Science and Technology Facilities Council

SAFETY AND SAFE USE OF WORK EQUIPMENT

STFC Safety Code No 4

Rev. 1.9, Issued October, 2022

Contents

Revisions

1	Launch	Sept 2012
1.1	Amendments to training and audit pages	May 2013
1.2	Minor change in Appendix 2h	June 2014
1.3	Addition of document retention Appendix	December 2014
1.4	Addition of motor vehicles to Appendix 2(2H) and Appendix 3 on Vibrating equipment. Minor change to Ladder Inspector course.	February 2016
1.5	Added Shelving and Racking Appendix	November 2016
1.6	Modification to Appendix 2b	September 2017
1.7	Minor update to reflect launch of SHE Assure	October 2018
1.8	Update to Appendix 2B to include kick stools	November 2020

Safety and Safe Use of Work Equipment

1. PURPOSE

Work at the STFC involves the use of a large amount of work equipment – ranging from simple access equipment to manufacturing robots.

Work with powered, electronically controlled and hand operated work equipment has the potential for serious personal injury and significant damage to property if the work equipment is not managed safely.

The STFC aims to pro-actively manage the risks associated with the selection, purchase, installation, use, modification, maintenance and repair of work equipment to minimise the potential for work equipment failures.

The Provision and Use of Work Equipment Regulations (PUWER) 1998 impose specific legal duties on the STFC to provide, inspect, maintain and operate safe work equipment. Additional duties are imposed by:

- The Health and Safety at Work etc. Act, 1974.
- The Management of Health and Safety at Work Regulations 1999.
- The Personal Protective Equipment at Work Regulations 1992 (as amended)

While this code addresses the general requirements to ensure that any item of equipment can be used safely, the appendices to this code outline controls for the management and use of specific types of equipment not covered in other codes, for example ladders, fume hoods (LEV's), and Personal Protective Equipment (PPE).

2. SCOPE

This code applies to all work equipment used on STFC sites by employees, facility users, visitors, to work equipment owned by the STFC but used by others (for example tenants), and to work equipment used by STFC employees at non STFC sites in the course of undertaking Council business.

Contractors and tenants are responsible for ensuring that their own work equipment is safe to use and fit for purpose.

Related STFC SHE Codes include:

STFC SHE Code 2: Safe Movement of Vehicles;
STFC SHE Code 5: Incident Reporting and Investigation;
STFC SHE Code 6: Risk Management;
STFC SHE Code 9: Work at Height;
STFC SHE Code 10: Provision of SHE Training;
STFC SHE Code 11: Confined Spaces;
STFC SHE Code 15: Management of Contractors;
STFC SHE Code 17: Portable electrical Equipment;
STFC SHE Code 19: Work on buildings, premises, services and infrastructure;
STFC SHE Code 26: Safe use of lifting equipment and lifting accessories;
STFC SHE Code 33: Safety of Pressure and Vacuum Systems; and
STFC SHE Code 37: COSHH

3. DEFINITIONS

3.1 Work equipment

Work equipment covers almost any equipment used at work. For the purposes of this code work equipment can be considered “high risk” or “low risk”.

Low Risk work equipment includes but is not limited to the following examples:

- Portable battery tools;
- Hand tools;
- Sack trucks and gas bottle trolleys;
- Office equipment (photocopiers etc.)
- Smaller pieces of Laboratory equipment (analytical equipment etc.);
- Lifting equipment; and
- Access equipment (ladders, scaffolding etc.)

High Risk work equipment covers all those items that can present serious physical hazards when in use, and includes but is not limited to the following examples:

- Workshop-type equipment also called “machines” (lathes, pillar drills, milling machines, guillotines etc.)
- An installation, such as a series of machines connected together;
- Some work vehicles (including fork lift trucks, electric vehicles etc.)

It does not cover:

- Substances (e.g. acids, cement, water);
- Electrical equipment that is not ‘used’ in a physical manner (e.g. computers, monitors, power supplies, lasers, battery chargers etc)
- Structural items (e.g. walls, stairs, roof , fences); and
- Private or Rented Cars and Vans.

3.2 Use of work equipment

Use of work equipment includes all activities involving that equipment, such as:

- Stopping or starting the equipment;
- Repair;
- Modification;
- Maintenance;
- Servicing;
- Cleaning;
- Training;
- Use; and
- Transportation.

3.3 Inspection of Work Equipment

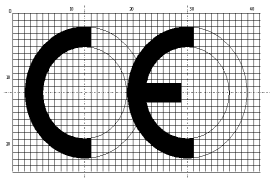
A visual or more rigorous inspection by a competent person to identify whether the equipment can be operated, adjusted and maintained safely, and that any deterioration can be detected and fixed before it gives rise to unacceptable risks. If necessary, inspection includes testing in an appropriate manner.

3.4 Personal Protective Equipment (PPE)

PPE means all equipment – including clothing protecting against the weather – which is intended to be worn or held by a person at work and which protects them against

one or more risks to their health and safety, or any addition or accessory designed to do the same.

3.5 CE Mark



An item of work equipment shall be designed and constructed in accordance with the relevant legislation, see Appendix 1, and if appropriate should carry the CE mark.

The CE mark is a symbol that when affixed (by a manufacturer) to a product indicates that the product complies with the relevant EU legislation.

For equipment in the scope of this code (with three exceptions), it indicates that the equipment complies with the Essential Health and Safety requirements (EHSR's) for that product, and may be considered safe to use in line with the manufacturer's instructions. Consequently, **all** items of work equipment within the scope of this code, with three exceptions:

- Unpowered Hand tools;
- Access equipment; and
- Vehicles (fork Lift trucks, MEWPS, Cherry Pickers, bicycles).

Should carry the CE mark, including those imported from outside of the EU.

3.6 Hand Tools

These are any portable tool, powered or requiring manual effort to use. Examples are: hammers, knives, handsaws, portable drills, hot air guns etc.

4. RESPONSIBILITIES

4.1 Directors shall:

4.1.1 Ensure that the specification, design, fabrication, purchase, commissioning, operation, modification, maintenance, inspection and in-house repair of any work equipment is carried out by competent persons, and that sufficient resources are available to implement the requirements of this code.

4.1.2 Ensure that one or more suitably trained and experienced Ladder Inspector(s) be appointed in writing and provided with the resources to manage the inspection of ladders, step ladders and footstools within defined areas of responsibility, collaborating with other departments where there are only low numbers of access equipment used. The names of such appointments should be recorded in the SHE directory.

