AS/NZS 2229:2004
(Incorporating Amendment No. 1)

Australian/New Zealand Standard™

Fuel dispensing equipment for explosive atmospheres

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 25 March 2004 and on behalf of the Council of Standards New Zealand on 2 April 2004.
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The following are represented on Committee EL-014:

Auckland Regional Chamber of Commerce and Industry
Australian Association of Certification Bodies
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Australian Gas Association
Australian Industry Group
Australian Institute of Petroleum
Department of Mineral Resources, New South Wales
Department of Mines and Energy, Queensland
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New Zealand Hazardous Areas Electrical Coordinating Committee
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Electrical equipment in hazardous locations to supersede AS 2229 Electrical equipment for explosive atmospheres—Electrical systems of dispensing equipment, Part 1-1982 and Part 2-1988 and NZS 6109 Electrical systems of dispensing equipment for explosive atmospheres, Part 1-1988 and Part 2-1988

This Standard applies to dispensing equipment for flammable liquids, LP gas and CNG dispensing equipment.

It prescribes general requirements in respect of design, construction and marking and includes a section on testing. It is intended for the guidance of manufacturers, users, statutory authorities and associated interests and for use in association with AS/NZS 3000 and New Zealand Electricity Regulations. This Standard does not cover modifications to equipment but readers should be aware that any modifications may require re-certification of the fuel dispenser.

Where Australian and New Zealand requirements or details vary they are shown within this Standard separated by a forward slash – "/".

The major differences between this edition and the previous Standards are as follows:

(a) Revision of previous disparate standards (AS 2229 and NZS 6109) into a joint document;

(b) Extension of the scope to include mechanical equipment;

(c) Inclusion of specific requirements for CNG dispenser construction;

(d) Revision of the requirements for vapour barriers; and

(e) Revision of the hazardous area classification - now included in AS/NZS 2430.3:1997.

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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1 SCOPE AND GENERAL

1.1 Scope

This Standard specifies requirements for design, construction and testing of fuel dispensing equipment.

The tests specified herein are intended as type tests to prove a particular design for compliance with this Standard.

NOTE: For installation, maintenance or overhaul/repair of fuel dispensers refer to AS/NZS 1596, AS/NZS 2381, AS 1940 or NZS 5425 as appropriate.

1.2 Application

Fuel dispensing equipment for hazardous areas shall comply with the requirements of AS/NZS 3100 except as varied herein and with the additional requirements of this Standard.

1.3 Referenced documents

The following documents are referred to in this Standard:

JOINT AUSTRALIAN/NEW ZEALAND STANDARDS

1596:2002	Storage and handling of Liquefied Petroleum Gas
1869:1996	Hose and hose assemblies for liquefied petroleum gases (LP Gas), natural gas and town gas
2381	Electrical equipment for explosive atmospheres—Selection, installation and maintenance Part 1:1999 General Requirements
2430	Classification of hazardous areas Part 3.2:1997 Examples of area classification—Vehicle workshops, vehicle parking, fuel dispensing stations and aircraft hangers
2739:2003	Natural gas (CNG) fuel systems for vehicle engines
3000:2000	Australian/New Zealand Wiring Rules
3100:2002	Approval and test specification—General requirements for electrical equipment
60079	Electrical apparatus for explosive gas atmospheres. Part 0:2000 General requirements. Part 20:2000 Data for flammable gases and vapours, relating to the use of electrical apparatus
60695	Fire hazard testing Part 2.11:2001 Glow-wire flammability test method for end products

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