

Further Guidance

- [Safety of pressure systems - L122](https://www.hse.gov.uk/l122/)
([hse.gov.uk](https://www.hse.gov.uk))
- [Pressure systems: A brief guide to safety](https://www.hse.gov.uk/publications/pressure-systems-a-brief-guide-to-safety/) ([hse.gov.uk](https://www.hse.gov.uk))
- [Written schemes of examination](https://www.hse.gov.uk/written-schemes-of-examination/)
([hse.gov.uk](https://www.hse.gov.uk))
- [Simple Pressure Vessels \(Safety\) Regulations 2016 - GOV.UK](https://www.gov.uk/government/consultations/simple-pressure-vessels-safety-regulations-2016)
(www.gov.uk)
- [Pressure Equipment Safety Regulations 2016 - GOV.UK](https://www.gov.uk/government/consultations/pressure-equipment-safety-regulations-2016)
(www.gov.uk)



Coffee Machines as Pressure Systems: Safety Advice

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Introduction

Employers have a duty to provide a safe workplace and safe work equipment. Following the coffee machine manufacturer's instructions and health and safety guidelines can help prevent risks.

If your coffee machine produces steam under pressure (such as an espresso machine or a higher pressure "Bean to Cup" machine, then its use comes under the Pressure Systems Safety Regulations 2000. If pressure equipment fails to operate correctly, it has the potential to seriously injure or kill people and severely damage property, as well as damage your business reputation. A pressure system is one that contains, or is likely to contain a relevant fluid over 0.5 bar.

Risks and hazards

General hazards that can be associated with making hot drinks using an espresso machine include:

- Scalds from steam and hot liquids
- Burns from hot components
- Spills from hot liquids
- Explosion from steam under pressure

Training

Everybody operating pressure equipment should have the necessary skills and knowledge to carry out their job safely, so suitable training needs to be provided by the employer. Additional training or retraining may be required if

- The job changes
- The equipment or operation changes
- Skills have not been used for a while

Cleaning

Follow the manufacturer's recommended programme for cleaning your machine on a daily and weekly basis

Written scheme of examination

Under the legislation, all pressure vessel systems are required to have a written scheme of examination which should involve testing and certification for safety at least every 14 months by a "competent person"

If you rent your coffee machine, then the examination may form part of the rental agreement. If you own your machine, then your insurance company may have details of competent persons who can undertake the examination of the appliance. The competent person needs to have the necessary knowledge, skills and independence to undertake their role effectively.

The system will generally comprise of a steam boiler, separate or combined hot water boiler, pipework and protective devices e.g. safety valve, pressure gauge, water level controls and heating element cut-out device.

This demonstrates that owners and users know the safe operating limits of their system. It should contain information about the equipment and enables a periodic and systematic inspection of the main safety hazards of the coffee machine. The certificate should be retained and forms part of your risk assessment.

Failure to comply with the Pressure System Safety Regulations 2000 can be dangerous and may have implications for your premises insurance cover.