

Challenge of the guard

From the number of prosecutions taken out against companies in the last 10 years it is obvious the message on machine safety isn't getting through. Particularly the changes brought in by the updated 2009 Machinery Safety Directive which introduced a range of new requirements for guards writes Phil Pinnington

It might sound like the infamous 'common sense' to say that guards play a vital role in ensuring that machines are safe to operate, but they are often treated surprisingly casually. Improper use is the cause of many severe injuries that could have been prevented.

During a recent visit to a fabricator I was encouraged to see that they had taken steps to include new technology in their lines to avoid injuries to employees, both operators and mechanics. The use of laser beam technology that switches machinery off if the beam is broken is a high tech solution but secondary physical lock outs are still the protection of choice.

To try to tackle this problem for the whole industry is a challenge it is true but, as ever that isn't one that we should shy away from.

With most employers, there is no malicious intent on their part; they are simply unaware of what they are required to do, and that the legislation has changed. So what are those requirements, what should businesses expect from their machinery suppliers, and how can guard safety best be tackled in the workplace?

The Machinery Directive applies predominately to those supplying a machine in the European Union. To carry a CE marking a product must comply with all applicable EU standards, many of which apply specifically to guards. A few examples are:

- EN 953: *Safety of Machinery – Guards – General Requirements*
- EN ISO 13857: *Safety of Machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs*
- EN 349: *Safety of Machinery – Minimum gaps to avoid crushing of parts of the human body*

So for those who are tasked with managing workplace safety, what are the essentials? The changes that are of particular interest are those concerning machines' essential health and safety requirements (EHSRs). These cover aspects such as guarding and other safety features that manufacturers must build into their machines before they can carry the CE marking that shows they conform to EU requirements.

A specific requirement in the directive is that all fixed guards must be removable only with the aid of tools. This means that ordinary machine screws and bolts should no longer be used as a means of attaching guards unless provision is made for the screws or bolts to be held captive when the guard is removed.

Guards must also now protect against the ejection of falling materials and objects. For example, if a grinding wheel explodes, can the guarding contain that explosion?

While a raft of standards underpin the directive, the most relevant to guarding is BS EN 1088: *Safety of machinery – Interlocking devices associated with guards – Principles for design and selection*. Interlocks prevent a user from making unsafe actions. For example, a guard may be interlocked to prevent machine operation when a guard is



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removed. This is an important point. As employers you must consider all the ways employees or sub-contractors could bypass these interlocks and address them.

It is a sad reality that many accidents with machinery in the factory have in some part a lack of commitment to the safety of the worker, either through poor guarding or poor practice and it is the responsibility of the employer to work to both manage the physical control as well as embedding a safety culture within their business.

Conclusion

Although the requirements of the Machinery Safety Directive may seem daunting they must nevertheless be complied with by businesses that use machinery. The HSE is obviously more than willing to prosecute firms whose failure to comply results in an employee being severely injured. Many duty-holders use the excuse that they are not the manufacturers of machinery and therefore must rely on their suppliers knowing what they are doing.

However, ignorance is no defence and failing to comply with the Machinery Safety Directive and/or the Provision of Work Equipment Regulations 1998 (PUWER), whether knowingly or unknowingly, can have serious and far-reaching consequences for both employers and their employees.

GGF members can get advice on health and safety issues by contacting the federation's health and safety team. □

The GGF's health and safety committee meets quarterly to discuss key issues affecting the industry. If you are interested in finding out more about the GGF and its health and safety function, please email info@ggf.org.uk