Risk Assessment Health
Health Safety Risk
Safety Risk Assessment
Risk Assessment Health

Code of Practice

August 2025

Pressure Equipment

Occupational Health & Safety Service HSD046P (rev 7)

Health Safety

Risk Assessment Health Risk

Approval History:

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Scope

This code of practice describes the management of equipment and systems containing steam and or operating above atmospheric pressure in the University. Following this code will ensure compliance with the Pressure Systems Safety Regulations (PSSR). It complements the University code of practice giving advice on the use of compressed gases. https://www.safety.admin.cam.ac.uk/system/files/hsd032c.pdf

Departments that only have equipment that has been installed by Estate Management, and is maintained by Estate Management, will need to take particular note of sections 1.2, 2.1 and 3.5, and the rest is good background information for you.

Departments that also have their own equipment, such as scientific departments, will need to be aware of all the requirements in this document.

Departments which are likely to wish to **design, build and use** their own pressurised equipment should obtain a copy of the more extensive Code of Practice by contacting the Safety Office.

Departments are reminded that although this document stresses the Statutory requirements for the larger pressure systems, all pressurised systems are potentially dangerous and competent advice should always be sought before specifying, purchasing, installation and use or pressure systems.

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1 Introduction to Pressure Vessels and Pressure Systems

1.1 Technical Terms

CE Marking is mandatory within the European Community, and any new equipment should normally come with a CE mark and be issued with a Declaration of Conformity. This should indicate that the system has been manufactured and tested in accordance with recognised standards. Many individual items which are not designed to stand-alone will not be CE marked but should nevertheless be manufactured to a recognised standard and tested to meet a specification and should be accompanied by a Declaration of Incorporation.

The UKCA (UK Conformity Assessed) mark serves as the equivalent certification for products marketed in Great Britain (England, Wales, and Scotland). Although both marks serve similar purposes, the main distinction lies in their regional use: CE applies to the EU/EEA, while UKCA is specific to Great Britain.

The following terms are defined in The Pressure Systems Safety Regulations 2000, SI 128 (which will be abbreviated to PSSR):

Protective devices – devices that are intended to protect the pressure system against system failure, including bursting discs and devices intended to give warning that system failure may occur. This includes items to prevent the safe operating limits of equipment being exceeded.

Safe operating limits are the operating limits, incorporating a suitable margin of error, beyond which system failure is liable to occur.

Written Scheme of examination (WSE) – means a written scheme as defined by Regulation 8 of the PSSR (note: the written scheme can be electronic). A competent person must draw up this written scheme, it will define the checks that must be done and the frequency of those checks. A competent person from the engineering inspection company employed by the University of Cambridge will carry out the examinations required under the PSSR.

Transportable pressure vessel - is a cylinder, tube or cryogenic receptacle that is used for the storage or transport of a gas. Examples are gas cylinders and the Dewars used in many laboratories. The owner and the user are frequently different employers.

Nominated person – This is the person nominated by an individual department to manage the inspections of all assets within the department required under these regulations. This person must be made known to the Safety Office.

Competent person – As defined by the PSSR, the University engage with engineering inspection contractors who supply competent persons for the purposes of writing Written Schemes of Examination and conducting inspections.

Abbreviations:

BES: British Engineering Services

DBIS: !!

DTI: Department of Trade and Industry

ED: Estates Division EU: European Union

HSE: Health & Safety Executive

PSSR: Pressure Systems Safety Regulations WSE: Written Scheme of Examination

1.2 Definition of Pressure Systems

- Pressure systems are defined as belonging to one of the following three arrangements: A pressure vessel of rigid construction + associated pipework + protective devices
- Pipework + protective devices + a transportable pressure vessel
- Pipelines

(Note: since pipelines are specifically for the transport of fluids across the boundaries of the premises they are not discussed further in this document).

Transportable pressure vessels are not of themselves pressure <u>systems</u> but become so when they are connected to other apparatus. They do, however, have to meet safety standards and they are subject to a written scheme of examination.

