

AS/NZS 4114.1:1995

Australian/New Zealand Standard

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**Spray painting booths**

**Part 1: Design, construction and testing**

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This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL/14, Electrical Equipment in Hazardous Areas. It was approved on behalf of the Council of Standards Australia on 13 March 1995 and on behalf of the Council of Standards New Zealand on 3 April 1995. It was published on 5 May 1995.

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The following interests are represented on Committee EL/14:

Australian Chamber of Commerce and Industry  
Australian Electrical and Electronic Manufacturers Association  
Australian Gas Association  
Australian Institute of Petroleum  
Australian Institute of Refrigeration, Air conditioning and Heating  
Department of Minerals and Energy, Qld  
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Electrical Supply Association of Australia  
Institute of Instrumentation and Control  
Metal Trades Industry Association of Australia  
Ministry of Commerce, New Zealand  
National Electrical Contractors Association of Australia  
The WorkCover Authority, N.S.W.  
Regulatory authorities (electrical)  
Testing interest

Additional interests participating in the preparation of this Standard:

Australian and New Zealand Spray Booth Manufacturers  
Department for Industrial Affairs, S.A.  
Environment Protection Authority, N.S.W.  
Gas and Fuel Corporation of Victoria  
Motor Trades Association of Australia  
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### **Part 1: Design, construction and testing**

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL/14 on Electrical Equipment in Hazardous Areas, to supersede AS/NZS 4114(Int):1993, *Electrical equipment for explosive atmospheres—Spray painting booths—Design, construction, installation and maintenance*.

This Standard is intended for the guidance of manufacturers, designers, users, statutory authorities and others associated with the construction of spray booths.

Changes to the 1993 edition incorporated in this revised edition are based on industry comments received concerning the application of the first edition, published as an Interim Standard, with the main change being the segregation of requirements into two Parts as follows:

- (a) Part 1: Design, construction and testing
- (b) Part 2: Selection, installation and maintenance

Other changes include—

- (i) the acceptance of direct fired heating systems that utilize fuels covered in Australia, by the Australian Gas Industry Codes and in New Zealand, the New Zealand Standards for gas installations referred to by the New Zealand Gas Regulations;
- (ii) segregation of requirements for the various booth types;
- (iii) removal of the previously designated 2 m Zone 1 hazardous area around the entrance of enclosed type booths;
- (iv) clarification of ventilation control requirements;
- (v) the introduction of a classification system for booth types; and
- (vi) other editorial and style changes to improve presentation of the document.

While this Standard covers spray booths in great detail, specific requirements for areas and rooms used for clean up or paint preparation, sometimes termed 'auxiliary rooms' are still under consideration by the committee and therefore have not been included in this Standard. At this stage such rooms should be classified in accordance with, in Australia, AS 2430, Parts 1 and 3 and in New Zealand NZS 6101, Parts 1 and 3 with the installation requirements of AS 2381.1 being applied for designated hazardous areas.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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