

(15) Machine Guarding

(15.1) Overview

At [Company Name], our priority is the safety of our employees. In our operations, we use various machines, some of which can pose potential hazards if not properly guarded. The hazards include ingoing nip points, rotating parts, flying chips, and sparks. To safeguard against these hazards, we have this comprehensive machine guarding policy.

- **Risk Identification & Assessment**

We have a commitment to regularly assess the machinery used within our facilities to identify potential risks. Our assessment process involves a complete analysis of the moving parts, the potential for contact, tasks the machine is used for, the methods of operation, and potential maintenance needs. This assessment allows us to determine the type of guard required, whether fixed, interlocked, or adjustable, to mitigate the identified risks.

- **Machine Guarding Basics**

Our machine guarding policy aligns with the OSHA standards, requiring the guards to prevent any part of a worker's body from accessing the machine's danger zone during operation. All guards are securely attached and maintained in good condition. They do not have sharp edges or protrusions and are free from cracks or wear.

(15.2) Types of Guards

- **Fixed Guards**

Fixed guards are permanent or semi-permanent parts of the machine that don't move. They provide a physical barrier between the operator and the machine's moving parts. These guards are typically made of material such as metal or hard plastic. They're most effective when there's no need for regular adjustment or interaction with the machine. For example, a metal casing surrounding the belt of a conveyor system could be a fixed guard.

These guards require little maintenance and remain a constant safety feature on the machine. However, if a machine requires frequent maintenance or adjustment, a fixed guard may not be the most practical solution, as it can be time-consuming to remove and reinstall.

- **Interlocked Guards**

Interlocked guards are designed to automatically shut off or disengage the machine when the guard is opened or removed. This provides an immediate safety response. They're ideal for machines that require regular access but still pose significant safety risks.

Interlocked guards can be connected to the power control system of the machine so that the power is cut off when the guard is moved. This can be particularly useful for machines that are hazardous when in motion, but also regularly be

accessed for maintenance or to clear jams. One potential drawback is that these guards can be more complex and require more maintenance than simpler guard types.

- **Adjustable Guards**

These guards can be manually adjusted to accommodate different sizes of material, or to allow closer proximity to the danger zone for certain tasks. They provide a barrier that can be adjusted according to the specific operations being carried out. They are used on machines that require frequent adjustments or changeovers.

Adjustable guards offer flexibility and can be particularly useful on machines that process different sizes of material or perform varied tasks. However, care must be taken to ensure that the guard is always correctly adjusted. Workers should be trained on how to properly adjust these guards, and it should be stressed that the guard should only be adjusted when the machine is off and cannot be unexpectedly started.

The type of guard selected must be suitable for the specific machinery and tasks performed. Depending on the complexity and functions of your machine, a combination of these guard types may be needed to provide optimal protection. Also, it's crucial to educate and train workers about the importance of machine guards and to follow all safety guidelines.

(15.3) Training and Education

We offer comprehensive training programs to all workers that cover machine guard safety. The training includes understanding the importance and purpose of guards, the correct way to use them, and the protocols to follow if a guard is missing or damaged. Refresher courses are regularly conducted to ensure our workers stay updated on the latest safety procedures.

- **Regular Inspections and Maintenance**

Routine inspections are carried out to ensure all guards are intact and functional. Any identified issues are logged and addressed immediately. Maintenance and repair protocols are in place to ensure that any damaged guard is repaired or replaced promptly.

- **Emergency Procedures**

We have developed clear emergency procedures that include knowledge of emergency stop mechanisms. In case of a machine malfunction or an emergency, workers are trained to quickly and safely shut down the machine.

- **Employee Responsibility**

Employees play a vital role in maintaining a safe workspace. They are responsible for reporting any issues related to machine guards to their supervisors immediately. They are also reminded that they should never operate a machine without its guards properly in place.

By strictly adhering to these guidelines, we aim to maintain a safe working environment at [Company Name].