

Whitepaper – Work Equipment

What is Work Equipment?

Anything provided for use at work constitutes work equipment. It includes computers, photocopiers and other office equipment. It also includes vacuum cleaners, floor cleaners, compactors, generators, ladders and machinery such as abrasive wheels. Equipment owned by employees but used at work, e.g. tool kits could also become a responsibility of the employer.

Who has Responsibilities?

All persons who have control over work equipment including employers, self-employed persons and hire companies have legal obligations. Even if an employer provides work equipment for use at work where they do not control its use or the premises where it is to be used, they should still ensure that the work equipment complies with appropriate legislation. Where multiple parties are involved, cooperation and co-ordination of activities is required.

Suitability, Maintenance and Inspection

- All work equipment must be constructed or adapted so as to be suitable for its intended use. Attention must be paid to the working conditions (e.g. if it is to be used inside or outside), the risks posed by the use of the equipment (noise, dust, radiation) and the risks existing in the premises (explosive or flammable atmospheres)
- Work equipment must be maintained in good repair and safe working order. Where work equipment is issued with a maintenance log, you are legally obliged to ensure that it is kept up to date. There is nothing else within the H&S regulations that require formal maintenance records to be kept, however, a record of maintenance is the only suitable means of proving compliance with the regulations and would therefore satisfy the enforcing authority.
- Where the installation of equipment can affect the safe operation of that equipment, then the equipment should be inspected after the installation.
- Also, where deterioration of the equipment can affect the safe operation of the equipment e.g. window cleaning cradles, it should be inspected on a frequent basis.
- Maintenance operations should be planned so as not to pose a risk to the health and safety of those carrying out the maintenance activities or any other person.
- Risk assessment should identify the risks posed from maintenance activities, and an appropriate safe system of work should be devised.

Specific Risks

- Employers need to ensure that, where work equipment presents a particular risk that cannot be eliminated only specified competent personnel can gain access to the equipment.
- Only specially designated competent persons, who have received adequate training to ensure their safety when performing such operations, should carry out maintenance tasks.

Information, Instruction and Training

Every employer shall ensure that all persons who use work equipment have received adequate training for purposes of health and safety. Employers should:

- a). Evaluate the existing competence of employees to operate the full range of work equipment that they will use.
- b). Evaluate the competence they need to manage or supervise the use of work equipment.
- c). Train the employee to make up any shortfall between their competence and that required to carry out the work with due regard to health and safety.

Conformity with EC Requirements

- If work equipment is subject to one or more European Product Directives, it must comply with these before it can be used.
- For machinery, this means that equipment first supplied after the start of 1995 must comply with the Machinery Directive and carry a CE mark before it can be put into service.
- It is illegal to *supply* equipment that does not comply and it is illegal to *use* such equipment at work.

Dangerous Parts of Machinery

Measures must be taken to prevent access to dangerous parts of machinery. A hierarchy of measures is outlined below to achieve this. The measures are ranked in the order they should be implemented, where practicable, to achieve an adequate level of protection:

- Fixed enclosing guards
- Other guards or protection devices such as interlocked guards and pressure mats
- Protection appliances such as jigs, holders and push-sticks
- Provision of information, instruction, training and supervision

There are identified specific hazards that should be eliminated, or where that is not practicable, should be adequately controlled. Measures must be taken to prevent against injury from very hot or very cold parts of work equipment.

Specific Requirements for Machines with Control Systems

- All controls to start machinery should have a deliberate action – changes in the mode of operation should only be permissible by use of an access code or key.
- Where appropriate, all work equipment must have readily accessible controls to bring them to a safe condition in a safe manner (stop controls) – these should have priority over start controls.
- At least one emergency stop control should be provided except in situations where its operation would not lessen the risk.
- All controls should be easy to access, clearly visible and identifiable.

Isolation from Sources of Energy

It must be possible to isolate the equipment from energy sources for cleaning and maintenance operations.

Stability and Lighting

Equipment must be stable and ambient lighting conditions must be sufficient to avoid risks.

Markings and Warnings

- Any markings must be clear and unambiguous.
- After all the risks have been addressed, as far as is reasonable; any remaining dangers should be highlighted with audible or visible warnings to ensure that the equipment can be used safely.

