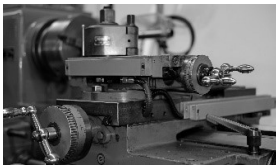


# MANAGEMENT & USE OF WORK EQUIPMENT



|  |               |                           |          |
|--|---------------|---------------------------|----------|
| <b>Summary</b>   |               |                           |          |
| This Code of Practice establishes the minimum requirements for all Schools and Functions to ensure suitable control arrangements are considered for the provision and use of work equipment within the University of Reading activities and undertaken by University Staff, Students and others as deemed appropriate by University of Reading Management. |               |                           |          |
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## Contents

|       |  |    |
|-------|--|----|
| 1     | Introduction .....   | 4  |
| 2     | Scope .....  | 4  |
| 3     | Definitions .....  | 5  |
| 4     | Responsibilities.....  | 6  |
| 5     | Requirements .....   | 8  |
| 5.1.1 | Acquisition, design, suitability, commissioning, and handover .....  | 8  |
| 5.1.2 | Risk assessment, safe systems of work and operating procedures ..... | 9  |
| 5.1.3 | Specific Hazards .....   | 9  |
| 5.1.4 | Maintenance, inspection, servicing, and cleaning.....                | 9  |
| 5.1.5 | Equipment Controls, isolation, stability, and lighting .....         | 10 |
| 6     | Emergency Arrangements .....   | 10 |
| 6.1.1 | Faulty equipment and emergency response arrangements .....           | 10 |
| 7     | Competence & Learning Requirements.....                              | 11 |
| 8     | Guidance.....  | 11 |
| 9     | Review & Audit.....  | 11 |
| 10    | Records & Retention Requirements .....                               | 12 |
| 11    | Relevant Legislation.....  | 12 |
| 12    | Version Control Log of Document Changes.....                         | 13 |

## 1 INTRODUCTION

This document establishes requirements for identifying, purchasing, using, and maintaining work equipment, to achieve compliance with the Provision and Use of Work Equipment Regulations 1998, more commonly known as PUWER. It also establishes requirements for longer-term management, modification, and transfer of equipment.

Requirements for specific types of hazardous or safety-critical equipment are detailed within separate parts of Code of Practice 46, which should be followed in conjunction with this Code of Practice.

## 2 SCOPE

Work equipment extends from simple hand tools, such as a hammer, to complex moving machinery, such as metalworking lathes. It includes, for example, exhibition stands, kilns, milking-parlour equipment, theatre lighting stands, library shelving systems, laboratory glassware, lawnmowers, and mechanical aids to manual handling such as trolleys. University-owned, leased or hired vehicles such as cars, minibuses, tractors etc are included; privately-owned vehicles are not.

Display screen equipment, including laptop computers, keyboards, and workstation screens, are primarily covered by CoP 13 rather than this CoP. However, this CoP does apply to chairs and desks.

Lifting equipment is primarily covered by CoP 41, but this CoP also applies.

See other CoPs for aspects of the use of work equipment giving rise to:

- Manual Handling (CoP 37)
- Noise (CoP 42)
- Hazardous Waste (CoP 48)
- Ultra-Violet Radiation (CoP 22)
- Lasers (CoP 21)

### 3 DEFINITIONS

“**Competent person**” is someone who has sufficient training and experience or knowledge and other qualities that allow them to assist the task/operation properly. The level of competence required will depend on the complexity of the task/operation.

Although “**competent person**” is not defined in law, the Approved Codes of Practices to Provision of Work Equipment Regulations and Lifting Operations and Lifting Equipment Regulations describes the attributes of a competent person for undertaking thorough examinations.

“**Inspection**” means a visual or more rigorous inspection by a competent person and may include touching and/or testing the equipment. Its purpose is to identify whether the equipment can be operated, adjusted, cleaned, and maintained safely, and to detect and remedy deterioration before this results in unacceptable risk.

“**Thorough examination**” means a thorough examination by a competent person required and defined by other legislation, such as the Pressure Systems Safety Regulations 2000, Control of Substances Hazardous to Health 2002, Control of Lead at Work Regulations 2002, Control of Asbestos Regulations 2012, and LOLER.

