

Australian/New Zealand Standard™

**Electrical equipment for coal mines, for  
use underground**

**Part 4: Mains powered electrical mobile  
machines**



Standards Australia



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NEW ZEALAND  
Pūrongo Aotearoa

## **AS/NZS 4871.4:2002**

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This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-023, Electrical Equipment in Coal Mines. It was approved on behalf of the Council of Standards Australia on 14 January 2002 and on behalf of the Council of Standards New Zealand on 19 February 2002. It was published on 2 March 2002.

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The following interests are represented on Committee EL-023:

Australian Chamber of Commerce and Industry  
Australian Coal Association  
Australian Electrical and Electronic Manufacturers Association  
Australian Industry Group  
Department of Mineral Resources N.S.W.  
Department of Natural Resources and Mines (QLD)  
Electrical Apparatus Service Association  
Mining Electrical and Mining Mechanical Engineers Society  
New Zealand Hazardous Areas Electrical Coordinating Committee  
Regulatory authorities (electrical)  
Regulatory interests, New Zealand  
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# Australian/New Zealand Standard™

## **Electrical equipment for coal mines, for use underground**

### **Part 4: Mains powered electrical mobile machines**

Originated as part of AS 2595.1—1983.  
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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-023, Electrical Equipment in Coal Mines.

The objective is to set out requirements for the design, construction and testing of electrical powered mobile machines for use in underground coal mines.

This Standard is Part 4 of the series AS/NZS 4871 *Electrical equipment for coal mines, for use underground*, prepared to supersede AS 1039, AS 1740, AS 2595.1 and AS 2989 (in part). The Australian Standards will remain available superseded until all relevant regulations have been updated.

The AS/NZS 4871 series comprises the following parts:

- Part 1: General requirements
- Part 2: Distribution, control and auxiliary equipment
- Part 3: Substations
- Part 4: Main powered electrical mobile machines (this Part)
- Part 5: Battery powered electrical mobile machines

In recognition of changes made to this Standard, existing equipment should be assessed for risk and interim control measures should be implemented.

Current installed equipment should be updated to conform to this Standard. Compliance improvements should be made within a time frame that takes into consideration the cost of upgrading and the associated risk levels.

Enquiries concerning approval in Australia should be made to the following organizations:

- (a) Department of Mineral Resources N.S.W.
- (b) Department of Natural Resources and Mines (QLD).
- (c) Department of Mineral and Petroleum Resources, W.A.
- (d) Department of Mines and Energy S.A.
- (e) Department of Industry, Technology and Resources, Vic.

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Part 4: Mains powered electrical mobile machines

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S E C T I O N 1    S C O P E   A N D   G E N E R A L

**1.1 SCOPE**

This Standard specifies requirements for the design, construction and testing of electrical powered mobile machines.

This Standard shall be read in conjunction with AS/NZS 4871.1.

NOTE: Mains powered mobile machines may require approval by the relevant regulatory authority.

**1.2 APPLICATION**

All mains powered mobile machines shall comply with the requirements of Part 1 of this Standard and the following requirements.

**1.3 REFERENCED DOCUMENTS**

AS/NZS

4240        Remote controls for mining equipment

4871        Electrical equipment for coal mines, for use underground

4871.1     Part 1: General requirements