MACHINE GUARDING TERMINOLOGY

Basic Terminology:

Parts of the Machine Requiring Guarding
- Point of Operation: Area where machine performs work on material
- Power Transmission Apparatus: Belts, gears, flywheels, chains, pulleys, spindles, couplings, cams, machine components that transmit energy.
- Other Moving Parts: Reciprocating, rotating, traversing motions, auxiliary machine parts.

Types of Mechanical Motion that Must be Guarded:
- Pinch Points: Points at which it is possible to be caught between moving parts, or between moving and stationary parts of a piece of equipment
- Rotating: Circular motion of shafts with a protrusion sticking out can grip clothing or pull body part into point of operation
- Reciprocating: Back-and-forth or Up-and-Down motion that may trap/strike an employee between the moving object and a fixed object.
- Traversing: Movement in straight, continuous line that may strike or catch an employee in a pinch or shear point between a moving and fixed object.
- Cutting: Action of sawing, boring, drilling, milling, slicing
- Punching: Action resulting when a machine moves a slide (ram) to stamp a sheet of metal or other material.
- Shearing: Movement of a powered slide or knife during metal trimming or paper cutting
- Bending: Action occurring when power is applied to a slide to draw or form metal or other materials

Common Machines That Require Machine Guards:

<table>
<thead>
<tr>
<th>Table Saw</th>
<th>Reciprocating Saw</th>
<th>Band Saw</th>
<th>Jointer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Feed Planer</td>
<td>Shaper</td>
<td>Lathe</td>
<td>Sander</td>
</tr>
<tr>
<td>Drill Press</td>
<td>Grinding Wheels</td>
<td>Mechanical Power Press</td>
<td>Mortising Machine</td>
</tr>
</tbody>
</table>

Group Discussion Topics:
- Identify the machines in your shop or that you use that require machine guarding.
- How could someone be injured by using these machines? How can this be prevented?
- Inspect your machines to ensure the guards are correctly positioned, intact and in place. Contact EHSEM if you need further assistance.