4.2 Line Managers shall:Internal STFC course

4.2.1 Ensure that any piece of work equipment used in areas for which they are responsible is fit for purpose and is used only for operations and under conditions for which it is suitable. An item of work equipment shall be designed and constructed in accordance with the relevant legislation, see Appendix 1, and if appropriate should carry the CE mark, see definitions.

Work equipment that is designed and constructed completely “in-house” for use “in-house” should also be designed and constructed in accordance with relevant legislation. It does not need to be CE marked.

4.2.2 Ensure that significant risks arising from the use of work equipment are assessed and recorded; and control measures are put in place, see SHE Code 6: Risk Management. Appendix 3 outlines the particular hazards associated with prolonged use of vibrating equipment.

4.2.3 Ensure that work equipment is maintained in a safe state, in good working order and in good repair.

4.2.4 Ensure that a maintenance procedure and schedule is prepared for items of work equipment that require it. (E.g. hand tools will not require a documented procedure but a fork lift truck will).

4.2.5 Ensure that the work equipment is examined, inspected and tested with a frequency that is consistent with the risk assessment for that equipment but:

a) where the safety of the work equipment is reliant on the installation conditions;
- Inspect after installation and before being put into service; or
- Inspect after assembly in a new location.

b) and if it is exposed to conditions causing deterioration that may result in dangerous situations;
- Inspect at suitable intervals and each time there is an incident involving the work equipment that may jeopardise its safety.

4.2.6 Ensure that records are kept of maintenance, examination, inspection and testing, including records of statutory inspections.

4.2.7 Ensure that all persons using work equipment are given appropriate information, instructions and training, see Appendices 3 and 4, and have sufficient experience; as appropriate have seen the risk assessment for the equipment or activity employing such equipment, and that they have supervision relevant to their level of expertise.

4.2.8 Ensure that a list of persons competent to use/maintain High Risk work equipment, see definitions, is displayed.

4.2.9 Ensure machinery is appropriately guarded in order to prevent contact with dangerous parts and protection is provided against specified reasonably foreseeable hazards e.g. swarf, temperature.

4.2.10 Ensure that, where identified by Risk Assessment, suitable PPE is supplied, and provision is made for its safe storage/cleaning and, as appropriate replacement.

4.3 Staff, tenants, facility users or visitors shall:

4.3.1 Ensure that they are familiar with the risk assessment for the task and follow the operating instructions for the work equipment that they are using. When using the equipment for a specialised or non-standard operation, consider whether the equipment is suitable and whether a separate risk assessment is required; and if so carry it out (see STFC SHE Code 6: Risk Management).

4.3.2 When using personal access equipment (harnesses/ropes etc.) –undertake their own inspection of such equipment - and any fall arrest or restraint equipment before each use.

4.3.3 Wear PPE as required, ensuring that it is suitably stored when not worn, and seek replacement at appropriate intervals and if damaged.

4.3.4 Undertake basic pre-use inspections of work equipment, as required by the planned work and the nature of the equipment. (E.G. A regular user of a CNC mill will need to spend a moment checking everything seems in order at the start of the working day, but more significant checks should be made before the first use of a neutron beam-line).

4.3.5 Report as an incident , following STFC SHE Code 5: Incident Reporting and Investigation, any instances where:

- An injury occurs whilst using work equipment; or
- A protective device (e.g. guard) or emergency stop mechanism fails to function when installed and used correctly.

4.4 SHE Group shall:

4.4.1 Ensure initial and refresher training for specific equipment items, as defined in Appendix 4, are made available for staff.

4.4.2 Provide assistance with interpretation of the requirements of this code.

4.4.3 Ensure that a register of ladders and step ladders is maintained, and that they are inspected at regular intervals (at least annually) by a competent person

5. References

Electronic copies of legislation, approved codes of practice and British Standards can be accessed by STFC staff through STFC-wide subscriptions for online information resources. These services are provided by the Chadwick and RAL libraries and further details can be found on the SHE Group website.

L22, Safe Use of Work Equipment (PUWER 98) ACoP (HSE)

L25, Personal Protective Equipment at Work ACoP (HSE)

Controlling airborne contaminants at work: A guide to local exhaust ventilation (LEV) HSG258

Safe Use of Ladders and Stepladders: An employers' guide INDG402

Safety in the use of abrasive wheels HSG17

Supply of Machinery (Safety) Regulations 2008

National Access and Scaffolding Confederation (NASC) - SG series of guidance documents.

BS EN 14175 – 2: 2003: Fume Cupboards. Safety and Performance Requirements

HSG6 "safety in working with lift trucks"

BGI/GUV-I 5139 E, Information Guide "Manufacturing and Operation of equipment designed for Research Purposes"

Use of Appendices 1, 2 and 3: Black text is given as guidance to outline subjects and issues that should be considered by the user. Text written in contrasting (white on black) indicates what you need to do to ensure that you are meeting your responsibilities as defined in the code above.

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 designed for this purpose.

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.

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.

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 Equipment for Use Outdoors Regulations 2001	SI 2001/1701, as amended by SI 2001/3958 and SI 2005/3525
The Electro-medical Equipment (EEC Requirements) Regulations 1988	SI 1988/1586, amended by SI 1994/3017 and section 1(2)(a) of the Employment Rights (Dispute Resolution) Act 1998 (c 8)
The Low Voltage Electrical Equipment (Safety) Regulations 1989	SI 1989/728, amended by SI 1994/3260
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) Regulations 1991	SI 1991/2749, amended by SI 1994/3098 and SI 2003/1400
The Gas Appliances (Safety) Regulations 1995	SI 1995/1629
The Electromagnetic Compatibility Regulations 2005	SI 2005/281, amended by SI 2006/1258 and SI 2006/1449
The Supply of Machinery (Safety) Regulations 2008	SI 2008/1597
The Personal Protective Equipment Regulations 2002	SI 2002/114, amended by SI 2004/693
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) Regulations 1994	SI 1994/3260, amended by section 1(2)(a) of the Employment Rights (Dispute Resolution) Act 1998 (c 8) and SI 2000/730
The Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 1996	SI 1996/192, amended by SI 1998/81, SI 2001/3766 and SI 2005/830
The Lifts Regulations 1997	SI 1997/831, amended by SI 2004/693 and SI 2005/831
The Merchant Shipping (Marine Equipment) Regulations 1999	SI 1999/1957, amended by SI 2001/1638, SI 2004/302 and SI 2004/1266
The Radio Equipment and Telecommunications Terminal Equipment Regulations 2000	SI 2000/730, amended by SI 2003/1903, SI 2003/3144 and SI 2005/281
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.