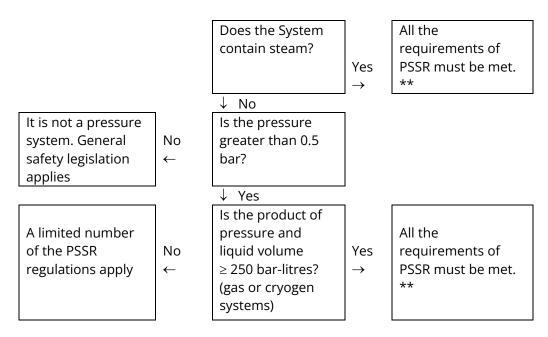
To qualify as a **pressure system** the equipment must contain either:

- steam at any pressure
- a gas or mixture of gases at > 0.5 bar
- a liquid with a vapour pressure > 0.5 bar either at its actual temperature or at 17.5°C
- a gas dissolved under pressure in a solvent contained on a porous substance which could be released without application of heat.

This means that the current document applies to systems containing gases, liquefied gases and steam, but does not apply to systems containing exclusively water or hydraulic fluids.

(Throughout this document pressures are quoted as gauge pressure that is, pressure above the atmosphere, so that 0.5 bar means 1.5 bar in absolute terms. The justification is that most pressure measuring equipment for increased pressures works on the basis that the atmosphere is the datum point.)

The flow chart below summarises in simplified form the thresholds that bring about regulatory requirements.



^{**} These items should all be on the University Pressure System Register if they are the property of the University.

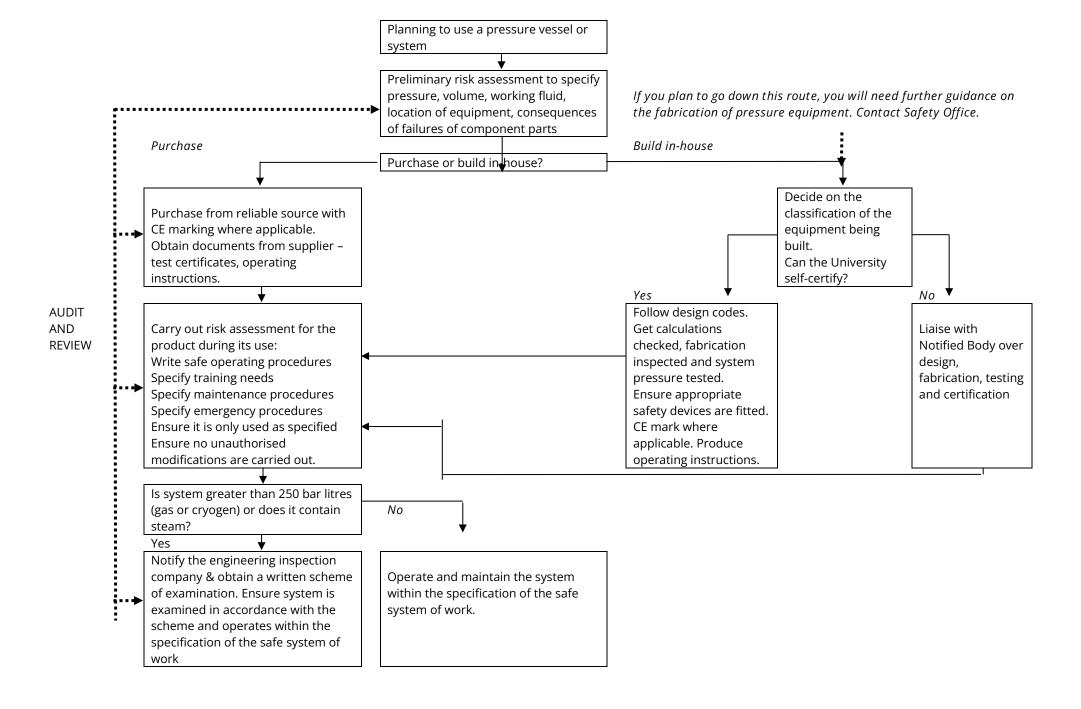
Thus, University pressure systems are likely to fall into one of the following broad categories.

