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AS/NZS 4871.1:2012
(Incorporating Amendment No. 1)

AS/NZS 4871.1:2012

Australian/New Zealand Standard™

Electrical equipment for mines and quarries

Part 1: General requirements

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The following are represented on Committee EL-023:

Australian Chamber of Commerce and Industry
Australian Coal Association
Australian Industry Group
Consult Australia
Department of Employment, Economic Development and Innovation, Qld
Department of Mines and Petroleum, WA
Department of Trade and Investment, Regional Infrastructure and Services, NSW
Electrical Apparatus Service Association
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Part 1: General requirements

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-023, Electrical Equipment in Mines and Quarries, to supersede AS/NZS 4871.1:2010, *Electrical equipment for mines and quarries*, Part 1: *General requirements*.

This Standard incorporates Amendment No. 1 (April 2014). 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.

The objective of this Standard is to set out the minimum design, manufacturing, testing and performance requirements for electrical equipment intended for use in mines and quarries.

This Standard is Part 1 of the series AS/NZS 4871, *Electrical equipment for mines and quarries*, which comprises the following parts:

Part 1: General requirements (this Standard)

Part 2: Distribution, control and auxiliary equipment

Part 3: Substations

Part 4: Mains powered electrical mobile machines

Part 5: Battery powered electrical mobile machines

Part 6: Diesel powered machinery and ancillary equipment

This Standard differs from the 2010 edition as follows:

(a) Additional requirements for high voltage tests including partial discharge and impulse testing. Appendix H updated with details for partial discharge and impulse test methods.

(b) Creepage and clearance requirements altered in light of additional high voltage testing.

(c) Requirements for earth-protection scheme clarified and additional information included in Appendix C.

(d) Revised requirements for pilot protection of restrained receptacles, earth fault lockout and earth continuity in hazardous zones.

(e) Minor changes of clarification.

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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