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 SHE Code 6: Risk Management) 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);

- 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.

Appendix 2. Detailed guidance for specific work equipment.

2A. Personal Protective Equipment (PPE)

The use of PPE should only be considered a last line of safety when other physical guards and controls cannot be implemented.

Suitability

When choosing an item of PPE consideration should be given to:

- The task and risks for which protection is needed;
- The physical effort required for the task and how long the task lasts;
- Requirements for visibility and communication;
- The environment the task takes place in; and
- The person – consider their health and any ergonomic effects;

Those carrying out the task should be consulted and involved in the selection of PPE.

If more than one item of PPE needs to be worn, the equipment must be compatible (not interfere with other PPE) and continue to be effective against the risks in question.

Maintenance

PPE should be maintained in working order and in good repair. It should be:

- Examined to check for faults and damage;
- Tested if necessary to ensure it is operating as intended;
- Cleaned – and disinfected if appropriate; and
- Repaired or replaced if damaged.

Storage

PPE should be stored to prevent: damage, contamination by dirt and other substances, and loss.

Type Specific PPE Requirements			
Category	Types available	Hazards	Specific Requirements
Head Protection	Industrial safety helmets; bump caps	Low level fixed objects (pipework, scaffold etc); transport activities; construction related work (falling objects).	Replace: • After a significant impact; • If deeply scratched or worn; • If the harness is damaged; • If more than five years old. Store out of direct sunlight
Eye and Face	Safety spectacles;	Liquid or chemical splash; ejection of	Ensure the eye/face protection fits the user well

Protection	goggles; face shields	material when working with tools; Dust, gas or liquid mist from machinery or during cleaning; radiant heat during welding; Laser radiation	and does not fall off easily. Store in a protective case. Laser eyewear should ideally be enclosed to avoid beam penetration (this may not be possible for all types). Consider misting and fogging of eyewear when selecting.
Hand and Arm Protection	Gloves – hand only; gloves with a cuff; gauntlets; sleeving/arm protection.	Handling sharp and pointed objects; cold weather; chemical handling; handling hot objects; cryogenics; work involving radioactive materials	Ensure the wearer is not allergic to, or sensitised by the glove material. Ensure glove users are instructed as to how to handle and remove gloves carefully to avoid contamination of the hands and the inside of the glove. For chemical handling do not use for longer than the recommended breakthrough time.
Protective Clothing	Separates; aprons; overalls, coveralls and body suits.	Working with chemicals; cuts and hazards working with machinery/knives etc.; electrical hazards; electrostatic hazards; cold work; hot work; work in wet areas	Store used/contaminated clothing separately from clean clothing. Clean clothing according to the manufacturer's instructions. Do not wear loose protective clothing near moving machinery.
Foot Protection	Safety boots or shoes (protective toe caps); wellington boots; clogs; other task specific footwear	Falling objects; Sharp Objects piercing the shoe; Slips/Trips/Falls; Hot or Cold conditions; Electrical hazards; Explosive atmospheres; Chemical work; wet work	Comfort is a significant issue. Footwear should be flexible, wet resistant and absorb perspiration. Cushioned soles will make standing more comfortable.
Personal Fall Protections	Work-restraint system; work-positioning system; rope-access system;	Fall from height.	The following should be considered when selecting equipment: • Maximum decent height and load;

	rescue system; fall-arrest systems		• Safe and secure anchor points; • Type and number of ropes and lanyards; • Specification of ascender/descender devices; • Fall recovery system. Fall protection equipment should be inspected before each use by the user. It should also undergo a statutory inspection every six months. Fall protection equipment that has been used may need to be disposed of – check with the manufacturer.
Hearing Protection	Ear plugs; ear muffs	Noise hazards – noise level and frequency (ies)	Ear Plugs should only be used for short term protection (less than one hour). Ear Muffs can be helmet or head band mounted; and can have communication equipment built in.
Respiratory Protective Equipment (RPE)	Respirators (filter workplace air); breathing apparatus (independent air supply); Nuisance dust masks	Noxious atmospheres; dusty environments; work involving radioactive open sources/materials	First Time users of RPE should inform SHE Group of their work using such protective equipment. Those working with radioactive materials should ensure they have spoken to the RPA about the work. Users should make sure they have the correct RPE and associated filters for the required use. Users of RPE should undergo fit testing to ensure they get the correct size face piece before first use. This should be requested from the supplier. Nuisance dusts masks can only be considered suitable

			for use as PPE if marked as “FFP1, FFP2, or FFP3”. These indicate that the mask contains a filtering face piece. Users of RPE require basic training from the supplier or an experienced user to enable them to use the RPE effectively.

2B. Ladders, stepladders and kick stools

Ladders and stepladders

When to use:

Ladders or stepladders should only be used if:

- The task does not require working in the same high point for more than 30 minutes;
- The maximum height of any work area is 5m (this means the operatives head may be slightly higher than 5m during the work);
- A handhold is available on the ladder; and
- Three points of contact can be maintained at the working position while undertaking the task.

Figure 1a Incorrect - overreaching and not maintaining three points of contact

Figure 1b Correct - user maintaining three points of contact

Selection and use:

The following requirements apply to all ladder use:

- Consideration should be given to the type of work involved – metal ladders should not be used for electrical works;
- Domestic Ladders should NOT be used – all new ladders must meet current BS EN131 or existing ladders the previous UK Class 1 or EN131 standards. All ladders and stepladders must be marked with their appropriate standard;
- Access ladders for scaffold must be secured at the top and another point;
- Unsecured ladders must be footed by a person or ladder mate; and
- Distractions should, if at all possible, be avoided by those working on or footing a ladder (for example mobile phones should not be answered etc.).

Maintenance:

- The treads and feet of ladders should be kept clean to prevent slips during use;
- Broken feet can be repaired/replaced (if parts are available); and
- If a ladder has a damaged rail or treads it should be removed from service and disposed of.

Storage:

- Ladders should be removed from the work area following the task, and stored in a clean and dry location in a way to minimise the risk of possible damage from other objects and area users.

