

Management Responsibility:

Ignorance of the law is no defence !

It is the duty of management to ensure a safe working environment for their employees and that the equipment complies with the **Machinery Directive EN ISO 4414 (ISO 4414 outside Europe)** or “**PUWER**” (the Provision and Use of Work Equipment Regulations)

Meeting the latest safety standards in pneumatic applications

Compressed air is used virtually everywhere, and is now a significant source of energy as well as a significant cost item for most enterprises. Using compressed air in a planned and intelligent fashion will ensure its efficiency and limit costs associated with compressed air production and distribution.

BUT ! DON'T UNDERESTIMATE THE DANGER IF NOT USED PROBABLY !!

Increased awareness of the need to ensure the health and safety of the users of pneumatic equipment has led to unprecedented levels of industry regulation. For example, the Corporate Manslaughter Act is now in force, placing even greater responsibility with business owners to ensure the safety of their employees. The repercussions are serious, potentially including heavy fines, damaging publicity and even the possibility of criminal charges for managers.

Likewise, as of 2009, ISO 4414 will integrate EN 983 and safety standard 2006/42/EC, as well as additional standards for machine safety, to become EN ISO 4414 (ISO 4414 outside of Europe). This will become the primary standard for workplace safety, requiring stringent measures to be taken to increase the safety of pneumatic applications.

Achieving a thorough understanding the new regulations and guidelines can be difficult and time consuming. The list below offers a starting point for those people responsible for ensuring the proper health & safety practices are implemented and adhered to throughout their organisation.

The new standards :

- **The Corporate Manslaughter Act**

The Corporate Manslaughter and Corporate Homicide Act (CMA) is now in force. The act requires business owners to ensure their employees work in compliance with the relevant health & safety standards, for example, by providing them with the necessary training and equipment.

As a result there is now the potential for serious penalties if, following a death in the workplace, the business is found by a jury to have behaved negligently. **These penalties can include:**

- **finances of up to 10% of the average annual turnover of the business.** This is a considerably bigger proportion than has typically been applied previously.
- **publicity orders**, which can be used to force a business to publicise its misconduct by posting information on its website, writing to shareholders and placing advertisements in the media. The repercussion of this can be even more devastating for a business than a heavy fine, impacting the share price and the potential for attracting new business.
- **Individual punishment:** company managers or directors being punished individually, with, for example, prosecution, a fine or even a prison sentence.

With such potentially damaging consequences to incidents of negligence, the CMA has made it vital for businesses to consider to health & safety at the highest level, regardless of the size of a business.

- **The Provision and Use of Work Equipment Regulations 1998 (PUWER)**

The Provision and Use of Work Equipment Regulations 1998 (PUWER) came into force in December 1998. PUWER states that employees must be provided with a safe working environment and equipment that is:

- suitable for use, and for the purpose and condition in which it is used.
- maintained in a safe condition for use so that people's health and safety is not at risk.
- inspected in certain circumstances to ensure that it is, and continues to be, safe for use.

Management should also ensure that risks created by the use of the equipment are eliminated where possible or controlled by taking appropriate hardware measures.

- **EN ISO 4414 / ISO 4414**

In 2009, ISO 4414 will become EN ISO 4414 (ISO 4414 outside of Europe), replacing both EN 983:1996 and BS ISO 4414:1998 as the primary safety standard for pneumatic applications.

The changes will include a number of important refinements and revisions to increase operator safety still further. Perhaps most pertinent to the managers and operators of applications using compressed air is the section on the failure of hose assemblies and plastic piping (EN ISO 4414 §5.4.5.11.1 / ISO 4414 §5.4.5.11.1). The proposed revision states that when the failure presents a whiplash hazard, it must be restrained or shielded, **and/or incorporate an air fuse**. This additional recommendation of the use of air fuses to ensure the safety of pneumatic applications is the result of considerable advances in air fuse technology in recent years.

Regulations OSHA & MSHA (USA):

Standards – 29 CFR, 1910.242 (partial):

- b) Compressed air used for cleaning – Compressed air shall not be used for cleaning purposes except where reduced to less than 30 psi and then **only with effective chip guarding and personal protective equipment.**

by mounting a Saveair pre-set regulator and HoseGuard Air Fuse you fully conform with this regulation

Standards – 29 CFR, 1915.131 – e) (partial) & 29 CFR, 1915.302 (partial):

- e) Before use, pneumatic tools **shall be secured** to the extension hose or whip by some positive means to prevent the tool from becoming accidentally disconnected from the whip.

by mounting a HoseGuard Air Fuse you fully conform with this regulation

29 CFR, 1915.302 (partial):

- (b)(1) pneumatic power tools **shall be secured** to the hose or whip by some positive means to prevent the tool from becoming accidentally disconnected from the whip.

by mounting a HoseGuard Air Fuse you fully conform with this regulation

- (b)(3) All pneumatically driven nailers, staplers and other similar equipment provided with automatic fastener feed, which operate at more than 100 psi pressure at the tool **shall have a safety device** on the muzzle **to prevent the tool from ejecting fasteners**, unless the muzzle is in contact with the work surface.

by mounting a Toolreg pre-set regulator with relief of the second pressure you fully conform with this regulation

(b)(7) All hoses exceeding ½" inside diameter **shall have a safety device** at the source of supply or branch line to reduce pressure in case of hose failure.

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