“**Use**” includes starting, stopping, programming, setting-up, taking-down, transporting, repairing, modifying, maintaining, servicing, emptying, and cleaning work equipment.

“**Maintenance**” means tasks required to maintain the good condition of the equipment and may include repairs.

“**Servicing**” includes routine tasks allowing the machine to operate well, including tasks which may be undertaken by the operators, such as running a machine through a self-cleaning programme every shift.

## 4 RESPONSIBILITIES

*All staff and students* are responsible for

- Ensuring they do not move, use, or operate equipment unless they
  - Are trained and authorised to move, use, or operate the equipment.
  - Are aware of the hazards and risk assessment findings related to the equipment.
  - Have carried out pre-use checks, as defined in the safe system of work or operating procedure.
- Leaving equipment in a safe condition after use
- Reporting promptly any equipment they find to be faulty or overdue for inspection or thorough examination.
- Ensuring they do not acquire, purchase, lease, borrow or in any other way bring work equipment into workspaces, use or under the control of the Schools or Functions unless consideration has been given to the hazards, storage needs, commissioning, maintenance, servicing, use and disposal of the equipment, in compliance with their Schools or Function's approval processes and requirements.

*Heads of Schools and Functions* are responsible for ensuring that suitable management arrangements are established to.

- Identify any work equipment under the Schools or Function's ownership or control.
- Define responsibilities for ongoing management of equipment, including thorough examination (where required by legislation), periodic inspection, maintenance, servicing, cleaning, transfer, and disposal.
- Define responsibilities for assessing risk and identifying competence requirements related to the commissioning, storage, maintenance, servicing, use and cleaning of equipment.
- Devise and, where necessary, document adequate safe systems of work.
- Provide adequate induction, training, and re-training.
- Consider the hazards, storage needs, commissioning, maintenance, servicing, use and disposal of equipment before it is acquired, purchased, leased, hired, borrowed or in any other way brought within the workspaces, use or control of the University, Schools or Functions and procurement – management arrangements to include a clear approval and authorisation process(es).
- Liaise with Estates, Technical Services, Health & Safety Services and other Schools or Functions, where necessary, to agree responsibilities and implement necessary health & safety requirements e.g., maintenance, access restrictions, fire arrangements, gas detection and alarm arrangements, etc related to work equipment, as determined by risk assessment.

- Define responsibilities for management and control of the design/re-design, modification and re-commissioning of equipment and systems where this may give rise to increased risk, including water, pressure, electrical and ventilation systems, guarding of dangerous parts of machinery, laser enclosures, risk controls around electro-magnetic fields and equipment controls including stop and emergency stop controls.
- Over the lifecycle of bespoke and major systems the equipment/system design should be controlled. Should establish arrangements to prevent modification to systems which might introduce new hazards, increase existing hazards, or compromise risk control measures, and to ensure any modifications are risk assessed and documented.
- Develop, where necessary document, communicate, train and exercise emergency responses to foreseeable emergency situations arising from work equipment, where determined as necessary by risk assessment.

**Heads of Schools and Functions** remain responsible for any work equipment left behind in workspaces assigned to their School or Function. Including equipment under the control of departing staff or researchers until it is reassigned to another Head of School or Function or disposed of correctly following University wastes procedures.

**Managers, Supervisors, Research Managers, Principal Investigators, Laboratory Managers, Workshop Managers** are responsible for identifying work equipment under their ownership or control and, for that equipment, ensuring all requirements specified below in Section 5 of this CoP, are fulfilled.

**Estates** are responsible for ensuring upon request that any item of work equipment has a suitable and sufficient inspection and maintenance regime implemented by their function by agreement and funding or have offered advice on how this is to be achieved to the person placing the request. The “Authorisation to Work” policy should be consulted as part of this process.

**Technical Services**, where deemed appropriate by them and by agreement of the Head of School or Function or the Estates Department following consultation, are responsible for ensuring that equipment is suitable and sufficiently inspected and maintained.

**Health & Safety Services** are responsible for upon request offering safety advice and guidance to Heads of School or Function, local HSC, Estates or Technical Services teams as appropriate.

