

Australian Standard™

Dry heat sterilizers

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Australian Standard™

Dry heat sterilizers

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PREFACE

This Standard was prepared by the Standards Australia Committee ME-003, Sterilizing Equipment, to supersede AS 2487—1981, *Dry heat sterilizers (hot air type)*.

The objective of this Standard is to increase safety and standardize requirements for dry heat sterilizers.

This edition is a general revision, and includes the following significant changes:

- (a) Innovations are acknowledged (see Clause 1.2).
- (b) The requirements for cabinet supports have been amended (see Clauses 2.2 and 3.2).
- (c) The requirements for dimensions have been simplified (see Clause 3.1).
- (d) The timer is required to automatically reset to zero in the event of a failure of a cycle (see Clause 3.12(c)).

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STANDARDS AUSTRALIA

Australian Standard
Dry heat sterilizers

SECTION 1 SCOPE

1.1 SCOPE

This Standard specifies requirements for dry heat sterilizers of the hot air type intended for use in hospitals, hospital laboratories, office-based health care facilities and similar situations for the sterilization of instruments, metalware, glassware and oils.

This Standard does not apply to machines that sterilize—

- (a) liquids, oils and greases that have a boiling point less than the selected sterilizing temperature; or
- (b) fluids in non-vented bottles.

NOTES:

- 1 The Standard applies to sterilizers that utilize circulated electrically heated air to maintain uniform sterilizing temperatures throughout the chamber.
- 2 The sterilizers maintain a sterilizing temperature of not less than 160°C and an automatically controlled and recorded sterilizing cycle, to achieve the sterilizing function.
- 3 The operating temperature and other details need to be discussed at the time of enquiry or order. Attention is drawn to the need to verify that the material to be sterilized can satisfactorily withstand the sterilizing temperature, which is not less than 160°C. For special purposes, a set temperature of 200°C may be required.
- 4 Dry heat sterilization is used for anhydrous items and items sealed within impermeable containers that cannot be sterilized by steam under pressure but can withstand a temperature of 160°C for a minimum holding time of 120 min plus the penetration time.
- 5 While sterilizing oils or greases, flammable vapours may be produced, which could be hazardous.
- 6 Where oils to be sterilized are intended for use in eye drops or injections, additional equipment (e.g. a simulated load probe and recorder) is required to reduce hazards to public health.

1.2 INNOVATION

Any use of new or unusual materials or methods to achieve the intent of this Standard is encouraged. Manufacturers employing innovative materials or methods shall show documented third-party proof that the innovation is not inferior to that of the intent of this Standard.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
1449	Wrought alloy steels—Stainless and heat-resisting steel plate, sheet and strip
1627	Metal finishing—Preparation and pretreatment of surfaces
1627.5	Part 5: Pickling, descaling and oxide removal