Australian/New Zealand Standard™

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.

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AS/NZS 4114.1:2003

## Australian/New Zealand Standard™

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

Part 1: Design, construction and testing

Originated as part of AS/NZS 4114(Int):1993. Previous edition AS/NZS 4114.1:1995. Second edition 2003.

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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.

### CONTENTS

		Page
SECTIO	ON 1 SCOPE AND GENERAL	
1.1	SCOPE	5
1.1	APPLICATION	
1.3	REFERENCED DOCUMENTS	
1.4	DEFINITIONS	
1.5	TYPES OF SPRAY PAINTING BOOTHS	
1.6	AIRFLOW SYSTEMS	
1.7	CLASSIFICATION OF HAZARDOUS AREAS	
CECTIC	NI 2 DECICN AND CONCEDUCTION	
	ON 2 DESIGN AND CONSTRUCTION  GENERAL	1.1
2.1		
2.2	MATERIALS	
2.3	INTERIOR SURFACES	
2.4	EXPANSION	
2.5	DOORS ENTRY/EXIT OF TUNNEL OR PRODUCTION BOOTHS	
2.6		
2.7	GUARDING OF MOVING PARTS	
2.8	SHELVES	
2.9	EQUIPOTENTIAL BONDING	
2.10	DUCTS	12
SECTIO	ON 3 SPECIFIC REQUIREMENTS	
3.1	GENERAL	14
3.2	OPERATION	
3.3	BOOTH CONSTRUCTION	
3.4	ELECTRICAL APPARATUS	
٥٠.		
SECTIO	ON 4 VENTILATION OF SPRAY PAINTING BOOTHS	
4.1	GENERAL	17
4.2	AIRFLOW	17
4.3	CONTROL SYSTEMS	20
4.4	EXHAUST AIR	20
	ON 5 SPRAY PAINTING BOOTH OPERATION	
5.1	GENERAL	
5.2	CYCLE	
5.3	HEATING SYSTEM	22
SECTIO	ON 6 MARKINGS	
6.1	GENERAL	25
6.2		
6.3	WARNING SIGN	
0.5	(1114.12.00 01011	23
SECTIO	ON 7 VERIFICATION AND TESTS	
7.1	GENERAL	26
7.2	VERIFICATION OF DOCUMENTS AND DESIGN	26
7.3	RUNNING TEST	26
7.4	VENTILATION SYSTEM TEST	26
7.5	AIRFLOW TESTING	26



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