- Above the 250 bar litre threshold (gas or cryogen systems) or containing steam: entered on the Insurance register and subject to Written Scheme of Examination.
- Below the 250 bar litre threshold (gas or cryogen systems): not named individually on the Insurance register, not subject to a written scheme of examination.
- Not belonging to the University, and therefore the responsibility of another employer.

Please see Appendix B for examples of pressure systems frequently used in and around the University departments that require inspection under PSSR.

Regardless of which category a system fits into, it is still your responsibility to conduct a risk assessment so as to define how to install it safely, use it safely and maintain it in safe condition.

The following chart summarises the processes which need to be followed. Note that there is a more detailed code of practice dealing with equipment built inhouse.



2 Essential Legal Requirements

2.1 Pressure Systems that are named on the University Pressure System Asset Register

All systems MUST be inspected by the University nominated competent inspection engineer BEFORE it is put into use, and thereafter on or before the specified 'next inspection due' date.

If the 'next inspection due' date expires then the equipment must be taken out of use and not used again until it has passed an inspection by the competent person.

If the equipment fails an inspection it must be taken out of use immediately. Any work required must be carried out and the equipment inspected again by the competent person before it can be reinstated.

2.2 Management of the Pressure Systems that are Named on the University Pressure System Asset Register

Each department must nominate a **single individual** (or a post-holder) who will be responsible for:

- liaising with the engineer inspection company's competent person to arrange for all registered equipment to be inspected
- notifying the engineer inspection company of changes to their holdings of pressure vessels requiring inspection
- keeping the written schemes of examination and inspection reports safe
- reviewing the engineer inspector reports, taking remedial action where required, or ensuring that action is taken by an appropriate person
- ensuring that equipment is made available for examination when required
- ensuring these responsibilities are handed over to a nominated person when leaving the post, be that your direct replacement or other nominated person to allow for complete continuity

The identity of the departmental 'Nominated Person' must be notified to the Engineering Inspection Company and the Safety Office.

The nominated person must familiarise themselves with the reporting database for all written schemes of examinations, and inspection reports, it is essential that they are able to find individual documents for assets when requested. The current University contract lies with British Engineering Services Group (BES Group). The nominated person can view registered items on E-report, which is the BES Group's portal, giving information on scheduling, documentation (such as WSE and reports) and status of the asset.

The legal responsibility for the equipment owned by the University rests with the University. When a mobile piece of pressure equipment is hired the legal responsibility for the equipment with regards to its basic safety and integrity remain with the owner. For example, with few exceptions, transportable cylinders remain the property of the gas company. The integrity of a pressure vessel itself, including the execution of the requirements of the written scheme of examination remains the legal responsibility of the owner.

Where Departments do own transportable cylinders and mobile equipment falling above the threshold they must ensure that they are on the pressure asset register and that they are examined according to a written scheme of examination.

Where the University Estate Division installs equipment in Departments, a decision will be made as to its future maintenance and where the responsibility will lie. Form A will be completed and handed to the nominated person in the Department if its care is to be transferred to the Department. See Appendix A

Users of pressurised equipment, whether it is equipment on the pressure vessel system register or is a more minor system, must undertake a risk assessment for the use of the equipment and devise safe operating procedures. Further advice on the use of pressure equipment is in section 4. The responsibility for the safe use of pressure equipment on a day-to-day basis, rests with the line management of the user – e.g. research equipment would be the responsibility of the research supervisor.

2.3 Essential Requirements of PSSR

The following is a summary of the key requirements. Subsequent sections give advice and guidance designed to meet these requirements.

