

**AS/NZS 3800:2005**  
(Incorporating Amendment Nos. 1 and 2)

AS/NZS 3800:2005

Australian/New Zealand Standard™

**Electrical equipment for explosive  
atmospheres—Repair and overhaul**



## AS/NZS 3800:2005

A1 | This Joint Australian/New Zealand Standard was prepared by Joint Technical Committees EL-023, Electrical Equipment in Coal Mines and EL-014, Electrical Equipment in Hazardous Areas. It was approved on behalf of the Council of Standards Australia on 3 February 2005 and on behalf of the Council of Standards New Zealand on 11 February 2005.  
This Standard was published on 4 April 2005.

A1 | The following interests are represented on Committees EL-023 and EL-014:

Auckland Regional Chamber of Commerce  
Australian Chamber of Commerce and Industry  
Australian Coal Association  
Australian Gas Association  
Australian Electrical and Electronic Manufacturers Association  
Australian Industry Group  
Australian Institute of Petroleum  
Certification interests (Australia)  
Department of Natural Resources and Mines (Qld)  
Department of Primary Industries, Mine Safety (NSW)  
Electrical Apparatus Service Association  
Electrical Regulatory Authorities Council  
Energy Networks Association  
Engineers Australia  
Gas Association of New Zealand  
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Mining Electrical and Mining Mechanical Engineering Society  
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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

*This Standard was issued in draft form for comment as DR 04438.*

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# **Electrical equipment for explosive atmospheres—Repair and overhaul**

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committees, EL-023, Electrical Equipment in Coal Mines, and EL-014, Electrical Equipment in Hazardous Areas, to supersede AS/NZS 3800:1997, *Electrical equipment for explosive atmospheres—Overhaul and repair*.

*This Standard incorporates Amendment No. 1 (April 2005) and Amendment No. 2 (June 2005). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

This Standard covers repair and overhaul of Group I and Group II electrical equipment and also includes 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 repair and 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.

It has been agreed by the Committee that this Standard will be replaced by the adoption of IEC 60079-19 when the IEC revision is published (late 2006/early 2007).

Considering this fact, the revision of the 1997 Edition has focused on the most urgent aspects requiring adjustment/updating. The main structure of the Standard was kept, in order to avoid further delays to the completion of the revision and publication of this new Edition, which has a limited currency (2 to 3 years).

Major changes to AS/NZS 3800:1997 are as follows:

A2

- (a) Clauses 1.4.5, 1.4.7, 1.4.27, 1.4.33, 1.5.6, 4.2.15 and 6.2.15 were added.
- (b) Clauses 1.5.2 and 2.3.4 have been fully reworded.
- (c) Clause 2.4.1 has been expanded to cover cast irons.
- (d) Clause 2.5.2(g) was reworded and Figure 2.1 added.
- (e) In Clause 2.5.3 last two paragraphs were added.
- (f) Clause 3.2.12 was reworded.
- (g) In Clause 9.2.2 a NOTE was added.
- (h) Clause 9.2.4 was reworded and the Table was deleted.
- (i) Figure 9.1 has been modified.
- (j) A new Section has been included to cover Ex 'm' equipment (Section 7).
- (k) Paragraph A2.2.2 of Annex A (Competent persons) was deleted.
- (l) Appendix B (Guidelines on the qualifications and competency of competent persons) was deleted.
- (m) Paragraph D.1.4.2 was modified.
- (n) Appendix E was modified.
- (o) A new typical repair/overhaul report for Ex 'm' equipment was added (Appendix V).

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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