



UHSP-31: Pressure Systems and Compressed Gases



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1. Objective

The University of Leicester recognizes its responsibilities under the Pressure System Safety Regulations (2000) to reduce and control the risks associated with pressure systems. This policy details the University's arrangements for managing pressure systems.

By doing so, the University complies with the requirements of the following legislation:

- Pressure System Safety Regulations (PSSR 2000)
- Pressure Equipment (Safety) Regulations (PESR 2016)

2. Scope

The main hazards identified in the Pressure System Safety Regulations and associated with pressure systems are:

- Impact from blast energy (from the release of stored pressure energy)
- Impact from fragments of or components of the failed pressure system
- Scalding from the released heat energy of steam

The scope of this policy will cover all systems where the above hazards may be present. This will include, but will not be limited to:

- All autoclaves
- Air compressors
- Expansion vessels
- Piped gas systems and regulator (but not mains natural gas)
- Catering equipment
- Rigid and flexible pressure systems

3. Definitions

Authorised Person (AP): Competent person possessing the skills, knowledge, experience and authority to make management decisions relating to pressure systems assets on behalf of the University.

Competent Person: A competent person has the skills, knowledge, experience and authority to prepare a written scheme of examination before a new pressure system is brought into use for the first time and for reviewing the written scheme as required. A competent person may also carry out maintenance and testing as required.

Authorising Engineer (AE): Competent person possessing the skills, knowledge, experience and authority to advise the Authorising Persons on decisions relating to pressure systems assets on behalf of the University.

4. Responsibilities

Executive Board will

- Provide leadership to ensure that these procedures are followed, including the provision of adequate resources

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Director of Asset Management & Compliance will

- Ensure that this policy is implemented within Estates-controlled areas
- Ensure that all employees that they have control over are made aware of this policy and any responsibilities they have therein
- Appoint an Authorised Person to manage pressure systems within Estates-controlled areas
- Appoint a pressure systems Authorising Engineer
- Ensure that a competent person (examination) is appointed to undertake all examination and testing of relevant pressure systems across the University
- Ensure that a competent person (written scheme) is appointed to prepare all required written schemes
- Ensure that pressure equipment to be supplied as part of any capital projects which are undertaken by Estates meet the requirements of PSSR 2000 and PESR 2016
- Ensure that the Authorised Person within their area of control has sufficient instruction, information and training to discharge their duties under this procedure

Heads of Schools, Departments or Corporate Service Divisions (Heads) will

- Be responsible for all pressure systems owned by their department.
- Ensure that this policy is implemented within their areas of control
- Ensure that all employees that they have control over are made aware of this policy and any responsibilities they have therein
- Appoint an Authorised Person to take managerial responsibility for pressure systems within their area of control
- Ensure that the Authorised Person has sufficient instruction, information and training to discharge their duties under this procedure

Department Authorised Persons will

- Take day to day managerial responsibility for pressure systems within their area(s) of control
- Maintain an inventory of all pressure systems within the University's preferred asset management system for pressure systems
- Notify the Authorising Engineer via the Authorised Persons in Estates and Digital Services of any new pressure systems installed within the University before the system is brought into use for the first time
- Make arrangements for the competent person (written scheme) to prepare a written scheme of examination before a new pressure system is brought into use for the first time
- Make necessary arrangements to have pressure systems examined and tested by the competent person (examination) in accordance with frequencies determined within the written scheme of examination
- Ensure that pressure systems are safely prepared for examination by a competent person in accordance with the written scheme of examination
- Ensure any actions arising from an examination are satisfactorily completed
- Ensure that pressure systems are maintained, serviced and repaired by a competent person in accordance with manufacturers or standard industry guidelines and that storage arrangements are satisfactory
- Ensure that any documentation relating to modifications to any pressure system is added to the asset management system for pressure
- Ensure that pressure systems that have not been examined in accordance with a written scheme are taken out of service and not operated until the necessary examinations have been satisfactorily completed