- All parts of a pressure system must be properly designed and constructed.
- The system must have protective devices to prevent danger.
- The equipment must have sufficient written information to enable the user to meet the requirements of the regulations.
- Any person who repairs or modifies a pressure system shall provide sufficient written information about the work to ensure the regulations are complied with. In particular, if there is to be any modification the risk assessment must be revised, and the revision sent to the Departmental Safety Officer before commencement of the work.
- The pressure system shall be installed in a way that does not give rise to danger, and so that the operation of any protective device or inspection facility is not impaired.
- Systems shall not be used unless the safe operating limits have been established.
- Systems that contain steam at any pressure and other systems where the pressure-volume product is 250 bar litres or more, shall not be operated unless there is a written scheme of examination.
- The pressure system shall be examined in accordance with the written scheme of examination, at the intervals specified by it, by a competent person.
- Any person operating the system must be given adequate and suitable instructions for the safe operation of the system and the actions to take in an emergency. The system must be operated in accordance with the instructions provided.
- The system must be maintained so as to prevent danger. Any modifications or repairs must not give rise to danger or otherwise impair the operation of any protective device or inspection facility.
- Certain records must be kept Examination and Inspection Records.

3 Procedure on Acquisition of Equipment

3.1 Procedures That Apply to all Equipment

To meet the requirements of sections 1.2 and 2.2, the system must be assessed to decide whether it must go on the University Pressure System Register – the simple flowchart in section 1.2 will help in this decision-making process.

Departments will need to ensure that individuals in the department, who are likely to acquire pressure systems, know that they must inform the nominated person to ensure that all systems are included on the pressure system asset register and the equipment has undergone an inspection by a competent person before it is put into use. Departments will need to ensure that their safety documentation gives clear instructions to enable this to happen. A suggested form for notifying the nominated person is given in Appendix A. The competent person will register this item via email: info@besgoup.com.

The recipient of the equipment should check that relevant inspection certificates and instructions relating to the equipment are received. These need to be stored in a safe place.

3.2 New Equipment Sourced Within the EU

Pressure equipment sourced within the EU is subject to the Pressure Equipment Directive and must be manufactured to meet the essential safety requirements in the Directive.

The equipment should comply with one of the major pieces of legislation, such as the Pressure Equipment Regulations, or the equivalent legislation in the country of origin.

Since the stringency of the requirements for manufacture is subject to a sliding scale, different pieces of equipment will come with different markings and paperwork. Low risk equipment must be fabricated according to the principles of sound engineering practice and may not be CE marked. Larger pieces of equipment must be CE marked and must then be supplied with a Declaration of Conformity, or, if they constitute only part of a pressurised assembly, such as a pressure release valve, must be supplied with a Declaration of Incorporation. The declaration will detail the standards to which they have been manufactured, and the way in which conformity has been assessed. These documents should be preserved.

3.3 New Equipment Sourced from Outside the EU

Equipment that has come from outside the EU must be assessed as to whether it meets the requirements of EU legislation before it can be put into use in the Department, and CE marked if relevant.

It is strongly advised that the contract for supply is drawn up in such a way that the supplier or importer is required to do this. Failure to specify this is likely to lead to the University having to assess the equipment, which could be both time-consuming and expensive. Advice should be sought from current Engineering Inspection company.

3.4 Acquisition of second-hand equipment

The Regulations do not apply retrospectively to second-hand equipment. Thus, second hand equipment does not need to be CE marked. However, it must still be safe. Equipment that is transferred from one department to another must be accompanied by its documentation. The University Pressure System asset register must be adjusted accordingly.

3.5 Installation of Equipment into a User Department by the Estate Division

When the Estate Division installs equipment into Departments and expects the department to be responsible for its future inspection regime they MUST complete the form found in Appendix A and hand this to the nominated person responsible for the management of pressure systems with that dept.

The Estate Division has a duty of care to the Department which is only discharged once they have passed on the completed form along with any maintenance instructions that are needed to ensure the safe continued use of the equipment.