## 5 REQUIREMENTS

### 5.1.1 Acquisition, design, suitability, commissioning, and handover

Schools and Functions should not obtain equipment without first considering the hazards associated with it, including in connection with installation, commissioning, storage, use, maintenance, servicing, cleaning, and disposal. Schools or Functions should establish management arrangements to ensure these matters are considered, with the assistance of competent and/or specialist advisors if necessary. Schools or Functions should have clear approval processes to prevent unauthorised acquisition and/or a lack of ongoing management of equipment, where this might lead to uncontrolled or unacceptable risk.

It is recommended that the Procurement guidance's and policies are followed.

Acquisition of significant bespoke systems, such as MRI scanners, major irrigation systems, x-ray suites, controlled environment rooms, milking parlours, etc, should be managed by a competent project manager. Their duties should include liaison with stakeholders, capture of requirements (including users', Estates', and Technical Services' requirements), and management of the design approval process, installation, commissioning, preparation of documentation and handover. Schools or Functions should liaise with Estates, Technical Services, Health & Safety Services, and other Schools or Functions, where necessary, to agree respective responsibilities for ongoing management and maintenance of equipment.

Equipment requiring integrating with existing building services such as ventilation, water or power supplies should be discussed with Estates to ensure that they do not compromise existing systems installed. The "Authorisation to Work" process should be followed.

All new equipment use should be considered with the requirements of the First Aid Needs Assessment process to ensure appropriate first aid and emergency provision is put in place.

All equipment purchased by Schools or Functions should have either a CE and/or UKCA mark to ensure relevant safety standards have been applied to the design and manufacture. If any items are to be purchased without these marks the local HSC should be consulted and agreed before any purchase is made. Should further advice be required the local HSC should contact H&SS for advice before anything is purchased.

Work equipment should be located and installed to allow required access to enable operation, maintenance, and other necessary tasks to be carried out without unacceptable risk.

Some equipment will require commissioning – a systematic process of testing, adjusting, tuning or otherwise characterising equipment to verify it has been installed correctly, runs as intended and all controls are reliable. Schools or Functions should identify in advance of acquisition if commissioning is necessary and ensure it is properly managed, planned and implemented.

Schools or Functions should ensure that handover of equipment to operators/users is effectively managed and that work equipment is constructed or adapted to be suitable for the use intended.



### 5.1.2 Risk assessment, safe systems of work and operating procedures

Use, maintenance, cleaning, and other tasks should not be undertaken until risk has been assessed and risk control measures implemented (see CoP 4). Risk assessment for work equipment should involve operators/users wherever possible and consider health as well as safety, for example effects from vibration, manual handling, etc. Where the risk assessment determines a safe system of work or operating procedure is necessary this should be developed in consultation with operators/users and documented.

Schools or Functions should liaise with Estates, Technical Services, Security, Cleaning and Health & Safety Services and other Schools or Functions, where necessary, to identify necessary H&S requirements, including amendments to fire risk assessments or DSEAR assessments, access restrictions, permit to work requirements, etc, especially where these have been determined by risk assessment.

### 5.1.3 Specific Hazards

Schools or Functions should seek advice from HSS, via their HSC, about the adequate control of risk from the following.

- Moving powered blades, rotating stock bars, in-running nips, crush, or sheer hazards from moving machinery.
- Rupture, disintegration, fall from or ejection of an item from a machine.
- Mobile elevated work platforms and forklift trucks.
- Very high or low temperature.
- Whole-body vibration.
- Gas detection & alarm systems and alarm response/evacuation and safe re-entry procedures.

In addition, see requirements for specific types of hazardous equipment in other parts of CoP 46.

### 5.1.4 Maintenance, inspection, servicing, and cleaning

Schools or Functions should establish adequate regimes for use, maintenance, and storage. These should provide for thorough examination (where required by legislation), periodic inspection, maintenance and repair, servicing, and replenishment of consumables, cleaning, and appropriate storage of equipment when not in use.

Competence requirements for these tasks should be determined and no person should move, operate, or use equipment unless trained and authorised. Operators or users should be provided with adequate induction and training in the findings of any relevant risk assessment and safe system of work or operating procedures and given refresher training as necessary. Where the Schools or Functions is undertaking its own maintenance, it should ensure this is carried out by suitably competent persons. For more detail on competence and training see Section 7 below.

