BS 2646-2:2023



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Autoclaves for sterilization in laboratories

Part 2: Planning and installation – Code of practice

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Foreword

Publishing information

This part of BS 2646 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 November 2023. It was prepared by Technical Committee CH/198, *Sterilization and associated equipment and processes*. A list of organizations represented on this committee can be obtained on request to the committee manager.

Supersession

This part of BS 2646 supersedes BS 2646-2:1990, which is withdrawn.

Relationship with other publications

BS 2646 is published in three parts. The other parts of the standard are as follows.

- Part 1: *Design, construction, safety and performance – Specification*; and
- Part 3: *Safe use and operation – Code of Practice*

Information about this document

This is a full revision of the document; this part of BS 2646 updates BS 2646-2:1990 and aligns with the recently updated BS 2646-1. It also updates its references to electrical safety standards.

This part of BS 2646 now incorporates guidance on installation of double door autoclaves, packaging, and installation testing for new autoclaves.

This publication can be withdrawn, revised, partially superseded or superseded. Information regarding the status of this publication can be found in the Standards Catalogue on the BSI website at bsigroup.com/standards, or by contacting the Customer Services team.

Where websites and webpages have been cited, they are provided for ease of reference and are correct at the time of publication. The location of a webpage or website, or its contents, cannot be guaranteed.

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As a code of practice, this part of BS 2646 takes the form of recommendations and guidance. It is not to be quoted as if it were a specification. Users are expected to ensure that claims of compliance are not misleading.

Users may substitute any of the recommendations in this part of BS 2646 with practices of equivalent or better outcome. Any user claiming compliance with this part of BS 2646 is expected to be able to justify any course of action that deviates from its recommendations.

Presentational conventions

The provisions of this document are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is “should”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Where words have alternative spellings, the preferred spelling of the *Shorter Oxford English Dictionary* is used (e.g. “organization” rather than “organisation”).

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1 Scope

This part of BS 2646 gives recommendations for planning and installation in laboratories of autoclaves for the sterilization of goods and material which could be infected with organisms, the sterilization and/or processing of growth media or other materials required for the operation of a laboratory.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes provisions, or limits the application, of this document[1)]. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 2646-1:2021, *Autoclaves for sterilization in laboratories – Part 1: Design, construction, safety and performance – Specification*

BS 3928, *Method for sodium flame test for air filters – (Other than for air supply to I.C. engines and compressors)*

BS 7671, *Requirements for Electrical Installations*

BS EN 837-1, *Pressure gauges – Part 1: Bourdon tube pressure gauges – Dimensions, metrology, requirements and testing*

BS EN IEC 60309 (all parts), *Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in BS 2646-1 and the following apply.

3.1 autoclave

machine incorporating a steam pressure vessel, designed to sterilize or process laboratory materials, waste and equipment

NOTE An autoclave can also be used for other processes, such as heat disinfection and heat treatment, which can be selected in accordance with the laboratory requirements and the nature of the load.

3.2 discard container

receptacle for material subjected to a make-safe process

NOTE Guidance on the design of discard containers is given in Safety in Health Service Laboratories – Safe working and the prevention of infection in clinical laboratories and similar facilities [1]. See also BS 2646-3.

3.3 double door autoclave

autoclave with a door at each end of the chamber

NOTE Also known as a pass through or double-ended autoclave.

1) Documents that are referred to solely in an informative manner are listed in the Bibliography.

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