Environmental Health and Safety Machine Guarding - Guidance Document



Purpose

The purpose of the machine guarding policy is to keep employees protected from hazards such as exposed belts, pulleys, sheaves, drive shafts, drive couplings, chains, rotating parts, flying chips, and sparks.

Operating machinery can pose numerous hazards to employees. It is imperative that machines are properly guarded in order to reduce the risk to the operator and nearby employees.

Applicability

No employee shall:

- Operate any machinery without proper protective guards in place;
- Allow any machinery to be operated without proper protective guards in place; or
- Modify/disable any protective guards on machinery without first contacting Environmental Health and Safety for approval or implementing the Lockout/Tagout program.

Guards shall be affixed to the machine where possible, and secured elsewhere if for any reason attachment to the machine is not possible, to prevent access to the hazard from all accessible directions including front, top, bottom, and back side.

Requirements for Safeguards

Prevent contact: The safeguard shall prevent hands, arms, and any other part of a worker's body from making contact with dangerous moving parts. An effective safeguarding system eliminates the possibility of the operator or another worker placing parts of their bodies near hazardous moving parts.

Secure: Workers should not be able to easily remove or tamper with the safeguard. Guards and safety devices shall be made of durable material that will withstand the conditions of normal use. Guards shall be affixed to the machine where possible and secured elsewhere if for any reason attachment to the machine is not possible.

Protect from falling objects: The safeguard shall ensure that no objects can fall into moving parts. A small tool which is dropped into a cycling machine could easily become a projectile that could strike and injure someone.

Create no new hazards: A safeguard defeats its own purpose if it creates a hazard of its own such as a shear point, jagged edge, or an unfinished surface which could cause a laceration. The edges of guards, for instance, should be rolled or bolted in such a way that they eliminate sharp edges.

Create no interference: Any safeguard which impedes a worker from performing the job quickly and comfortably might soon be overridden or disregarded. Proper safeguarding can actually enhance efficiency since it can relieve the worker's apprehensions about injury.

Allow safe lubrication: If possible, one should be able to lubricate the machine without removing the safeguards. Locating oil reservoirs outside the guard, with a line leading to the lubrication point, will reduce the need for the operator or maintenance worker to enter the hazardous area.

Additional Information	
Protective Clothing and PPE	Training
Other personal protective equipment may be necessary and shall be worn in accord- ance with the <u>Personal Protective Equip-</u> <u>ment</u> policy.	 Supervisors shall facilitate operator training involving instruction or hands-on training in the following: Description and identification of the hazards associated with particular machines; The safeguards on the particular machines including, but not limited to: how they provide protection, the hazards for which they are intended, and how to use them; What to do (e.g., contact the supervisor) if a safeguard is damaged, missing, or unable to provide adequate protection. This training shall be provided to all new operators and maintenance or setup personnel, when any new or altered safeguards are put in service, or when workers are assigned to a new machine or operation.