

# Machine Safeguarding (General Requirements)

This sample program is intended as a resource for helping employers with developing a program that meets the general requirements for all machines in OSHA Standard 1910.212 of Subpart O. This program is not intended to supersede the requirements of the standard. Each employer will need to adapt this program to more appropriately fit their operations for their program to be complete. Each employer should reference this and the remaining standards in Subpart O for additional information.

#### Safety Program Guide for FFVA Mutual Policyholders

A successful safety program helps company leadership minimize workers' compensation costs and increase profitability.

This Sample Written Program has been developed to assist FFVA Mutual policyholders in:

- Maintaining employee safety and controlling losses in the workplace
- Guiding senior management in establishing safety standards
- Developing an employer integrated safety program

Please customize this accident prevention program according to your workplace. Your written accident prevention program can only be effective if it is put into practice.

Your account's dedicated safety professional is available to assist in the review and implementation of your safety program, offer technical guidance, provide training to meet compliance issues, and assist in locating relevant reference materials.

If you have questions or would like assistance implementing your organization's safety program, contact 800-346-4825 or visit ffvamutual.com/safety for more information.

# **Table of Contents**

Section 1 – Objective	4
Section 2 – Assignment of Responsibility	
Management	5
The Program Administrator	5
Supervisors	5
Employees	5
Section 3 – Guarding vs. Safeguarding	6
Section 4 – Program	7
Section 5 – Guarding	8
Section 6 – Safeguarding	8
Section 7 – Revolving Drums, Barrels or Containers	10
Section 8 – Fans, Flywheels and other Rotating Components	11
Forms	12
Appendix A	13
Appendix B	14
Appendix C	

# Section 1 – Objective

The objective of this procedure is to establish machine safeguarding procedures for powered machinery. The program serves to identify general requirements for all machinery and is not specific to any type of machinery.

## Section 2 - Assignment of Responsibility

#### Management

 Management is responsible to provide the means necessary to ensure machinery is adequately safe guarded.

### **The Program Administrator**

- The Program Administrator will be responsible for implementing the machine safeguarding program.
- The Program Administrator is responsible for evaluating machinery within the facility and developing additional, machine-specific programs that are not covered under this program.
- The Program Administrator is responsible for monitoring the compliance of this program and will conduct periodic audits to ensure compliance with the program.

#### **Supervisors**

• Supervisors are responsible for enforcing the program and insuring compliance with the procedures in their departments.

#### **Employees**

- Employees are responsible for knowing the safeguarding requirements of the machinery they operate.
- Employees are responsible to ensure safeguarding means are in place before operating machinery.
- Employees are responsible not to bypass machine safeguarding.
- Employees are responsible to report to their supervisor when safeguarding means have been removed for maintenance and not put back into place before operating the machinery.

## Section 3 – Guarding vs. Safeguarding

For the purposes of this program, guarding is defined as the use of a device that prevents physical access to the exposure area of the machine, as described in Section 4. Examples include expanded mesh, adjustable tubular barriers, Plexiglas or other barriers.

For the purposes of this program, safeguarding is defined as the use of an electronic or other device that does not prevent physical access to the exposure area, but when properly used by the operator will keep the operator from accessing the exposure area of the machine as described in Section IV. Examples include two-hand controls, electronic presence sensors, pull-back devices and restraint devices.

Where guarding can be implemented, this is the preferred method to use over safeguarding.

## Section 4 – Program

This program focuses on general requirements. Where needed, machine-specific requirements will be developed and implemented.

Machinery used in this facility will be safe guarded so employees are not exposed to:

- Flying Chips
- In-Running Nip Points
- Points of Operation
- Rotating Parts
- Sparks

Guards and Safe Guards will be secured to the machinery wherever possible. Where the safe guard cannot be secured to the machine, or where having the safe guard not secured to the machine enhances operator performance, the safe guard will be secured elsewhere as long as Employee safety is not compromised.

Guards and Safe Guards that must be removed for maintenance or machine setup will be attached to an interlocking device that will prevent the machine from operating when the safe guard is removed.

Machinery that requires a bypass of the interlocking device in order to facilitate service setup will be identified in **Appendix A** of this program. Only qualified employees who have been trained on properly and safely performing the service and setup operations will be permitted to perform this function.

