

Australian/New Zealand Standard™

**Cleanrooms and associated controlled environments**

**Part 4: Design, construction and start-up**

## **AS/NZS ISO 14644.4:2002**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee ME-060, Controlled Environment. It was approved on behalf of the Council of Standards Australia on 31 May 2002 and on behalf of the Council of Standards New Zealand on 23 May 2002. It was published on 10 July 2002.

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The following are represented on Committee ME-060:

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Australian/New Zealand Standard<sup>TM</sup>

## Cleanrooms and associated controlled environments

### Part 4: Design, construction and start-up

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## PREFACE

This Standard was prepared by the Joint Australia/New Zealand Committee ME-060, Controlled Environment.

This Standard is identical with and has been reproduced from ISO 14644-4:2001, *Cleanrooms and associated controlled environments, Part 4: Design, construction and start-up*. It is part of a series of Joint Australian/New Zealand Standards that will supersede in part the AS 1386 series titled *Cleanrooms and clean workstations*.

It is expected that a guide will be published to include informative material from the AS 1386 series that is not covered in the adopted ISO series.

The objective of this Standard is to specify the requirements for the design and construction of cleanroom facilities.

As this Standard is reproduced from an International Standard, the following apply:

- (a) Its number appears on the cover and title page while the International Standard number appears only on the cover.
- (b) In the text, 'this part of ISO 14644' should be read 'this Australian/New Zealand Standard'.
- (c) A full point substitutes for a comma when referring to a decimal marker.

References to international Standards should be replaced by references to the following Australian/New Zealand Standards.\*

<i>Reference to International Standards</i>		<i>Australian/New Zealand Standard</i>	
ISO		AS/NZS ISO	
14644	Cleanrooms and associated controlled environments	14644	Cleanrooms and associated controlled environments
14644-1	Part 1: Classification of air cleanliness	14644.1	Part 1: Classification of air cleanliness

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\* Any international Standards not listed do not have an equivalent Australian/New Zealand Standard.

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AUSTRALIAN/NEW ZEALAND STANDARD

## Cleanrooms and associated controlled environments

### Part 4:

### Design, construction and start-up

#### 1 Scope

This part of ISO 14644 specifies requirements for the design and construction of cleanroom installations but does not prescribe specific technological or contractual means to meet these requirements. It is intended for use by purchasers, suppliers and designers of cleanroom installations and provides a checklist of important parameters of performance. Construction guidance is provided, including requirements for start-up and qualification. Basic elements of design and construction needed to ensure continued satisfactory operation are identified through the consideration of relevant aspects of operation and maintenance.

NOTE Further guidance in respect of the above requirements is given in annexes 1 to 11. Other parts of ISO 14644 may provide complementary information.

Application of this part of ISO 14644 is restricted in the following:

- user requirements are represented by purchaser or specifier;
- specific processes to be accommodated in the cleanroom installation are not specified;
- fire and safety regulations are not considered specifically; the appropriate national and local requirements should be respected;
- process media and utility services are only considered with respect to their routing between and in the different zones of cleanliness;
- regarding initial operation and maintenance, only cleanroom construction-specific requirements are considered.

#### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 14644. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 14644 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 14644-1:1999, *Cleanrooms and associated controlled environments — Part 1: Classification of air cleanliness*.

ISO 14644-2:2000, *Cleanrooms and associated controlled environments — Part 2: Specifications for testing and monitoring to prove continued compliance with ISO 14644-1*.