Appendix 1: Guidance on the Suitability, Procurement, Use, Maintenance and Inspection of work equipment.

# 1A Suitability

The main aspects to consider when choosing work equipment are:

- Its initial integrity;
- The place where it will be used;
- Who it will be used by;
- The purpose for which it will be used; and
- How it will be maintained and inspected.

Equipment must:

- Be suitable by design, construction or adaptation for the actual work it is provided to do; and
- Be used in accordance with the manufacturer's specification and instructions.

The environmental conditions that will be present where work equipment will be used should also be assessed to make sure the equipment can be used safely. In some circumstances, it may not be possible to use some types of work equipment, for example, electrically powered equipment is not suitable for use in wet or flammable atmospheres unless it is

Line Managers should ensure that work equipment is suitable for its intended use by taking into account its initial integrity, its place of use, who will use it, its purpose, the work environment, and how it will be maintained and inspected.

designed for this purpose.

#### 1B Procurement

Safety, Health and Environmental (SHE) issues must be considered when the specification documents for new work equipment are being prepared.

All suppliers – whether they are acting directly for the manufacturer or simply importing an item for sale in the UK – are required to show that the equipment meets the relevant standards, and should be able to provide a "declaration of conformity" indicating which harmonised BS EN standards have been adopted during the design and manufacture of the work equipment to show this.

**All** new work equipment with the exceptions of:

- Unpowered hand tools;
- Access equipment (scaffolding, mobile access equipment etc.); and
- Vehicles (fork lift trucks, MEWPs, electric vehicles etc.)

Should be "CE marked".

Line Managers should take account of SHE issues when specifying new work equipment and ensure that any work equipment purchased or used on STFC sites meets an appropriate standard. In many cases this is demonstrated by the manufacturer affixing a "CE mark" to the equipment.

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The standards to which various items of work equipment should be designed and constructed are given in the following pieces of legislation:

(1) Title	(2) Reference	
The Noise Emission in the Environment by	SI 2001/1701, as amended by SI 2001/3958	
Equipment for Use Outdoors Regulations	and SI 2005/3525	
2001		
The Electro-medical Equipment (EEC	SI 1988/1586, amended by SI 1994/3017 and	
Requirements) Regulations 1988	section 1(2)(a) of the Employment Rights	
	(Dispute Resolution) Act 1998 (c 8)	
The Low Voltage Electrical Equipment	SI 1989/728, amended by SI 1994/3260	
(Safety) Regulations 1989		
The Construction Products Regulations 1991	SI 1991/1620, amended by SI 1994/3051 and	
	section 1(2)(a) of the Employment Rights	
	(Dispute Resolution) Act 1998 (c 8)	
The Simple Pressure Vessels (Safety)	SI 1991/2749, amended by SI 1994/3098 and	
Regulations 1991	SI 2003/1400	
The Gas Appliances (Safety) Regulations	SI 1995/1629	
The Electromagnetic Compatibility	SI 2005/281, amended by SI 2006/1258 and	
Regulations 2005	SI 2006/1201, amended by SI 2006/1258 and SI 2006/1449	
The Supply of Machinery (Safety)	SI 2008/1597	
Regulations 2008		
The Personal Protective Equipment	SI 2002/114, amended by SI 2004/693	
Regulations 2002		
The Medical Devices Regulations 2002	SI 2002/618, amended by SI 2003/1400, SI	
	2003/1697, SI 2005/2759 and SI 2005/2909	
The Electrical Equipment (Safety)	SI 1994/3260, amended by section 1(2)(a) of	
Regulations 1994	the Employment Rights (Dispute Resolution)	
	Act 1998 (c 8) and SI 2000/730	
The Equipment and Protective Systems	SI 1996/192, amended by SI 1998/81, SI	
Intended for Use in Potentially Explosive	2001/3766 and SI 2005/830	
Atmospheres Regulations 1996	CI 1007/021 amondod by CI 2004/602 and	
The Lifts Regulations 1997	SI 1997/831, amended by SI 2004/693 and SI 2005/831	
The Merchant Shipping (Marine Equipment)	SI 1999/1957, amended by SI 2001/1638, SI	
Regulations 1999	2004/302 and SI 2004/1266	
The Radio Equipment and	SI 2000/730, amended by SI 2003/1903, SI	
Telecommunications Terminal Equipment	2003/3144 and SI 2005/281	
Regulations 2000		
The Pressure Equipment Regulations 1999	SI 1999/2001, amended by SI 2002/1267 and	
	SI 2004/693	
The Cableway Installations Regulations 2004	SI 2004/129	

These standards apply to work equipment that is purchased from an external supplier and to equipment designed and constructed "in-house" for use "in-house".

