

AS/NZS 3800:1997

Australian/New Zealand Standard®

**Electrical equipment for explosive
atmospheres—Overhaul and repair**

AS/NZS 3800:1997

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committees, EL/23, Electrical Equipment in Coal Mines and EL/14, Electrical Equipment in Hazardous Areas. It was approved on behalf of the Council of Standards Australia on 29 October 1997 and on behalf of the Council of Standards New Zealand on 17 October 1997. It was published on 5 December 1997.

The following interests are represented on Committees EL/23 and/or EL/14:

Auckland Regional Chamber of Commerce, New Zealand
Australian Association of Certification Bodies
Australian Chamber of Commerce and Industry
Australian Coal Association
Australian Electrical and Electronic Manufacturers Association
Australian Gas Association
Australian Institute of Petroleum
Australian Institute of Refrigeration, Air conditioning and Heating
Department of Mineral Resources, N.S.W.
Department of Mines and Energy, Queensland
Electrical Apparatus Service Association, Australia
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Electrical equipment for explosive atmospheres—Overhaul and repair

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committees, EL/23, Electrical Equipment in Coal Mines, and EL/14, Electrical Equipment in Hazardous Areas, to supersede AS 2290.2—1993, *Electrical equipment for coal mines—Maintenance and overhaul, Part 2: Overhaul and repair of electrical equipment for hazardous areas* and NZS 6112:1989, *Code of practice for the repair of electrical apparatus for use in potentially explosive atmospheres*.

This Standard covers Group I and Group II electrical equipment for use in Class I areas and also includes Class II equipment to be used in the presence of combustible dusts.

The objective of this Standard is to provide users and relevant regulatory authorities concerned with the repair and maintenance of electrical equipment in hazardous areas with guidance to ensure safety and compliance with the relevant existing Standards.

Each section of this Standard deals with the overhaul requirements appropriate to one of the types of explosion-protection which may be used to achieve electrical safety or with basic requirements and considerations which are fundamental to the safe use of electrical equipment in hazardous areas.

Major changes to AS 2290.2—1993 and NZS 6112:1989 are as follows:

- (a) Requirements for the repair and overhaul of equipment used in coal mines and other non-coal mining hazardous areas are now combined into one document.
- (b) Requirements for repair of equipment not covered by approval or certification and for repair and overhaul workshops have been clarified.
- (c) New Sections have been included covering—
 - (i) Ex n equipment;
 - (ii) DIP equipment; and
 - (iii) user information.

The other parts of the AS 2290 series, Part 1: *Maintenance of electrical equipment for hazardous areas* and Part 3: *Maintenance of gas detecting and monitoring equipment*, cover electrical equipment in coal mines (Group I) only.

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.

Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of this Standard.

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