

Australian/New Zealand Standard™

**Remote control systems for mining
equipment**

**Part 3: Operation and maintenance for
underground coal mining**



AS/NZS 4240.3:2013

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Australian Cablemakers Association
Australian Chamber of Commerce and Industry
Australian Coal Association
Australian Industry Group
Consult Australia
Department of Mines and Petroleum, WA
Department of Natural Resources and Mines, QLD
Department of Trade and Investment, Regional Infrastructure and Services, NSW
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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.

This Standard is based on NSW MDG 5002 C, *Guidelines for the use of remote controlled mining equipment in underground coal mines*, which was developed for the Mine Safety Operations Division of Trade and Investment NSW by a working group consisting of representatives from major underground coal mines operating remote control mining equipment together with equipment suppliers, maintenance personnel, CFMEU and regulators. NSW MDG 5002 C will be withdrawn on publication of this Standard.

The objective of this Standard is to provide mines with the information and requirements to assist in the management of risks associated with the use of remote control mining equipment in underground coal mines.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

Statements expressed in mandatory terms in notes to Figures are deemed to be requirements of the Standard.

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Australian/New Zealand Standard
Remote control systems for mining equipment

Part 3: Operation and maintenance for underground coal mining

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard provides information and specifies requirements for the management of risks associated with remote control mining equipment in underground coal mines. It covers issues related to work system design, equipment operation and maintenance, personnel and the environment in which the equipment is operated.

NOTE: Technical requirements for the design of remote control equipment are given in AS/NZS 4240.1, *Remote control systems for mining equipment—Part 1: Design, construction, testing, installation and commissioning*.

This Standard applies to the following equipment:

- (a) Continuous miners (including roadheaders, bolter miners, sump miners and the like).
- (b) Shearers.
- (c) Mobile roof supports [breaker line supports (BLS)].
- (d) Mobile roof bolters.
- (e) Continuous haulage systems.
- (f) Breaker feeders.
- (g) Load haul dump vehicles (LHDs).
- (h) Shearer carriers.
- (i) Shuttle cars.
- (j) Longwall pump station movers.

The Standard covers the use of the equipment throughout its life cycle, including arrival at the mine, transport underground, installation, commission, operation, maintenance and repair, and transport from the mine. It also encompasses both on board and off board modes of operation.

This Standard does not apply to the following equipment; however, it may be used to assist in the management of risks associated with these types of equipment:

- (i) Cranes.
- (ii) Shaft and drift winders.
- (iii) Special purpose equipment.
- (iv) Fixed conveyor systems.
- (v) Automatic vehicle guidance systems.
- (vi) SCADA and remote stop/start stations, e.g. remote closing of high voltage circuit breakers.
- (vii) Longwall roof support.