## 1C Maintenance

Equipment must be maintained so that its performance does not deteriorate to such an extent that people are put at risk.

Some parts of equipment such as guards, ventilation equipment, emergency shutdown systems and pressure relief systems need to be maintained to do their job at all times, whilst other less obvious parts need to be maintained to prevent danger from parts seizing or overheating, for example bearings need regular lubrication and filters will need replacing when they start to clog.

# Frequency of Maintenance

The frequency of maintenance should take account of:

- The intensity of use frequency and maximum working limits;
- The operating environment;
- The number of different tasks or functions the equipment performs; and
- The risk to Health and Safety in the event of a malfunction or failure.

A variety of different approaches are available:

- Planned preventative maintenance (PPM);
- Condition based maintenance; and
- Breakdown.

The most appropriate strategy should be selected on a case by case basis, but where safety critical components could fail and cause the equipment, guards, or other protection devices to fail and lead to immediate or hidden potential health and safety, or environmental hazards, a formal system of PPM or condition based maintenance is likely to be required.

#### Maintenance Logs

Maintenance logs should be in place for High Risk equipment and kept up to date. Maintenance procedures should be carried out in accordance with any manufacturer's recommendations regarding for example, periodic lubrication, replacement or adjustment of parts. Logs can take the form of a log book, or sheet kept in a folder. Basic details that should be recorded are:

- Equipment name/identifying number;
- Date maintenance undertaken;
- Name of person carrying out maintenance; and
- Details of what maintenance undertaken including details of parts replaced and any testing or re-commissioning carried out.

#### Maintenance Workers

Maintenance work should only be carried out by those who are competent to do so.

Line Managers should ensure that work equipment is maintained by competent individuals on a regular basis, and that maintenance is recorded.

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# 1D Inspection

Inspection is a formal requirement of the regulations, and builds on the common, but often informal in-house inspection of work equipment, which many people already carry out as part of their work routine. Inspection does not normally include:

- Checks that are part of the maintenance schedule, though some elements may be common, or
- Pre-use check that an operator may perform before using work equipment.

Inspection is intended to identify if equipment can be operated, adjusted or maintained safely and that any deterioration (e.g. defect, damage, wear) can be detected and remedied before it results in an unacceptable risk.

# What needs to be inspected?

Any equipment identified in a risk assessment that presents a significant risk to the operator either from its installation or use should be included in the programme of inspection. Inspection is only necessary where there is a significant risk (see STFC <u>SHE Code 6: Risk Management</u>) resulting from:

- Incorrect installation or re-installation;
- Deterioration; or
- As a result of exceptional circumstances which could affect the safe operation of the equipment.

# What should be included in the Inspection?

The extent of the inspection will depend upon:

- The type of equipment;
- Where it is used; and
- How it is used.

Inspections can vary from simple visual inspection to a detailed comprehensive inspection, which may include some dismantling and/ or testing.

Inspections should always include safety related parts which are necessary for the safe operation of equipment, for example overload warning devices and limit switches.

Some work equipment requires regular thorough examination, for example lifting equipment. Inspection of this type of equipment will only be necessary if the thorough examinations do not fully cover all the significant Health and Safety risks which are likely to arise from the use of the equipment.

# Who should carry out an Inspection?

Only competent people with the necessary knowledge and experience should determine the nature and frequency of inspections and carry them out.

The person carrying out the inspection should know what to:

• Look at (the key components);

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- Look for (fault finding, what is acceptable and what isn't); and
- Do, as regards:
  - a. Reporting faults;
  - b. Making records;
  - c. Who to report to; and
  - d. When things should be taken out of service.

Line Managers should ensure that work equipment is inspected on a regular basis by competent individuals. Where the equipment already receives a statutory inspection (LEV systems, Pressure system, Lifting equipment etc), there is no requirement to carry out additional inspections.