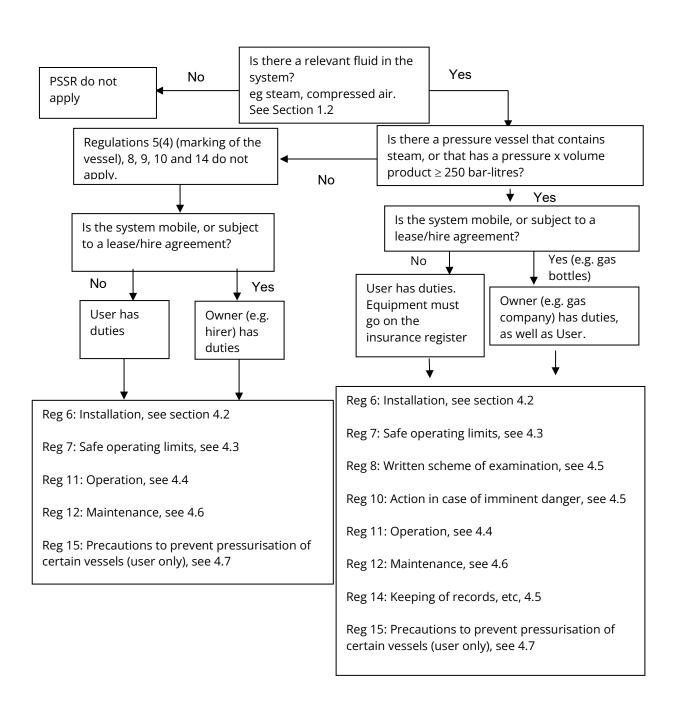
4 Using Pressure Systems

4.1 Risk Assessment

Risk assessments will be required at several points in the life of all pressure systems. These will include:

- Installation and commissioning,
- Normal use.
- Maintenance and repair, and eventually,
- Decommissioning and scrapping (particularly relevant if the system has contained toxic substances).

Whether the University is responsible for every element of the lifetime of the equipment depends on the status of the equipment. The decision chart below (adapted from the HSE guidance), shows the main distribution of responsibility and the requirements for the two major categories of pressure equipment. The Regulation numbers themselves refer to PSSR.



4.2 Installation

4.2.1 Vessels plus associated pipework and protective devices

It is important to install a pressure system in such a way that it does not give rise to danger. A risk assessment should be done, that should consider not only the risk inherent in physically transporting it onto the premises, but also the risks in its future use that may be reduced at this early stage. Important points would include:

- Preparation of a suitable area for the equipment, taking into account the loads.
- How to handle and lift the equipment so as to avoid damaging its protective devices and pipework,
- Checking for damage that may have arisen in transit,
- The self-weight of the equipment and the stresses that will result from this.
- Stresses due to thermal expansion,
- Mechanical tolerances and misalignments,
- Ensuring that the protective devices are clear of obstruction, that they operate properly, and that they discharge to a safe place,
- Ensuring that access doors/hatches are clear of obstruction and operate correctly,
- Ensuring that labels and markings are clearly visible,
- That there is adequate access for maintenance and examination,
- That the system is adequately protected against accidental damage (eg protection of pipes against damage from being climbed on),
- That there is adequate space around and beneath valves, and
- That the work is checked by a suitably qualified person.

In addition, compressed air systems should be arranged so that they are in a well-ventilated, cool environment, where any air-cooled surfaces are located so that the air flow is unobstructed, and that inlet air is drawn from an area that is free from potentially flammable, corrosive contaminants, and excessive dust or moisture.

The system, if falling within the total scope of PSSR should then be registered with the nominated person in the Department (see the chart in section 1.2).

4.2.2 Pipework plus protective devices plus transportable pressure vessel

In this instance the integrity of the pressure vessel is treated separately, because it is either the property of a third party, or is on our Pressure System Asset register in its own right. However, it is important to design the apparatus that is to be connected to the cylinder in such a way that parts of it cannot become over-pressurised and they themselves become dangerous. This may mean that pressure relief devices should be placed at strategic points in the apparatus, to limit the maximum pressure that can accumulate there.

Pressure regulators for gas cylinders should be inspected fully on a five-year cycle. The cost-effective way of doing this is often to enter into an exchange-reconditioning arrangement.

In apparatus where there is a possible source of ignition and the cylinder contains a fuel gas (e.g. hydrogen, Light Petroleum Gas (LPG), acetylene, methane) some arrangement is required to prevent flame flashing back into the cylinder. A common solution to this problem is to fit flashback arrestors on the outlet of the regulator. These should also be replaced at an interval recommended by the manufacturer, or if this is not defined, on a five-year cycle.