Registration and inspection:

- Ladders should be registered with the appropriate departmental ladder inspector. SHE Group can advise who this is.
- The appropriate person should record:
  - Unique departmental identification number;
  - Type of ladder;
  - Size; and
  - Storage location.
- The unique identification number provided should be indelibly marked on the ladder;
- In addition to regular inspection by the user, all ladders should be checked at regular intervals (at least annually) by a competent Ladder Inspector, appointed by SHE Group.
- All registered ladders should have a 'scaf-tag' attached to them for inspection purposes. This is to enable all users to clearly see if a ladder is in date or not prior to use.

Kick stools

Selection and use:

The following requirements apply to use of kick stools:

- Kick stools should only be used for low risk tasks of very short duration where a stepladder would not be practical e.g. to reach a book on a high shelf;
- Inspect the kick stool for damage prior to every use;
- Do not overreach or stretch whilst using the kick stool – this could result in a loss of balance. if you can't reach the object comfortably, alternative access equipment, such as a stepladder, should be used;
- The kick stool needs to be used in such a way that it is prevented from slipping on the surface;
- The surface must be level and clear of contamination (e.g. oils, greases) to allow the kick stool to keep good contact with the floor;
- Any items that are carried / handled should be relatively small and lightweight; and
- Keep both feet on the kick stool at all times.

Maintenance:

- Check kick stools regularly to ensure they are in good condition:
  - Check all the wheels are present and rotate freely;
  - Check the rubber ring on the base is fixed in position;
  - Check the rubber surfaces on the bottom and top step are free from contamination;
  - Check for cracks or other signs of damage; and
  - Check the kick stool engages when you stand on it.
- If damage is found, the kick stool should be removed from service and disposed of.

Registration and inspection:

- Kick stools should be registered with the appropriate departmental ladder inspector. SHE Group can advise who this is.
- The appropriate person should record:
    - Unique departmental identification number; and
    - Storage location.
- The unique identification number provided should be indelibly marked on the kick stool.
- In addition to regular inspection by the user, all kick stools should be checked at regular intervals (at least annually) by a competent Ladder Inspector appointed by SHE Group.

2C. Local Exhaust ventilation (LEV)

See also STFC SHE Code 20: Gases and Dust

Scope

LEV refers to any powered extraction system that is designed to either remove airborne contaminants from the working area directly, or dilute contaminants by bringing large quantities of air into the breathing zone of the worker.

LEV includes (but is not limited to):

- Fume Cupboards
- On tool extraction
- Nederman arms
- Welding fume extraction hoods
- Shot blasting booths
- Paint booths

Selection and Use

Fume Cupboards:

- New fume cupboards should be designed, manufactured, installed and commissioned to the requirements of EN 14175 - 2003.
- Consideration should be given to:
  - the required use when specifying the lining of the fume cupboard.
  - the use of scrubbing systems if highly corrosive chemicals will be used routinely.
  - whether any components needed to be ATEX rated – if the fume cupboard is to be used with flammable gases.
  - LEV systems employed in handling open radioactive sources (See also STFC SHE Code 28: Radioactive Open Sources) must only be installed following consultation with the site Radiation Protection Advisor (RPA); and
  - fitting sash stops, sash alarm, some form of flow indicator (fan speed indicator or manometer) and flow failure alarms.

Other LEV:

- New LEV systems should be specific to the work need.
- Consideration should be given to:
  - On-tool extraction vs. capture hood;
  - The size and shape of any capture hood to be used;
  - The location of moveable LEV if it is to be used in more than one area;
  - The need for filtration and ATEX rated electrical equipment if large amounts of dust or flammable gases etc. are to be extracted; and
  - The size of fan to produce the required flow rate.

Cleaning, Checks and Maintenance

- All LEV should be cleaned regularly to prevent build-up of contaminants.
- Filters should be changed/cleaned on a regular basis. Used/contaminated filters should be disposed of as Hazardous Waste.
- Regular checks should be made of:
  - Moving parts that may wear (bearings);
  - Parts that can suffer damage (hoods, ductwork and seals); and
  - Parts that deteriorate with use.

- Given the need for regular and occasionally extensive maintenance, consideration should be given to putting a maintenance contract in place with a specialist

All LEV must undergo a regular statutory inspection – 6 or 12 monthly. This inspection is organised by SHE Group at RAL and Estates at DL and ROE. All LEV MUST be registered with SHE/DL Estates. To register LEV on your site please provide:

- An original certificate of conformity; and
- An original installation and test report.

2D. Hand Tools

Scope

Hand tools, as indicated in definition 3.6 include: Screwdrivers, Hammers, Punches, Chisels, Hacksaws, Files, Axes, Knives, Crowbars, Shovels, Spanners, Mains and Battery Powered Electric Drills, Saws, Sanders, Grinders and any other item used by hand as a tool.
They normally present a low risk of injury if their use is restricted to activities they are designed for.

Selection, Use, Checks, Maintenance and Inspection

Hand tools should:

- Only be used for tasks for which they are designed (e.g. screwdrivers should not be used as punches);
- Not used if damaged or work beyond effective service;
- PAT tested annually if mains powered;
- Checked before use by the user; and
- Be replaced or repaired if damaged.

Hand tools are unlikely to need formalised maintenance, though some may require regular lubrication, and tools such as drills, grinders, sanders and saws may require replacement of the cutting/sanding/grinding piece.

There is no requirement for any formal form of inspection – pre use checks by the user should be sufficient.

2E. Scaffolding and Scaffold Towers

Scaffold and scaffold towers provide a working platform for those working at height.

Scaffold

Within STFC Scaffold will be designed, specified, erected and taken down only by specialist contractors to meet STFC design access requirements for that particular job (location, size, shape, load capability etc.).

Scaffold should be:

- Used when long term access is required to large high areas (i.e. most construction work at height); and
- Erected and dismantled by competent scaffolders working to industry standards.

STFC staff who are involved in the procurement of scaffolding services should ensure that the scaffolding:

- Is designed and built to meet STFC's access requirements;
- Is inspected on erection and prior to use by a competent person, see Appendix 4; and
- Subject to a weekly inspection programme to ensure that it is safe for STFC staff and contractors to use. These arrangements should include:
    - Signage to indicate state of scaffold (safe to use/under construction/being dismantled etc.);
    - Appropriate signage to indicate when the scaffold was inspected; and
    - Signage detailing next inspection date (no more than 7 days from previous).

Scaffold Towers

Within STFC Scaffold Towers will be used by teams to provide a temporary platform for work at height.