Interlocking devices will be tested periodically, the frequency of which depends on the application of the interlocking device. Where the interlocking device is attached to an opening gate or other device that allows employees access to the machine as part of the routine tasks, the interlock will be tested at the beginning of each shift.

Where the interlocking device is attached to a fixed Guard not intended to be removed except for service and maintenance, the interlocking device will be tested whenever the fixed Guard is removed for service or maintenance, and will be tested only by the employee qualified to perform the service or maintenance.

Hands-in-die feeding is the least preferred method for machine operating. Where employees must place parts into the machines using their hands, they will use a hand-held tool to place the part. These tools can include magnetic tools, suction tools or tongs. We will as much as possible, eliminate hands-in-die feeding.

## Section 5 - Guarding

Guarding is the preferred method to protect employees from the hazards outlined in Section IV. Guarding is not electronic and when properly installed is not subject to periodic testing to ensure it is functioning properly.

Where used, Guarding will be installed to prevent access to the exposure area of the machine. It must be installed so employees cannot reach over, under, through or around the Guard at any time during operation of the machine.

Except for Plexiglas and other clear guarding devices, Guarding will be painted a bright color to alert the operator of the presence of the guard. Where employees must look through Guarding into the point of operation, it will be painted a flat black to eliminate the contrast the can cause eye strain. The frame around this flat black area will remain brightly colored.

Guarding is required to be attached to the machine via an interlocking device as described in Section 4.

## Section 6 - Safeguarding

Safeguarding does not keep the employees hands out of the machine, but when properly installed and adjusted, prevents their hands from being in the machine during the functioning of the machine. Safeguarding is used only where Guarding cannot be used or where Guarding prohibits production on the machine.

Safe Guards will be properly installed in accordance with manufacturer's instructions. Installation of Safe Guards must prohibit accidental operation of the machine if the Safe Guard has been tripped or activated, and must have a reset function before the machine can operate.

Safe Guards will be properly setup and adjusted. Except as indicated in this section for restraint and pullback devices, Safe Guards will be tested at the beginning of each shift for proper function.

If at any time the Employee becomes aware of an issue with the Safeguard that prohibits safe operation of the machine, he will report the issue to his Supervisor.

Restraint devices, when properly adjusted, restrict employees' ability to access the exposure area. Where restraint devices are used, they will be inspected before each shift, and any defective parts repaired or replaced.

Where restraint devices are used, they will be adjusted by the machine operator before the beginning of the shift and/or before initial machine operation. The proper adjustment of the restraint device will be checked during the employee's shift whenever the employee leaves the machine for any reason and before operating the machine. The proper adjustment will be documented by the employee on the log located on the machine. (See Appendix B)

Pullback devices, when properly adjusted, do not restrict employees' ability to access the exposure area. They instead pull the employees' hands from the exposure area during the cycling of the machine.

Where pullback devices are used, they will be inspected before each shift, and any defective parts repaired or replaced.

Where pullback devices are used, they will be adjusted by the machine operator before the beginning of the shift and/or before initial machine operation. The proper adjustment of the pullback device will be checked during the employee's shift whenever the employee leaves the machine for any reason. The proper adjustment of the pullback device will be checked upon return to the machine and before operating the machine. The proper adjustment will be documented by the employee on the log located on the machine. (Appendix B)

## Section 7 – Revolving Drums, Barrels or Containers

Where possible, revolving drums, barrels or other revolving containers will be Guarded using fixed guarding.

Where the Employee must access the revolving container, a gate equipped with an interlocking device to prevent activation of the machine while accessing the container will be used.

# Section 8 – Fans, Flywheels and other Rotating Components

Where exposure to fan blades, flywheels and other rotating or moving components located with seven (7) feet of a walking surface exist, Guards will be installed to prevent accidental contact.

# **Forms**

Appendix A

Appendix B

Appendix C

# Appendix A

List of Machinery that Requires Safe Guard Interlock Bypass for Service and Setup

DEPARTMENT	MACHINE	COMMENTS

# Appendix B

Restraint / Pullback Device Daily Adjustment Log

#### LOG DATE:

EMPLOYEE	DEPT	MACHINE	TIME ADJUSTMENT CHECKED	COMMENTS

# Appendix C

Pre-shift Test of Electronic Safe Guard Devices Log

#### LOG DATE:

EMPLOYEE / SHIFT	DEPT	MACHINE	SAFE GUARD DEVICE	COMMENTS