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

# Spray painting booths, designated spray painting areas and paint mixing rooms

Part 1: Design, construction and testing





#### AS/NZS 4114.1:2003

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-014, Electrical Equipment in Hazardous Areas. It was approved on behalf of the Council of Standards Australia on 30 December 2002 and on behalf of the Council of Standards New Zealand on 13 December 2002. It was published on 11 February 2003.

The following are represented on Committee EL-014:

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This Standard was issued in draft form for comment as DR 01285.

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

# Spray painting booths, designated spray painting areas and paint mixing rooms

## 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-014, Electrical Equipment in Hazardous Areas to supersede AS/NZS 4114.1:1995, Spray painting booths, Part 1: Design, construction and testing.

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

Major changes to the 1995 edition incorporated in this revised edition are based on industry comments received and are as follows:

- (a) The title was reviewed and reads 'Spray painting booths, designated spray painting areas and paint mixing rooms'.
- (b) New definitions were added.
- (c) Diagrams for the different airflow systems (Clause 1.6) were added.
- (d) Diagrams for external exhaust fans (Clause 2.10) were added.
- (e) Infrared heating (Clause 3.4.5) was added.
- (f) Diagrams for examples of air supply/exhaust systems (Clause 4.2.2.1) were added.
- (g) Spray cycle airflow rates (Clause 4.2.2.3) were fully reviewed.
- (h) Clause 5.3.2—*System requirements* was substantially expanded to include detailed requirements for heat exchangers and heat exchanger flues.
- (i) Method to determine airflow velocity (Clause 7.5) was added.
- (j) Appendix A—*Relevant authorities* was updated.
- (k) A new Appendix B—*Paint mixing rooms* was added; it contains all the requirements for the different types of such rooms.

This Standard is Part One of a Series which consists of the following:

### AS/NZS

- 4114 Spray painting booths, designated spray painting areas and paint mixing rooms
- 4114.1 Part 1: Design, construction and testing (this Standard)

4114.2 Part 2: Selection, installation and maintenance

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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