
Statement

The University of Dundee recognises that the risks to people and property presented by autoclaves must be controlled through correct selection, use, testing and maintenance of autoclaves in full compliance with legislation and in accordance with best practice. The performance of autoclaves must also be verifiable to ensure the control of infection and genetic modification risks.

Arrangements

Deans should ensure that suitable autoclave facilities are provided and maintained within Schools, that staff and students are competent to use these facilities, and that they follow the approved operating procedures at all times. Specifically, Deans should ensure that autoclave users are trained and fully instructed in correct operating procedures, the purpose and function of controls and safety devices, and the dangers of bypassing or interfering with safety devices.

Deans should ensure that all autoclaves fulfil standards 1 to 8 below:

1. Comply with BS 2646 or BS EN 285.
2. Safety valve to prevent over pressurisation.
3. Suitable pressure indicator installed where it can be easily observed.
4. Clearly marked with maximum allowable pressure.
5. Clearly marked with maximum operating temperature.
6. Written operating procedures displayed by the autoclave. These should include daily safety checks for items such as damage to door seal and hinges, smooth operation of door locking mechanism, chamber corrosion and blocked drains, and daily cleaning of chamber.
7. Interlock to prevent cycle initiation until the door is securely closed, and the chamber sealed.
8. Interlock to prevent the door being opened until the temperature is less than 80 deg. C.

Deans will ensure that all infectious waste is rendered non-infectious before disposal by appropriate monitoring depending upon the level of risk. For high risk waste (e.g. Hazard Group 2 and 3 micro-organisms, and all Class 2 and 3 genetically modified micro-organisms) monitoring should be by a thermocouple placed into the centre of...
each load, and records should be kept for one year. For low risk waste (Hazard group 1 micro-organisms and Class 1 genetically modified micro-organisms, potentially infected materials such as human tissues) monitoring can be by other means (e.g. indicator strips placed in the centre of the load), and records should be kept for one year. In both cases Deans will ensure that the performance of the autoclave is validated at least annually.

At Ninewells Hospital and Dental School
Deans will ensure that new autoclaves are notified to NHS. NHS ensure autoclaves are tested by a competent person following a written scheme of examination in compliance with the Pressure Systems Safety Regulations 2000. carries out statutory inspection and

Deans will ensure that test report recommendations are implemented.

The Director of Campus Services will ensure a register of autoclaves operated by University staff and students is kept, and will ensure all these autoclaves are tested by a competent person following a written scheme of examination in compliance with the Pressure Systems Safety Regulations 2000.

Users must follow their training and instructions at all times. They must report faults immediately, and take steps to prevent use of a faulty autoclave.
Guidance Note on Autoclave Statutory Inspection Standards

Pressure vessel test
Pressure vessel testing by a competent person according to a written scheme of examination.

Performance validation
1. Autoclaves used to sterilise media and equipment for laboratory research.
   Not required, research staff may require testing to ensure sterility of media and equipment.
2. Autoclaves used to sterilise low risk waste.
   Annual performance validation with independent thermocouples placed at several positions within chamber under different load conditions.
   Inactivation of each load validated either by thermocouple placed into centre of load, or indicator strips. Records kept for one year.
3. Autoclaves used to sterilise high risk waste.
   Annual performance validation with independent thermocouples placed at several positions within chamber under different load conditions.
   Inactivation of each load validated either by thermocouple placed into centre of load. Records kept for one year.

Final Disposal
At City Campus autoclaved waste becomes Controlled Waste, except animal carcasses and materials held under Specified Animal Pathogens Order or other licences, which become Clinical Waste for incineration.

At Ninewells and Dental Hospitals autoclaved waste becomes low risk Clinical Waste and is sent for heat treatment, except animal carcasses which become Clinical Waste for incineration.