Persimmon | Health, Safety & Environment Department

TOOLBOX TALK

Topic	MACHINE GUARDING	Ref	HSMS TBT
Audience	Site Operatives, Contractors	Presenter	GHSEA, Production Managers & Deputies

Subject

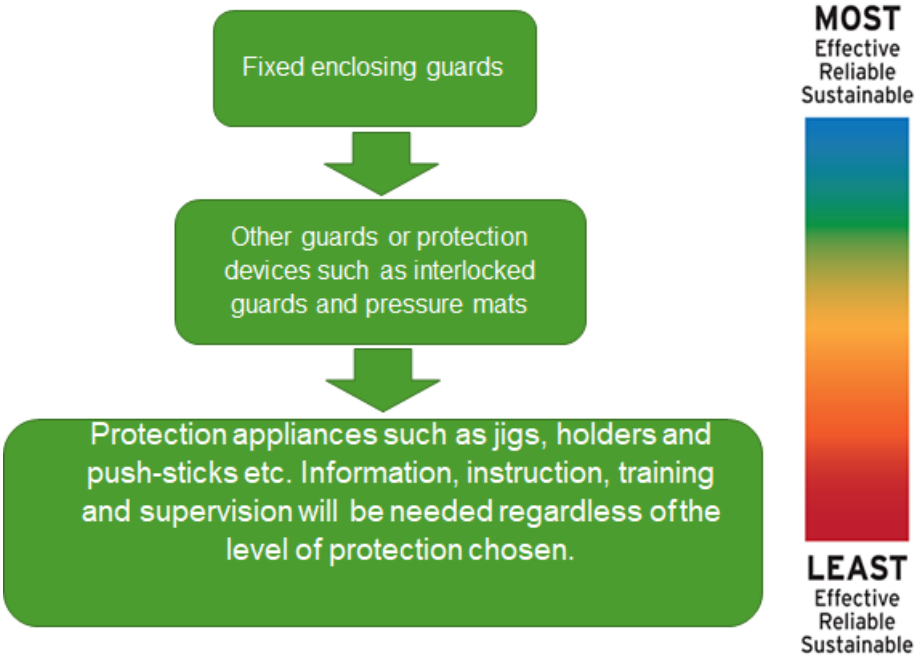
- **Why is Machine Guarding Important?**

In the UK, an estimated one in four workplace injuries and eight out of ten workplace fatalities involve mechanical equipment.

Employees who use machinery are exposed to risks during operation, adjustment, maintenance and lubrication of machinery and all risks need to be eliminated as far as are possible. In order to prevent injuries and fatalities, securely fitted and installed machine guarding is used to guard against dangerous and moving parts of machinery.

- **Hierarchy of Machine Guarding**

The legal requirement for adequate guarding of machinery comes from the **Provision and Use of Work Equipment Regulations (PUWER)**. The requirement for machine guarding must follow the hierarchy below;



- **Key Rules**

✓ **The first rule of working with machines, equipment or tools is to check that the guards are in place (pre use inspection)**

✗ **You must never tamper with or remove a guard (without authority)**

✓ **If a machine guard is removed then adequate isolation of energy MUST be in place (LOTO/LOTOTO)**

TOOLBOX TALK

• Types of Machine Guarding

1. *FIXED GUARD*

A fixed guard is a permanent part of a machine that protects by a physical barrier to the hazard. It is not dependent on moving parts to function. Examples of this type of guard include a barrier, cover or safety fence. Fixed guards make it more difficult to physically access the machine, making it the preferred type of guard.. When it comes to maintenance or repair of the machine, the guard often has to be removed. A fixed guard must NEVER be removed unless authorised.

2. *INTERLOCKED GUARDS*

An interlocked guard may use electrical, hydraulic, mechanical or pneumatic power, and once opened (or removed) all power is automatically shut off and the moving parts of the machine are stopped. The machine can't be restarted until the guard is back in place. Examples of interlocked guards include gates, fences, and protective covers for presses, blades and moving parts. These guards may be easy to disengage, which is great for removing jams as it's not as time-consuming as removing a fixed guard would be.

3. *ADJUSTABLE or SELF ADJUSTING GUARDS*

An **adjustable guard**, like a fixed guard, is a permanent part of the machine and may be depende nt on moving parts to function. The barrier allows flexibility and may be adjusted to suit many different operations (including varying sizes or specific applications). One major concern with an adjustable guard is that the operator's hand can enter the dangerous area with moving parts and may not be protected when the guard is not locked or adjusted properly.

A **self-adjusting guard** creates a barrier between the operator and the danger zone, only allowing enough room for the material passing through to enter the danger zone, returning to the rest position once the material is through.

• Maintenance

The machine guards are there for protection while the machine is in operation. Lockout/tagout (LOTO or LOTOTO) procedures, meanwhile, are the actions you take when the machine needs to be serviced or repaired. BEFORE a guard is removed or disengaged suitable isolation of ALL energy sources MUST be made.

NB Interlocks should NEVER be used as an isolation during maintenance activities!

IF IN ANY DOUBT ABOUT MACHINE GUARDING

- **DO NOT PROCEED**
- **ASK!**