### 5.1.5 Equipment Controls, isolation, stability, and lighting

Schools or Functions should ensure that, where appropriate, work equipment have controls which adequately start it, re-start after a stoppage, and control any change in speed, pressure, or other operating conditions of the work equipment, where the change can result in greater risk to health and safety. Operators should not normally be able to restart the equipment simply by resetting a protection device, for example an interlock – operation of the start control should also be required.

Where appropriate, work equipment should also have stop controls to bring the work equipment to a safe condition in a safe manner. The control should switch off all sources of energy from the equipment, after it has stopped, if this is necessary to prevent or minimise risk to health or safety.

Schools or Functions should ensure that, where appropriate, work equipment has emergency stop controls where the other safeguards in place are not adequate to prevent risk when an irregular event occurs. Where it is appropriate to have one, based on the risk assessment, an emergency stop should be provided at every control point and at other appropriate locations around the equipment so that action can be taken quickly. Schools or Functions should seek advice from HSS on the location, accessibility and design of emergency stop controls before installation. Where they are installed Schools or Functions should establish a regular and documented testing regime to demonstrate they continue to function as intended.

Schools or Functions should seek further advice from HSS where lack of isolation from sources of energy, assembly/disassembly, erection/re-erection, ground conditions and other factors affecting stability, modification or repurposing of equipment may give rise to substantial health and safety risk. Schools or Functions should inform HSS where they expect to use mobile work equipment such as MEWPs, cherry pickers, forklift trucks or any equipment for carrying people other than conventional bicycles, cars or minibuses. Work equipment should not be used for carrying people unless it has been designed for that purpose.

Schools or Functions should ensure environments in which work equipment are expected to be used are suitable, including adequate lighting and space for operators to undertake tasks. Drive shafts for the transmission of energy should be guarded to prevent entanglement.

## 6 EMERGENCY ARRANGEMENTS

### 6.1.1 Faulty equipment and emergency response arrangements

Where equipment is found to be not in a safe and serviceable condition it should be removed, locked-off, locked away, labelled, or otherwise effectively taken out of use in a manner adequately preventing risk.

Where equipment is no longer required or serviceable it should be repaired or disposed of in accordance with the University's waste management procedures, or otherwise addressed to prevent risk.

Where foreseeable failure of work equipment may lead to emergency situations, e.g., collapse of an access platform, this should be considered as part of risk assessment. Where risk assessment identifies emergency response arrangements or instructions are necessary these should be documented. They should be communicated to operators, managers, Security, and others likely or expected to respond, before the work equipment is first used and/or every time, as the risk assessment determines. These arrangements should be reviewed when new or additional relevant items of equipment are due to be purchased to ensure that they are still suitable.

## 7 COMPETENCE & LEARNING REQUIREMENTS

Schools and Functions should ensure all operators/users are competent to use the equipment or are under supervision by a competent and authorised person and receiving training in the use of equipment. The authorised person should be nominated in writing by the Manger of the department and agreed by the Head of School or Function.

Persons are not deemed competent unless they at least understand:

- the hazards and risks of using the equipment.
- the controls and safety protections and how to operate them.
- what to check before use to ensure the item is safe to use
- what to do in an emergency

## 8 GUIDANCE

Further information on the types of minimum checks can be found at the following link:

[Work Equipment Information](#)

## 9 REVIEW & AUDIT

Schools or Functions should periodically inventory and review their equipment to ensure all items requiring statutory thorough examination and test are provided with these and do not become overdue.

## 10 RECORDS & RETENTION REQUIREMENTS

All records required by statutory legislation for the item of equipment should be recorded in accordance with the legislation level.

Any additional records deemed appropriate by the University of Reading or local School and function must also be completed.

Any records for servicing or maintenance that are conducted by any other party i.e., Estates or Technical services contractors must be kept by the department engaging them. Best practices are for a copy of these records to be issued to the School or Function for information.

All records must be kept for a minimum of 5 years.

## 11 RELEVANT LEGISLATION

Health & Safety at Work Act 1974

- <https://www.hse.gov.uk/legislation/hswa.htm>

The Provision and Use of Work Equipment Regulation 1998

- <https://www.hse.gov.uk/work-equipment-machinery/power.htm>

## 12 VERSION CONTROL LOG OF DOCUMENT CHANGES

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| 1.0     |         |        |             |               |                |
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