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"For Safety's Sake - Do Something"

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Machine Guarding

The world of safety compliance should not be confusing. Rules are in place to maintain a safe workplace. This week we are going to look at machine guarding. The OSHA standard is **1910 Subpart O Machinery and Machine Guarding**. Moving machine parts have the potential to cause severe workplace injuries, such as crushed fingers or hands, amputations or burns. Safeguards are essential for protection from these preventable injuries. These types of injuries typically occur due to lack of machine guarding or failure to control the hazardous energy utilizing lock out tag out. There are mechanical motions that must be guarded which include pinch points, rotation, reciprocating, traversing, cutting, punching, shearing, and bending.



Hazardous machine fundamental areas can be broken down into three points.

- *Point of Operation* - The point on the machine where the work is performed on the material.
- *Power Transmission Apparatus* - All components of the mechanical system which transmit energy to the part of the machine performing the work.

- *Other moving parts*: All parts of the machine that move while the machine is working.

Machine guarding requirements.

Safeguards must be installed and maintained so that they meet these minimum general requirements:

- *Prevent contact*: A good safeguarding system eliminates the possibility of the operator or another worker from placing parts of their bodies near the hazardous moving parts.
- *Secure*: Operators should not be able to easily remove or tamper with the safeguard.
- *Protect from falling objects*: The guard should ensure that no objects can fall into moving parts.
- *Create no interference*: Any guard that impedes an operator from performing the job quickly and comfortably might soon be disregarded.
- *Allow safe lubrication*: Operators should be able to lubricate the machine without removing the guards.

Types of guards.

- *Fixed guard*: this guard is most preferable because it is easy to use and difficult to remove because it is a permanent part of the machine.
- *Interlocking guard*: Automatically shuts off or disengages the machine if the guard is opened or removed.
- *Self-adjusting guard*: Allows the barrier to open and close depending on the size and movement of the material.
- *Adjustable guard*: Relies on the individual to adjust the guard properly.

Machine related injuries.

These types of injuries can be minimized by doing the following:

- Inspecting the machinery before operation.
- Operate the machinery according to the manufacturer's instructions.
- Utilizing proper PPE.
- Following all lock out tag out procedures.