Scaffold Towers should:

- Conform to BS 1139, and be certified or marked as such;
- Be procured or hired from competent suppliers;
- Stored as a complete set in dry and clean conditions;
- Thoroughly checked before and after each use;
- Any damaged parts replaced or repaired; and
- Erected, dismantled and used by individuals who have had appropriate training, see Appendix 4.

2F. Abrasive Wheels

Scope

An abrasive wheel is defined as a wheel consisting of abrasive particles bonded together with various substances. They are used for cutting and finishing materials, and can be mounted on fixed machinery, or – for smaller wheels – on portable/hand held grinding machines.

Failure of an abrasive wheel disc can result in damage to the equipment and injury to people in the vicinity. The hazards of ejected material, and evolved dust and heat also exist when using abrasive wheels.

Selection and Use

- Selecting the correct wheel for the task is essential for safety. An abrasive wheel may be dangerous if used for an application for which it is not intended.
- Consideration should be given to;
    - The type and hardness of material being worked;
    - The speed of machine or spindle on which the wheel is to be mounted;
    - The type of grinding machine;
    - The accuracy and finish required; and
    - The area of contact.
- The following steps should be followed to minimise the risk of failure:
    - Abrasive wheel discs should only be mounted and set by trained competent people, see Appendix 4;
    - Abrasive wheels should always be run within the specified maximum rotational speed;
    - If they are large enough, this speed should be marked on the disc;
    - Smaller discs should have a notice fixed near the machine, giving the individual or class maximum permissible rotational speed;
    - The power driven spindle should be governed so that its rotational speed does not exceed this; and
    - Guarding should be provided to contain fragments of the disc if it “bursts”. These guards will also restrict access to the dangerous parts of the wheel, only allowing access to the area used to work materials.

Cleaning, Maintenance and inspection

- Abrasive wheels and grinding machines should be cleaned after each days use with appropriate materials/solvents – as described in the instructions provided with the wheel.
- Worn or damaged wheels should be replaced.
- Guards should be checked regularly and repaired or replaced if damaged.
- Abrasive wheels and grinding machines should be inspected by the user before each use, to ensure that:
    - The wheel is safely attached and true;
    - The emergency stops function as required; and
    - Guards are correctly fitted and not damaged.

2G. Machinery

Scope

Machinery refers to an assembly of parts, one or more of which are fitted with a drive system, and which are joined together for a specific application.

Consequently, whilst a pillar drill, or a neutron beam line are considered as pieces of **work equipment**, and all the general parts of this code apply, only those parts of the pillar drill, or neutron beam line, which are powered and can be remotely moved (without direct human effort) are considered to be **machinery.**

Machinery used within STFC includes (but is not limited to): workshop machines (pillar Drills, lathes, milling machines, guillotines etc.); robots; moveable beam line components; and neutron beam line shutters etc.

Safe Machines

Machines are made safe by employing a number of parallel strategies. These strategies are enshrined in the relevant legislation given in Appendix 1A, but an overview of the essential requirements is given below.

1: Prevent access to dangerous parts of machinery

Machinery should be constructed to prevent contact of any part of the body or clothing with any dangerous (moving, sharp, hot or electrically live) part of the machine. This is done by:

- The provision of fixed closing guards; or, if not practicable;
- The provision of other guards or protection devices such as interlocked guards and pressure mats; and
- With workshop machinery it will be necessary to provide appliances such as jigs, holders and push sticks etc.

2: Provide suitable controls including emergency stops

Controls should be designed and fitted such that:

- It is possible to easily identify what each control does, and which equipment it effects.
- Controls and their markings are clearly visible;
- Controls for normal operations should not be placed where anybody using them might be exposed to risk;
- It should only be possible to start, or re-start equipment by using the appropriate controls. (e.g. it should not be possible to restart equipment by simply re-setting a protection device);
- Any change in the operating conditions of equipment should only be possible by the use of a control unless the change does not increase Health and Safety risks;
- Start controls should not be combined with “emergency stop” controls;
- “Hold to run” controls should be designed so that the stop function has priority over the start control following the release of the control; and
- Accidental operation is prevented (e.g. buttons and levers should be shrouded or lockable).

Stop Controls

Operation of a stop control should bring equipment to a safe condition in a safe manner. The stop control does not have to be instantaneous in its action and can bring the equipment to rest in sequence or at the end of an operating cycle if this is required to ensure safety.

Stop controls should switch off all sources of energy from the equipment after it has stopped, if this is necessary to prevent or minimise risks to health and safety. Where internally stored energy could lead to risk, it should be cut off or dissipated by the operation of the stop control.

The stop control should take priority over an operating or start control. Where possible, it should only require a short manual action to activate it, even though the stop sequence once initiated may take some time to complete.

Emergency Stop Controls

Emergency control(s) should be provided where the other safeguards in place are not adequate to prevent risk when an irregular event occurs. However, emergency stops should not be considered as a substitute for safeguarding. Emergency stops should be easily reached and activated but should not be used as functional stops during normal operation.

3: Implement Lock Off and Isolation Procedures

Such procedures should be used to make equipment safe:

- During maintenance;
- When unsafe conditions develop; or
- When a temporary situation (such as a change in environmental conditions) would make it unsafe to use the equipment.

Isolation entails breaking the energy supply in a way that ensures inadvertent reconnection is not possible. For some equipment this could be a simple as removing the plug from the electrical supply, whilst for others an isolating switch or valve may need to be locked in the closed position to avoid reconnection.

Control of Maintenance work

If work on isolated equipment is being done by more than one person:

- Consider providing a locking device with multiple locks and keys. Each person will have their own lock and key, and all locks will have to be removed before the isolating device can be removed.
- Keys should not be passed to anyone other than the nominated people working on the isolated equipment, and they should not interchange keys.
- When equipment contains stored energy, this should be dissipated in addition to effective isolation of the machine before any maintenance or repair work begins.

4: Provide Markings and Warnings

Markings

Markings should be fixed to the machinery as appropriate to indicate the presence of hazards and provide useful information to the user. For example:

- Start and stop controls;

- Safe working loads for lifting equipment & lifting accessories;
- Gas cylinder colour to identify contents;
- Pipe work should be colour coded to indicate contents; and
- Markings are also required to denote the presence of radioactivity or lasers.

Markings may use words, letters, numbers or symbols and as far as possible should conform to published standards.

