Machinery Guarding Requirements: A Practical PUWER Compliance Guide

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The Risk from Machinery

Contact with moving machinery remains a significant cause of serious workplace injury in the UK. Workers are struck by moving parts, drawn into rotating equipment, or trapped between

components, and these incidents frequently result in amputations, crush injuries and fatalities. Hands and fingers are the parts of the body most at risk, because they are so often closest to the point of operation.

Most machinery injuries are preventable. They happen because a guard was missing, removed, bypassed or poorly designed, or because someone was allowed near moving parts without an adequate safe system of work. This article sets out what the law actually requires, what a compliant arrangement looks like day to day, and where guarding regimes commonly fail.

Legal Requirements

The Provision and Use of Work Equipment Regulations 1998 (PUWER) place duties on employers, and on anyone else who has control over how work equipment is used, to ensure it is suitable for its intended purpose, properly maintained, and used only by people who have received adequate information, instruction and training. This applies to all machinery regardless of age, and whether it is owned, leased or hired.

Regulation 11 of PUWER sets out a clear hierarchy for dealing with access to dangerous parts of machinery. Where practicable, employers must first provide fixed guards enclosing every dangerous part. Where that is not practicable, other guards or protection devices must be used. Where that is not practicable either, protection appliances such as jigs, holders or push sticks come next. Information, instruction, training and supervision are needed alongside whichever measure applies, but they are not a substitute for the physical measures above. Too many businesses rely on them alone because it is cheaper or faster, when an engineering solution higher up the list was genuinely achievable.

New machinery placed on the market must also meet the requirements of the Supply of Machinery (Safety) Regulations 2008, which implement essential health and safety requirements and require UKCA or CE marking and a declaration of conformity. The Management of Health and Safety at Work Regulations 1999 underpin all of this by requiring a suitable and sufficient risk assessment covering every machine and process in use.

Types of Machinery Guards and Protective Devices

Different machines and processes call for different guarding solutions, and the right choice depends on how often access to the danger zone is needed:

- **Fixed guards:** barriers held in place by fasteners that need a tool to remove. These offer the strongest protection and are the correct choice where routine access to the danger zone is not required.
- **Interlocked guards:** linked to the machine controls so opening the guard stops the machine, and the machine cannot restart until the guard is closed and reset. Essential on equipment that needs regular opening, such as for loading, unloading or clearing jams.
- **Adjustable guards:** can be repositioned to suit different workpiece sizes while still restricting access, commonly seen on bandsaws and pillar drills.

- **Self-adjusting guards:** move automatically to admit material and return to the protective position afterwards, typical on circular saws.

Guards must be robust enough to withstand the environment they are used in, securely fixed (fixed guards should need a tool to remove), and designed so they do not themselves create new hazards such as trapping points or restricted visibility.

Where a fixed or interlocked guard genuinely cannot be fitted, other protective devices may be appropriate. Photoelectric safety curtains and light guards stop the machine if a hand or arm breaks the beam near the danger zone. Pressure sensitive mats stop the machine if someone steps into a restricted area. Two-hand control devices require both of an operator's hands to be on separate controls simultaneously, keeping them away from the point of operation, and are common on presses and guillotines. Trip devices and emergency stops provide a final means of halting a machine quickly, but they are a backup, not a substitute for guarding, since the operator can still be injured before the machine fully stops.

Risk assessments are often weakest on older equipment that has been modified or repurposed without anyone reassessing the guarding. A structured review as part of a wider health and safety audit will often pick up gaps that have been missed during routine day to day checks.

Maintenance, Isolation and Safe Systems of Work

Many serious machinery injuries happen during maintenance, cleaning, clearing blockages or fault finding, precisely when guards have been removed or interlocks bypassed. You need documented safe systems of work for these activities, including isolation procedures (lock out, tag out), permits to work where the risk warrants it, and clear rules on who may remove a guard and under what conditions.

Guards should never be permanently removed, propped open or defeated with tape or magnets, however inconvenient they are. If a guard genuinely makes a job difficult or slow, that is a signal to redesign the task or the guard, not to remove protection. Responsibility for maintaining safe systems of work sits with the employer and, day to day, with supervisors and maintenance leads who sign off isolation and permit procedures. This applies as much in manufacturing and engineering workshops as it does on conveyor and sortation lines in warehousing and logistics operations.

Training, Competence and Review

PUWER requires everyone who operates or maintains machinery to have adequate training covering the hazards involved, correct use of guards and protective devices, and what to do if a guard is damaged, missing or not functioning correctly. Training should be refreshed when equipment changes, when a near miss or incident reveals a gap, and periodically even where nothing has changed, since habits and shortcuts tend to creep in over time.

Managers and supervisors responsible for signing off safe systems of work benefit from structured training in risk assessment and control, and Integral Safety, as an IOSH approved training provider,

runs the IOSH Managing Safely course for people in these roles. It will not teach someone to guard a specific machine, but it does build the competence to recognise where guarding arrangements, permits and supervision are falling short.

Inspection and Record Keeping

Guards and protective devices should be checked regularly, ideally as part of a documented pre-use or periodic inspection regime, looking for damage, wear, missing fixings, defeated interlocks and signs of tampering. Where PUWER's inspection requirements apply, usually because deterioration could result in a dangerous situation, inspections must be carried out by a competent person at suitable intervals and after any event likely to have affected the equipment, such as a significant repair.

Keep records of inspections, maintenance, repairs and any defects found and rectified, and as good practice hold on to them for the working life of the equipment. These records matter not just for compliance but as evidence that a sensible system was in place if something ever goes wrong, which is also the point at which a formal accident investigation would look closely at guarding history and maintenance records.

Getting Independent Assurance

Guarding failures are rarely deliberate; they build up gradually through modification, wear and small compromises that nobody quite notices until an inspection or an incident brings them to light. An independent review through health and safety consultancy or a site audit is often the quickest way to find out where your arrangements genuinely stand against PUWER.

Integral Safety supports manufacturing, engineering, warehousing and logistics businesses across Coalville, Leicester and the wider East Midlands with machinery risk assessments, PUWER audits and safe system of work development. If you would like an independent view of your guarding arrangements, talk to our health and safety consultants in Coalville to arrange a visit.

Talk to Integral Safety Ltd

We are health and safety consultants based in Coalville, Leicestershire, working with businesses across the East Midlands. If anything in this guide applies to your workplace, we can help.

Phone	01530 382 150 or 01664 400 450
Email	info@integralsafetyltd.co.uk
Website	integralsafetyltd.co.uk

This guide is general information about UK health and safety law and practice, correct as at 11 November 2026. It is not

advice on your particular circumstances. The latest version is at https://integralsafetyltd.co.uk/blog/machinery-safety-guarding-requirements-and-best-practice.