



Work Equipment Policy and Guidance

INTRODUCTION

Every year the use of work equipment including machinery results in a number of accidents, many of which are serious, and sometimes can be fatal. The guidance below has been prepared to ensure that risks associated with work equipment are eliminated or reduced to a minimum.

The type of risks which arise from work equipment include:

- Using the wrong equipment for the job, e.g. ladders instead of access towers for work at high level.
- Lack of guards or poor guards on machines, leading to accidents caused by entanglement, shearing, crushing, trapping, cutting etc.
- Having inadequate controls or the wrong type of controls so that equipment cannot be turned off quickly and safely or it starts accidentally.
- Failure to keep guards, safety devices, controls etc. properly maintained so that machines or equipment become unsafe.
- Failure to provide the right information, instruction and training for those using the equipment.

Work equipment includes:

- Machines such as circular saws, drilling machines, photocopiers, mowing machines etc.
- Hand tools such as screwdrivers, knives, hand saws, meat cleavers, etc.
- Lifting equipment such as lift trucks, elevating work platforms, vehicle hoists, lifting slings and
- Other equipment such as ladders and pressure water cleaners.

Suitability

Any equipment provided for work must be constructed or adapted to be suitable for its intended purpose. This includes considering the working conditions, health and safety risks where the equipment is to be used and any risks associated with the equipment itself. For example a hammer should not be used as a screwdriver and a photocopier should only be positioned in a well-ventilated area to reduce the level of ozone which may be produced.

Maintenance

All parts of the machinery must be maintained so that its performance does not deteriorate to the extent that it puts people at risk.

The manufacturer's instructions should be consulted when determining the items that require maintenance, the type of maintenance the items require, for example lubrication, replacement of parts and the frequency of maintenance work. The frequency at which maintenance activities are carried out should also take into account the:

- Intensity of use - frequency and maximum working limits.
- Operating environment, for example marine, outdoors.
- Variety of operations - is the equipment performing the same task all the time or does this change?
- Risk to health and safety from malfunction or failure.

Maintenance management techniques should be used to ensure the effectiveness of the maintenance to target the parts of the equipment where failure or deterioration could lead to increased risk to health and safety.

Maintenance management techniques, which could be used, are:

- Planned preventative - involves replacing parts or making necessary adjustments at preset intervals so that hazards do not occur as a result of the deterioration or failure of the equipment.
- Condition-based - involves monitoring the condition of safety critical parts and carrying out maintenance whenever necessary. If safety critical parts could fail and cause the equipment, guards or other protection devices to fail in a dangerous way, a formal system of preventative or condition-based maintenance is necessary.
- Breakdown - only needs to be carried out after failure has occurred. This is appropriate only if failure does not present an immediate risk can be corrected before risk occurs, for example, through effective fault reporting and maintenance schemes.

Selection of the appropriate technique is achieved with the use of a risk assessment which may require a combination of the above to address the risks involved. Maintenance management measures may need to be reviewed and revised in certain circumstances, for example the woodworking machinery is subjected to particularly heavy use.

A maintenance log must be kept on each item of work equipment and only competent maintenance workers should carry out maintenance work.

Inspection

Work equipment must be inspected:

- After installation and before it is used for the first time.
- After it has been installed at a new location or premises.
- Visually on a daily basis or if the equipment is infrequently used before use to ensure there are no defects and that the work equipment is in a safe and operable condition.

Records of all inspections must be made and kept.

Specific Risks

Risks from work equipment should be controlled (in the order given):

- Eliminating the risks, or if that is not possible;
- Taking 'hardware' (physical) measures to control the risks such as the provision of guards; but if the risks cannot be adequately controlled:
- Taking appropriate 'software' measures to deal with the residual (remaining) risk, such as following safe systems of work and the provision of information, instruction and training.

The use and maintenance of work equipment which is known to pose a specific risk to health and safety must be restricted to designated personnel who have received adequate training in the operations. For example the use of machinery such as circular saws and planers must only be used by fully trained and competent machine workshops personnel.

Information and Instructions; Training

All persons using work equipment must have adequate health and safety information, and where appropriate written instructions on the use of the equipment. In addition health and safety training in the use of the work equipment including any associated risks and necessary precautions must also be provided. Refresher training will also be required especially when a worker has not operated a particular piece of equipment for some time; the method of control of the equipment has changed and new equipment or technology is introduced.

Adequate information and training, and written instructions where appropriate must also be made available to Supervisors and Managers.

Conformity with EC Requirements

Work equipment provided for use after 31 December 1992 must be designed and constructed in compliance with the relevant UK legislation to meet the essential health and safety requirements. The machinery must also undergo a conformity assessment procedure to ensure it is appropriate to carry a “CE” marking.

Dangerous Parts of Machinery

Measures must be taken to prevent access to dangerous parts of machinery or stop the movement of any dangerous machinery before any person enters a danger zone.

The hierarchy of measures includes:

- Fixed guards
- Other guards or protection devices, i.e. interlocking guards, pressure pads etc.
- Jig holders
- Push-sticks or similar protection appliances
- Information, instruction, training and supervision.

All guards, protection devices and protective devices must be suitable for their intended purpose; be of good construction, sound material and adequate strength; be maintained in an efficient state, in efficient working order and in good working order and in good repair.

Protection against Specified Hazards

Appropriate measures must be taken to control or prevent exposure to any specified hazards arising from the use of work equipment.

The specified hazards are: falling or ejected articles or substances; component rupture or disintegration, equipment overheating or catching fire and unintended premature discharges or explosions.

High or Very Low Temperatures

Work equipment components or articles or substances which are at high or very low temperatures must be protected so to prevent burns, scalds or sear injuries through contact with the surfaces.

Controls and Control Systems

Where appropriate start and operating controls which require deliberate action to operate must be fitted as well as readily accessible stop controls that will bring the equipment to a safe condition in a safe manner.

Readily accessible emergency stop controls must be provided for work equipment unless the time required to bring the equipment to a complete stop is achieved with the use of the normal stop control or the nature of the hazard proves it unnecessary. Emergency stop controls should also be provided where other safeguards are inadequate to prevent the risk of an irregular event. These must have priority over any normal stop controls and should not be used to stop equipment in normal work routines.

All controls fitted must be clearly visible and identifiable and in a position so as not to create risks to the health and safety of the operator.

Isolation from Sources of Energy

Work equipment must be provided with clearly identifiable and readily accessible means of isolating it from its energy source and reconnection must not expose personnel to any risks to their health and safety.

Stability

Work equipment must be stabilised where necessary especially if the equipment is liable to fall over.

Lighting

Suitable lighting must be provided which takes account of the operations carried out. For example strip lights which create a strobe effect must not be used in an area where a circular saw is operated.

Maintenance Operations

Work equipment, so far as is reasonably practicable, should be constructed or adapted to allow maintenance work that involves a risk to be carried out while the equipment is shut down or inactive. Where this is not possible the maintenance operations should be carried out in such a way that the person doing the maintenance work is not exposed to any health and safety risks and appropriate measures are taken for their protection.

Markings and Warnings

Work equipment should have appropriate and clearly visible health and safety markings and incorporate any health and safety warnings and warning devices that are unambiguous and easily understood.