Warnings and Warning Devices

Warnings or warning devices are appropriate where risks to health and safety remain after other hardware measures have been taken. A warning is normally in the form of a notice or warning device with the intention of reinforcing information, instruction and training, e.g. “Hard hats must be worn”.

Warning devices make the extra step and actively warn users of danger. They can be audible or visible, and indicate either imminent danger or the continued presence of a potential hazard.

Warnings must be designed so that they are:
- easily perceived, understood and can be acted on; and
- unambiguous;

Consideration should be given to factors which affect people’s perception of warnings and warning devices, especially those indicating imminent danger. Choice of colour or constant or flashing signal can have a different impact in different situations.

Maintain and Inspect

Maintenance and Inspection of Machinery should be carried out in line with the guidance in Appendix 1.

2H. Fork Lift Truck (FLT), Mobile Elevated Work Platforms (MEWP), battery operated buggies, bicycles and motor vehicles.

See STFC SHE Code 2: Safe movement of vehicles on STFC sites

Scope

FLTs and MEWPs operate within storage areas, construction areas and on site roads on STFC sites. They are used for manoeuvring equipment/providing temporary access to elevated work areas.

Battery operated buggies ("golf buggies" etc.) and bicycles are used for deliveries and occasional travel between areas of site. The basic requirements for the safe use of these two types of vehicle on the roads of STFC sites are given in STFC SHE Code 2: Safe movement of vehicles on STFC sites, Appendix 1. Battery operated buggies and bicycles **are** items of work equipment.

Selection, Maintenance, Use and Inspection of FLTs and MEWPs

Fork Lift Trucks and Mobile Elevated Work Platforms must:

- Be suitable for the environments in which they are operating. Consideration should be given to:
  - Where the FLT/MEWP will be used. Gas/diesel powered FPTs should only be employed in open ventilated work environments. Where electric FLTs are required consideration should be given to where they will be re-charged. Re-charging should only be undertaken in open ventilated environments to guard against the generation of explosive atmospheres;
  - What loads/personnel will be carried; and
  - How often and for how long the FLT/MEWP will be used;
- Only be operated by qualified staff. Training must be relevant for the type of FLT/MEWP operated, see Appendix 4. All FLT/MEWP drivers must have an STFC "Permit to Drive" for insurance purposes;
- Be subject to an inspection and maintenance regime – carried out by the operator - in line with the guidance given in the table at the end of this section; and
  Undergo a regular statutory inspection – as required under the Lifting operations and Lifting Equipment Regulations 1998 (See also STFC SHE Code 26: Safe use of lifting equipment and lifting accessories

Additionally staff operating FLTs and MEWPs:

- Must have an adequate level of fitness. If necessary following illness or injury, occupational health medical opinion should be sought regarding fitness to operate.

  Operators should be medically screened for fitness before employment, see SHE code 24 "Occupational health surveillance and health screening medicals" Appendix 1

To help ensure the safety of others:

- Pedestrians should be excluded from areas where FLTs/MEWPs operate, so far as is practicable; and
- Keys must always be removed from FLTs/MEWPs when they are not in use to prevent inadvertent usage.

- MEWPs should not be used as a crane to lift equipment/materials through the use of slings or other lifting accessories. MEWPs can be employed to lift people, materials and tools located on the working platform/carrier provided the Safe Working Load (SWL) is not exceeded.

Frequency of Check	Items to be Checked/Maintained
Every shift or start of days use	Tyre pressures: Pneumatic tyres should be inflated to the proper pressure. Tyres should also be checked for damage, for embedded material and cuts and bubbles.
Every shift or start of days use	Parking brake, service brakes, and steering gear to ensure they are working efficiently.
Every shift or start of days use	Fuel, water and oil in internal combustion engine powered vehicles for leaks and correct levels.
Every shift or start of days use	Batteries of battery-operated lift trucks to check that they are adequately charged and leak free, that the charger is switched off, the charge lead disconnected and properly stored, and the battery retention device is in place.
Every shift or start of days use	Systems for lifting, tilting and manipulation, including attachments. These should be working properly. Hydraulic systems should be free form leaks and hydraulic fluid levels should be correct when the fork arms are in the parked position.
Every shift or start of days use	Audible warning signal.
Every shift or start of days use	Lights.
Every shift or start of days use	Mirrors, if fitted.
Weekly	An operational check of the steering gear, lifting gear, condition of the battery and other working parts.
Weekly	The condition of the mast, fork arms, attachments, tyres and any chains or ropes used in the lifting mechanisms, and , if fitted, the operator restraint.
Weekly	Security of the overhead guard and load back-rest extension.

Selection, Maintenance, Use and Inspection of battery operated buggies and bicycles

All battery operated buggy drivers must have an STFC “Permit to Drive” for insurance purposes.

Battery operated buggies and bicycles should undergo regular pre-use checks by their users.

Checks should ensure that:

- Tyres are correctly inflated and in good condition; and
- Brake, reversing and indicator lights are working for battery operated buggies and front and rear lights are working on bicycles.

Any maintenance carried out on battery operated buggies and bicycles - with the exception of pumping up the tyres or replacing light batteries – should be recorded, and those records maintained for the life of the vehicle. This includes records of when the vehicle is charged for battery operated vehicles.

Selection, Maintenance, Use and Inspection of motor vehicles

All drivers of motorised vehicles, including but not limited to: cars; vans; delivery vehicles; cranes; passenger vehicles; must have an STFC “Permit to Drive” for insurance purposes, and by implication a valid driver’s license.

As any car, motor vehicles should undergo regular pre-use checks by their drivers, including but not limited to ensuring that:

- Tyres are correctly inflated and in good condition;
- Rear and wing mirrors in place and adjustable; and
- Front, brake, reversing and indicator lights are working.

Any maintenance and MOT test carried out on motor vehicles – should be recorded, and those records maintained for the life of the vehicle.

Appendix 3. Vibrating Equipment – Hand Held Power Tools or Vehicles

The use of Hand Power Tools such as concrete breakers, sanders, grinders, disc cutters, hammer drills, chainsaws, hedge trimmers, heat guns and hand held croppers can cause ill health from vibration related injuries to joints for example vibration white finger or Reynaud's disease – these are collectively known as Hand Arm Vibration (HAV) illnesses.