Mobile Equipment

Mobile equipment is any work equipment which is transported between locations or carries out work whilst moving. It includes towed and self-propelled equipment and any attachments. In addition to general requirements, specific measures are to be taken when using mobile equipment:

- a). Persons must not be carried unless suitable provision has been made, and they are protected from other risks to their safety i.e. from wheels or tracks - protection may be required from the danger of falling objects.
- b). Restraint systems to ensure that persons are not injured if there is a risk of being thrown from the equipment.
- c). Roll-over protection may be needed if there is a risk from a 180 degree/ greater roll-over.

Maintenance of Work Equipment

There are four main questions to consider when preparing a maintenance regime for your work equipment, these are:

1. How often and for how long is the equipment being used for?
2. In what type of environment is the equipment being used in, e.g. outdoors, indoors, dusty environments?
3. How is the equipment being used, e.g. for the same type of task or for a variety of operations?
4. What is the risk to health and safety if a failure or malfunction of the equipment occurs?

The answers to these four questions will determine how often the equipment needs to be checked. The extent and complexity of maintenance can vary substantially from simple checks on basic equipment to integrated programmes for complex plant. In all circumstances, for maintenance to be effective it needs to be targeted at the parts of work equipment where failure or deterioration could lead to health and safety risks.

A number of maintenance management techniques could be used:

- a) Planned preventive
- b) Condition-based
- c) Breakdown

Appropriate techniques should be selected through risk assessment and used independently or in combination to address the risks involved.

Simple hand tools usually require minimal maintenance but could require repair or replacement at intervals. More complex powered equipment will normally be accompanied by a manufacturer's maintenance manual, which specifies routine and special maintenance procedures to be carried out at particular intervals. Some of the procedures will be necessary to keep the equipment in working order; others will be required for safety reasons. It should be remembered that different maintenance management techniques have different benefits.

- a). Planned preventive maintenance involves replacing parts and consumables or making necessary adjustments at preset intervals so that risks do not occur as a result of the deterioration or failure of the equipment.
- b). Condition-based maintenance involves monitoring the condition of safety-critical parts and carrying out maintenance whenever necessary to avoid hazards which could otherwise occur.
- c). Breakdown maintenance involves carrying out maintenance only after faults or failures have occurred. It is appropriate only if the failure does not present an immediate risk and can be corrected before risk occurs, for example through effective fault reporting and maintenance schemes.

Where safety-critical parts could fail and cause the equipment, guards or other protection devices to fail and lead to immediate or hidden potential risks, a formal system of planned preventative or condition-based maintenance is likely to be needed.

Remember maintenance procedures should be carried out in accordance with any manufacturer's recommendations which relate to the equipment, e.g. periodic lubrication, replacement and adjustment of parts. Additional maintenance measures may be required if particularly arduous conditions of use are expected or have been experienced.

Maintenance Log

There is no requirement for you to keep a maintenance log. However, it is recommended that you keep a record of maintenance for high-risk equipment. A detailed maintenance log can provide information for future planning of maintenance activities and inform maintenance personnel and others of previous action taken. If you have a maintenance log, you should keep it up to date.

Overview

- Select the correct equipment for the job – seek the supplier's advice.
- Machinery and equipment manufactured since 1995 must carry a CE mark.
- Make sure work equipment is fitted with all the necessary safety devices; e.g. fixed guards, fences, interlocked guards etc.
- Carry out a risk assessment before installation and/or at first use. This will confirm that the fitted guarding is sufficient and identify what training is required.
- All machinery and any safety devices such as guards must be maintained in good condition and used at all times.
- Anyone who uses work equipment must be trained in the correct method of use: not just how to use the machine, but also the correct operation of the safety devices, guards etc.
- A well maintained machine will work better, and is less likely to breakdown or clog. Maintenance work must be carried out safely, with the equipment switched off or isolated to ensure it does not start without warning.
- Keep records of maintenance, operator training, breakdowns etc. Records will enable you to check that what needs to be done has been done.

This information is provided for general reference purposes only. If you have a specific enquiry relating to this topic please contact Wirehouse on:

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