4.3 Safe Operating Limits

You must establish the safe operating limits of every pressure system. There is a legal responsibility for the supplier of a mobile system to provide written information specifying the safe operating limits and to ensure that these limits are durably marked on the system.

Second hand systems need to be thoroughly assessed to ensure that the safe operating limits have been established correctly.

The safe operating limits should be reviewed when undertaking the examinations under the written scheme (where applicable) and when significant repairs or modifications are carried out.

The information regarding the safe operating limits must be recorded and kept readily available to the users. This information should be made available to the person responsible for the examinations in accordance with the written scheme, and it is also recommended that the documentation is made available to the person operating the system.

In general, these details should be marked on a plate, or by some other durable means:

- The name and address of the manufacturer,
- The year of manufacture,
- Identification of the equipment, such as type, serial number, etc.,
- The essential maximum/minimum allowable limit, and
- Where necessary, warnings drawing attention to misuse which experience has shown might occur.

And, in most cases, where applicable:

- The volume in litres,
- The nominal size of piping,
- The test pressure that was applied, in bar, and the date,
- The safety device set pressure in bar,
- The output of the equipment in kW,
- The supply voltage,
- Intended use,
- Filling ratio kg/litre,
- Maximum filling mass in kg,
- Tare mass in kg, and
- The product group.

A system MUST NOT be operated outside its safe operating limits. If it is desired to extend the limits of a system, it MUST be re-assessed and re-tested so that its safe operating limits can be re-established.

4.4 Operation

The person operating the system must be provided with adequate and suitable instructions for the safe operation of the system and for the action to be taken in the event of any emergency.

The content might therefore include:

- Start-up and shut-down procedures,
- Precautions for standby operation,
- Function and effect of controls and protective devices,
- Likely fluctuations expected in normal operation,
- The requirement to ensure that the system is adequately protected against over-pressure at all times, and
- Emergency actions.

4.5 Written Schemes of Examination (WSE)

Those items that contain steam or are at or above the 250 bar litre threshold **must** have a Written Schemes of Examination. A WSE specifies the periodic examination by a competent person of the following parts of the system:

- All protective devices,
- Every pressure vessel and every pipeline in which a defect may give rise to danger, and
- Those parts of the pipework in which a defect may give rise to danger.

It is the responsibility of the user to ensure that the University appointed competent person draws up such a document. The nominated person in each department must inform the engineering inspection company, who provides the competent person, of all new equipment that will require a WSE. The engineering inspection company will add the equipment to the Pressure system asset register and then produce a Written Scheme of Examination.

Details of our current Engineering Inspection company are:-

Nick Langley Key Account Manager BES Group 07799 696567 nicholas.langley@besgroup.com

Note that if a system is altered it may invalidate the Written Scheme of Examination. It is essential to contact the Engineering Inspection company before undertaking modifications of equipment, to check that they are of sound design, that any necessary testing is carried out and that the written scheme is updated.

Where systems are complex and changed on a frequent basis it may be possible to adopt a modular approach, containing defined configurations. This possibility should be discussed with the Engineering inspector.

The scheme will include the following:

- Those parts of the system that are to be examined,
- Identification of the item of plant or equipment,
- The nature of the examination required, including the inspection and testing to be carried out on any protective devices,
- The preparatory work necessary to enable the item to be examined safely,
- What examination is necessary before the system is first used, where appropriate,
- The maximum interval between examinations,
- The critical parts of the system, which if modified or repaired should be examined by a competent person before it is used again,
- The name of the competent person certifying the scheme, and
- The date of the certification.

It is the responsibility of the user to ensure that examinations are carried out according to the scheme – individuals should liaise with the nominated person in their Department.

If the competent person carrying out the examination is of the opinion that the pressure system will give rise to imminent danger unless certain repairs or modifications are carried out they are obliged by law to immediately make a written report to both the user (and owner if a mobile system) and the HSE. The system must be taken out of service forthwith until the specified remedial work has been carried out.