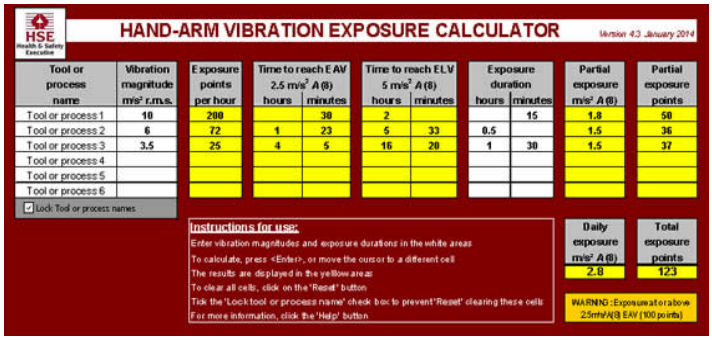
There is a related issue of whole body vibration arising from driving vibrating vehicles.

Hand-arm vibration is the transmission of vibrations from work equipment/processes into workers hands and arms. Regular and frequent exposure to HAV can lead to permanent injury to hand and arm joints.

Identifying signs and symptoms at an early stage is essential to avoid long term injury. The symptoms of which include any combination of:

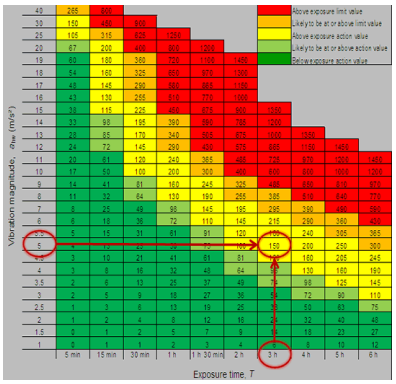
- Tingling and numbness in the fingers;
- Not being able to feel things properly;
- Loss of strength in the hands; or
- Fingers going white (blanching) and becoming red and painful on recovery (particularly in the cold and wet, and probably only in the tips at first).

Before using any hand held power tool the HAV risks arising from using such equipment must be included in the Risk Assessment for the activity and should be completed prior to use. Further guidance on HAV can be found on the HSE Website.



Equipment/tools for which HAV hazards exist should also be available from the equipment's manufacturers to assist you with this Risk Assessment.

The HSE provide a simple HAV exposure calculator to determine the likelihood of HAV injuries occurring, see the HSE Vibration calculator.



Where the potential for such injuries exist those exposed will be required to register for regular Occupational Health screening medicals, see SHE Code 24, Appendix 1.
If you believe that HAV or whole body vibration hazards may arise from your work please contact your local SHE Group for advice and any use of the HSE HAV exposure calculator

Appendix 4. Shelving and Racking within STFC

It has been agreed that in STFC the definition of racking and shelving will be:

- Racking – mechanical aids such as fork lift trucks and pallet trucks are used to place items onto racks, items are often situated on wooden pallets.
- Shelving – items are placed by hand onto shelves.

Where items are placed by hand and by mechanical aids, the storage will be deemed to be 'racking'.

Legal requirements

The Management of Health and Safety at Work Regulations 1999 require employers to put in place appropriate health and safety arrangements. The Provision and Use of Work Equipment Regulations 1998 state that all work equipment should be suitable for use, maintained in a safe condition and inspected by a competent person (record kept until the next inspection).

Requirements for racking

1. All items at height are secured, e.g. shrink wrapped.
2. Safe working load is displayed on each racking unit.
3. Impact protection at each support is in place.
4. Any damaged pallets are identified and removed.
5. Each support is securely fitted to the floor.
6. All fork lift trucks are operated by trained individuals.
7. Racking inspections carried out at intervals by a competent person.
8. Any damage should be reported promptly to the relevant line manager and items on racking removed until racking is repaired.
9. Each racking system should have its own risk assessment (copy stored on SHE Assure).
10. It is recommended that each racking unit is given a unique identifying number.

Requirements for shelving

The risks associated with shelving units should be addressed by each department in either a dedicated risk assessment or as part of a risk assessment covering the activities within the room. The risk assessment should cover the following points:

- Access to shelves should never be by climbing the shelving unit (person can be injured by pulling the shelving unit on top of themselves).
- Heavy items should be stored either at low height or the average waist height (never at head height due to risk of musculoskeletal injury).
- Any shelving exceeding a height to depth ration of 4:1 to the top loaded shelf is adequately secured to another surface such as the wall behind the shelving unit or the floor (due to the risk of the shelving unit falling onto a person).

- The safe working load of each shelf should be taken into consideration when items are stored (risk of sudden failure should weight exceed the safe working load). It is recommended that the safe working load information which is available from the manufacturer at time of purchase is displayed on each shelving unit.

Appendix 5. Information, Instructions and Training that should be provided to users of all work equipment

5A. Information and Instructions

Work equipment bought off the shelf will often arrive with information (what it does to what specification, what hazards are present) and instructions (how to use it safely, how to maintain, how to inspect etc.), whilst work equipment that has been in the workplace for a few years may not have any relevant documentation. It is important that Users, Supervisors and Line Managers have access to relevant information for the equipment in use.

Information and Instructions should cover:
- All Health and Safety aspects arising from the use of the work equipment;
- Any limitation on the use of the equipment;
- Any foreseeable difficulties that could arise; and
- The methods to deal with them.

Written instructions (how to use safely, how to maintain, how to inspect etc.) for work equipment should be made available to those that need them. They can be provided by manufacturers or suppliers (manuals etc.), in-house instructions or instructions from training courses.

5B. Training – general guidance

The training required by users of work equipment will vary considerably according to:
- The user and their relevant experience;
- The equipment being used; and
- The task involved.

Consequently there is no suite of training courses that can be offered to users of work equipment. Specific training must be provided as required.

Training can be provided either formally, by sending work equipment users on a course or having the supplier perform demonstrations in the workplace; or informally through on the job training and work shadowing.

Line Managers of those using work equipment should carry out a basic training needs assessment when a new piece of work equipment is brought into use, to determine what training is required and by whom.; and then put that training in place.

However provided, the training should:
- Evaluate the existing competence of the work equipment user to operate the full range of work equipment that they will use;
- Establish the competence needed to manage or supervise others using work equipment; and
- Train the work equipment user to make up for any shortfall between their existing competence and that required to:
    - Operate equipment in all foreseeable situations; or
    - Supervise or manage the use and maintenance of work equipment.