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- Ensure systems that have been notified as dangerous or potentially dangerous via a defect notice are positively managed, including liaison with the Health and Safety Executive as required
- Ensure that the documentation is kept up to date, including written schemes of examination (WSE), examination reports, and repair and modification documentation
- Ensure that piped gas systems that are supplied via flexible piping are suitably maintained, services and regulators changed every five years or sooner depending on the gas type
- Notify Health and Safety Services of any incidents involving pressure systems

Estates Authorised Person will

In addition to the duties outlined in the Authorised Persons section above, the Estates Authorised Person(s) will be responsible for:

- Liaising closely with departmental managers and others who need to be informed of any interruption, testing or examination of a pressure system or part thereof
- Providing technical advice to those responsible for the purchase of any equipment that may be a pressure system or become part of an existing pressure system
- Providing advice on the provision and / or replacement of pressure systems or components of such systems
- Organising training for Estates office staff (and other staff if required) to ensure compliance with the regulations
- Seeking the advice of the Authorising Engineer whenever there is any doubt as to any aspect of a pressure system
- Notifying the Authorising Engineer of all new or modified pressure systems within the University
- Ensuring that piped gas systems using rigid pipe (i.e. copper) are suitably examined, serviced and regulators changed every five years or sooner depending on the gas type

Line managers or principal investigators

Those with supervisory duties are responsible for:

- Ensuring staff and students who need to use pressure systems are suitably trained and competent to do so
- Ensuring risk assessments for the use of the pressure system are in place and regularly reviewed.
- Cooperating with the Authorised Person / Authorising Engineer to allow service, maintenance, and examination and test, to be conducted at appropriate intervals not exceeding those specified in the written scheme of examination
- Reporting any incident involving pressure systems directly to Health and Safety Services or the Authorised Person in their area
- Liaising with the Authorised Person when procuring any new pressure system to be used in their area

Health and Safety Services are responsible for:

- Advising on matters relating to pressure systems, including any changes in legislation and how these impact on the University activities
- Reviewing the effectiveness of this policy and advising on changes

Authorising Engineer (PSSR)

The University, via Estates and Campus Services will engage the services of an Authorising Engineer (PSSR), who will undertake the following duties:

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- To recommend those persons who, through individual assessment, are suitable to be appointed Authorised Persons (PSSR)
- If necessary, recommend the suspension or cancellation of an appointment
- To ensure that all Authorised Persons (PSSR) have satisfactorily completed appropriate training
- To ensure that all Authorised Persons (PSSR) are re-assessed every three years and have attended a refresher or other training course before such re-assessment
- To review the Management systems in support of the PSSR, including accuracy of the records database Written Schemes of Examination and Inspection Reports
- To monitor the implementation of this policy and its associated procedures
- To provide technical advice and support to the Authorised Persons in relation to PSSR
- To initiate and coordinate the investigations of reported injuries and dangerous occurrences within the Authorising Engineers sphere of responsibility

5. Procedure

For pressure systems, the contract for statutory examination and test is arranged with the University Insurer. The responsible person in the department/division will need to contact the appointed competent person to arrange the necessary inspection prior to the current test period expiring. In addition, coordination with a service engineer may be required to prepare the equipment prior to inspection.

Pass / fail certificates are uploaded into the pressure asset management system for viewing. Any pressure systems that fail an inspection must be immediately removed from use until they are repaired and certified as safe for use. It is the responsibility of the school, department or division to arrange any repair or undertake the recommendations of the insurer for pressure systems that they own.

6. Related documents

- Pressure System Safety Regulations (2000)
- Pressure Equipment (Safety) Regulations 2016
- Pressure Systems Safety Regulations 2000. Approved Code of Practice and Guidance on Regulations – L122 (HSE)
- Pressure systems: A brief guide to safety INDG261
- Written schemes of examination – Pressure Systems Safety Regulations (2000) INDG178
- [Http://www.safed.co.uk/technical-guides/pressure-equipment](http://www.safed.co.uk/technical-guides/pressure-equipment)

7. Revision History

Date of Issue	Version number	Amendments Made
31/01/2020	1.0	First issue
14/12/2020	1.1	Minor amendments: Estates and Campus Services changed to Estates and Digital Services in Section 4

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