guarding:

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

- Joints
- Portable power tools
- Forming rolls and calender machines.

5.0 BARRELS, CONTAINERS, AND DRUMS

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

6.0 EXPOSURE OF BLADES

When the periphery of the blades of a fan is less than seven (7) feet above the floor or working level, the blades should be guarded. The guard should have openings no larger than one-half (1/2) inch.

7.0 ANCHORING FIXED MACHINERY

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

8.0 DISCONNECTION FROM SOURCE OF POWER

Every machine should be equipped with a loose pulley, clutch, switch, or other adequate means within reaching distance of the normal operating positions of the operator for disconnecting the machine from the source of power.

Machines that two or more operators work with should be equipped with one or more controls. So, one of these operators can quickly disconnect the machine from the source of power.

9.0 COUNTERWEIGHTS, TENSION, AND SPRINGS

Every counterweight should be enclosed or be equipped with a safety device attached independently of the counterweight support which should prevent the weight from falling to a point of less than 7 feet from the floor or working level.

Every tension weight exposed to contact should be enclosed or securely fastened to the tension bar.

All springs should be guarded or equipped to eliminate any hazard due to breakage of the spring or failure of the mounting.

10.0 GUARDING OF HOT PIPES

All pipes carrying steam or other hot materials within 7 feet of the floor or working platform should be covered with an insulating material, or guarded. So that contact will not cause personal injury.

11.0 PREVENTION OF AUTOMATIC RESTARTING

Machines should be prevented from automatically restarting on the restoration of power if there is a restarting risk of motors after power failures that can cause an injury to the operator. See UW-Stevens Point Lockout/Tagout Policy for more information.

12.0 MAINTENANCE

All equipment, machine tools, guards, and power-driven machinery should be operated and maintained in a safe condition.