The reports of the competent person in accordance with the written scheme of examination must be retained in any event until replaced by a subsequent report. If the report contains information which will materially assist in assessing whether the system is safe to operate if any repairs to the system can be carried out safely it should be retained.

4.6 Maintenance, Modification and Repair

All systems shall be properly maintained in good repair, so as to prevent danger. The maintenance programme should take account of:

- The age of the system,
- The operating/process conditions,
- The working environment,
- The manufacturer's or supplier's instructions,
- Any previous maintenance history,
- Reports of examinations carried out under the written scheme of examination (for equipment to which this applies),
- Results of other relevant inspections,
- Repairs and modifications to the system, and
- The risks to health and safety from failure or deterioration.

When carrying out repairs or modifications, it is essential to ensure that nothing about the way in which this work is done gives rise to danger or otherwise impairs the operation of any protective device or inspection facility.

4.7 Pressure Systems that are No Longer in Use

If a system is no longer used within a department but is going to be stored for possible future use then it needs to be deleted from the university pressure system asset register. This is to prevent it being listed as 'not available' and therefore show as a noncompliance. The data will not be lost and can easily be reinstated for inspection when needed.

All such equipment should NOT be used again until it has been inspected and if necessary, the Written Scheme of Examination has been reviewed / updated or produced.

4.8 Precautions to Prevent Pressurisation of Certain Vessels

Some vessels have a permanent outlet to the atmosphere e.g. a steam vent or vent from a chemical reaction vessel. If blockage of this vent could cause the vessel to become a pressure vessel, the user must ensure that the vent is kept open and free from obstruction at all times when the vessel is in use.

When designing vacuum equipment special care must be taken to ensure that it cannot be placed under a large positive pressure. Consider some safety device if necessary. In particular, where a gas bottle is attached to the equipment, the failure of the regulator and the foreseeable possibility that a person may set the outlet pressure incorrectly can both be eliminated by using a pressure relief device.

4.9 Embedded Companies

Where embedded companies and external service contractors, such as caterers are used the host department must liaise with them and ensure that any pressure systems and equipment brought in or used in their facilities have the necessary written schemes of examinations in place and are independently examined.

5 References

The Pressure Systems Safety Regulations, 2000, SI 128, http://www.legislation.gov.uk/uksi/2000/128/contents/made

Approved Code of Practice and Guidance: L122, HSE Books, ISBN 9780 7176176 78

The Pressure Equipment Regulations, 1999, SI 2001, http://www.legislation.gov.uk/uksi/1999/2001/contents/made

6 Contacts for Further Information

Advice on General Safety Legislation:

The Safety Office

Contacts in the SO for any queries with the Pressure System Asset Register held by British Engineering Services (BES Group) – S Thompson st293@cam.ac.uk or A Eccles abe24@cam.ac.uk

Advice on Pressure Systems Legislation and CE Marking:

The Safety Office safety@admin.cam.ac.uk / BES Group info@besgroup.com

Contact point for BES Group

Nick Langley
Key Account Manager
BES Group
07799 696567
nicholas.langley@besgroup.com Or info@besgroup.com

7 Further reading

Further reading on Product Standards and Guidance on the UK Regulations can be found here:

https://www.gov.uk/pressure-equipment-manufacturers-and-their-responsibilities

8 Appendices

8.1 Appendix A: Pressure Vessel/System Registration Form

Complete and send this form to the Engineering Inspection Company (address overleaf) and copy the Safety Office whenever a **pressure system** with a rigid vessel is purchased, installed, or relocated. This registers the equipment and ensures a Written Scheme of Examination is prepared before use. Alternatively, contact BES using the details in Section 6.

Items that should go on the form

This form should be filled in:

If the system contains steam, regardless of pressure or volume of the system.

For all other gases or vapours (including liquid nitrogen, helium, air, carbon dioxide, etc.) if the pressure is greater than or equal to 0.5 bar above atmospheric <u>and</u> the product of pressure (in bar) and liquid volume (in litres) is greater than 250 bar litres.