Appendix 6. Training for specific pieces of Work Equipment

Role	Initial Training	Refresher	Frequency	Comments
Personal Protection Equipment (PPE)	Information should be given to the user by those responsible for their safety regarding: • the risks that the PPE will avoid or limit; • the purpose for which and manner in which the PPE is to be used and stored; and • any action the wearer needs to take to ensure that the PPE remains effective.			
Ladder Users	Safe Use of Ladders, 2hrs		5 years	Basic information for the safe use of a ladder should be marked on one of the rails by the manufacturer.
Courses available:	Internal STFC course			
Ladder Inspector	Ladder & Stepladder Inspection Course, 2 hrs		5 years	
Courses available:	Internal STFC course			
Local Exhaust Ventilation (LEV) Users	Two types of on the job training should be provided for operators/users of LEV. • A demonstration of how to operate and maintain the system should be provided by a competent person – for a new system this should be the commissioning/handover engineer. For an existing system this could be an experienced user/colleague. • A briefing provided by the work supervisor covering: o The harmful nature of the substances in use; o How exposure may occur; o How the LEV system works; o Methods of working to that get the best from the LEV; o How to check the LEV is working; o The consequences of LEV not working; and o What to do if something goes wrong.			
Hand tool users	Effective training and supervision of hand tool users will ensure they are used as intended. Users should be made aware of what to: • Look at (the key components); • Look for (fault finding and what are acceptable standards); and • Do, as regards: o Reporting faults; o Who to report to; and o When tools should be taken out of service.			

Role	Initial Training	Refresher	Frequency	Comments
Managers supervising others working on scaffold, or **Managers procuring scaffolding services**	• Scaffold Awareness Training – 1 day, refresher ½ day; and • Managers and Supervisors of work at height training – 1 day, refresher ½ day.		3 years	Training in what makes a safe scaffold and training in the selection of equipment and the preparation of risk assessments and method statements.
Courses available:	KO Training			
Users of scaffold towers	• Mobile Access Tower Training – 1 day; and • Working at heights training – 1 day, refresher ½ day.		3 years	Training to teach users how to erect and dismantle scaffold towers safely and training on the use of equipment and basic height awareness.
Courses available:	KO Training			
Abrasive Wheels Users	Safety in the use of abrasive wheels, ½ day		3 years	Users should also be competent users of workshop machinery.
Courses available:	Newbury college			
General Machinery Users	Specific training may be available for individual items of equipment provided by their manufacturer or others, for example for lathes. Depending on their complexity, information and training should be provided for users of machinery in line with the guidance given in Appendix 3.			
FLT Drivers	4 day new starter training	1 day refresher training	3 years	Information should be provided to FLT operators in line with the guidance given in Appendix 3.
Courses available:	Total Truck Training			

Appendix 7. Audit Checklist

Ref	Item	Comments
1 (Section 4.2.1)	Is the work equipment in use fit for purpose, and for the environment in which it is being used?	
2 (Section 4.2.1)	Does any equipment used meet the appropriate legislative requirements?	
3 (Section 4.2.2)	Have risks arising from the use of work equipment been assessed and recorded?	
4 (Section 4.2.3) (Section 4.2.4)	Has the Work Equipment been maintained, and if appropriate is there a maintenance schedule and procedures?	
5 (Section 4.2.5)	Has the Work Equipment been examined, inspected and tested as appropriate?	
6 (Section 4.3.4)	Have Users been carrying out Work Equipment inspections?	
7 (Section 4.2.6)	Are maintenance and examination/test/inspection records available?	
8 (Section 4.2.7)	Have Work Equipment Users been given appropriate training?	
9 (Section 4.2.8)	Is there a list of high risk Work Equipment Users?	
10 (Appendix 2a)	What issues were considered when the PPE available was chosen?	
11 (Appendix 2a)	Is the available PPE in working order, clean and stored appropriately?	
12 (Appendix 2a)	Are PPE users given appropriate training regarding its use?	
13 (Appendix 2b)	Are any ladders in use registered?	
14 (Appendix 2b)	Are any ladders in use in good working order and stored appropriately?	
15 (Appendix 2b)	Have ladder users been given training?	
16 (Appendix 2c)	Are LEV systems in use registered with SHE/Estates?	

17 (Appendix 2c)	Are LEV systems in use in good working order and clean?	
18 (Appendix 2c)	Have LEV users been given training?	
19 (Appendix 2e)	Has scaffolding that is in use been constructed to the appropriate standard?	
20 (Appendix 2e)	Is the scaffolding being regularly inspected, and is there evidence of this?	
21 (Appendix 2e)	Have scaffold towers in use been erected by individuals who have had appropriate training?	
22 (Appendix 2f)	What issues were considered when selecting the abrasive wheel in use?	
23 (Appendix 2f)	Are abrasive wheels and grinding machines being maintained appropriately and cleaned after use?	
24 (Appendix 2f)	Have abrasive wheel users received training?	
25 (Appendix 2g)	Is it possible to access and dangerous parts of working machinery?	
26 (Appendix 2g)	Have suitable controls been provided for machinery users?	
27 (Appendix 2g)	Do “Lock Off” and “Isolation” procedures exist for maintenance work on the machinery?	
28 (Appendix 2g)	Have Markings and Warnings been provided on the machinery?	
29 (Appendix 2g)	Have machinery users received training?	
30 (Appendix 2h)	Are FLTs, MEWPs, Battery operated buggies and Bicycles undergoing pre use/weekly/monthly maintenance and checks as appropriate?	
31 (Appendix 2h)	Have FLT and MEWP drivers received appropriate training?	
32 (Appendix 2h)	Do FLT and MEWP drivers undergo regular medical screening?	

Appendix 8. Document Retention Policy

Records Established	Minimum retention period	Responsible record keeper	Location of records	Comments / Justifications
Access/ladder equipment inspection records	Current + 3 years	Line Management	Local Record System	(see also SC 26, 33 & 37)
Access/ladder equipment maintenance and testing records	Current + 3 years	Line Management	Local Record System	
Fall arrest equipment inspection records	Current + 3 years	Line Management	Local Record System	
Fall arrest equipment maintenance and testing records	Current + 3 Years	Line Management	Local Record System	
Scaffold inspection records	Current + 3 years	Line management	Local Record System	
Scaffold maintenance and testing records	Current + 3 years	Line management	Local Record System	
Abrasive wheel inspection records	Current + 3 years	Line Management	Local Record System	
Abrasive wheel maintenance and testing records	Current + 3 years	Line Management	Local Record System	