If the product is less than 250 bar litres it is not necessary to have the system named on the University Pressure System Asset Register and it is not necessary to use this form. Normal risk assessment procedures, which specify safe systems of work, will still apply.

Exceptions:

Do not fill this form in for items that are on lease or hire to the University, e.g. almost all gas bottles.

Name of person who has purchased or had the equipment installed (originator)					Date	
Contact details of originator (e.g. room number, telephone number, e-mail address)						
Department in which the equipment is to be found (or building if it is shared equipment)						
Exact location of vessel/system (if it is mobile, record here a location where it might be found).						
Type of system (e.g. autoclave, pressurised coffee machine, compressor)						
Manufacturer				Is this equipment new of hand?	r second-	
Serial number/ID of vessel/system						
What is the working fluid? (e.g. air, nitrogen, carbon dioxide, steam, helium).						
Volume of main reservoir (in litres)			Rated Pressure (bar)			
Name of the person who will receive the Written Scheme of Examination and the reports. Dept. nominated person						
Department to which the nominated person is employed by						

Please see overleaf for responsibilities regarding this completed form.

Originator: Please copy this form and pass the original to the nominated person as responsible for records of pressure vessels in your Department. Please retain any documents that came with the pressure system, e.g. test certificates, CE declarations of conformity.

Estate Division (ED): If ED has installed the equipment, please decide whether this equipment will be kept within your care and control with regard to arranging for its future inspections or handed over to the Department. If the latter, please give the form to the nominated person in the receiving department for them to process. If the former, please give them a <u>copy</u> of this form, but ensure that it is filled in to demonstrate that Estate Division retains responsibility.

Nominated person: Every Department must appoint a Nominated Person to arrange and manage the inspections and flow of reports. The University Inspection Company must be notified of all new pressure systems that require statutory inspection; this can be done by informing them verbally or by sending them this completed form. Once they have received notification they will arrange for and complete the inspection within 10 days or longer at your request. It is important to note this time when installing new equipment, as it will not be able to be used without a Written Scheme of Examination issued and an initial inspection from the competent inspection engineer. The University is not insured to operate equipment that does not have a current WSE or a valid inspection certificate. The current Engineering Inspection Company details are found below and all completed forms should be sent directly to this address and a copy sent to the University Safety Office.

Nick Langley
Key Account Manager
BES Group
07799 696567
nicholas.langley@besgroup.com

8.2 Appendix B: Examples of Pressure Systems used in the University requiring inspection

Examples of Bulk Liquid Nitrogen Storage Tanks:





Pressurised Dewars



Air Receivers



Autoclaves:







Pressure Cookers:







Steam Generating Café Boilers / Coffee Machines:





Kitchen Steam Ovens:



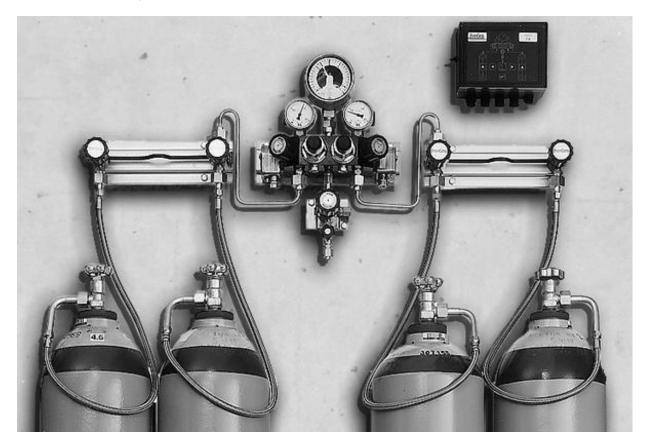
Refrigeration & Air Conditioning Plant (Chillers):



Air Compressors:



Gas Bottles Fixed Pipe Work:



NB. These are only examples of some pressure systems that are present across the University Estate, the list is by no means complete and there are other types used that do require an inspection under PSSR. For more help and advice please contact the Safety Office, or arrange for a competent person from our engineering inspection company to visit your department to assess your pressure equipment.



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