

Australian Standard™

**Underground mining—Winding  
suspension equipment**

**Part 5: Rope swivels and swivel hooks**

This Australian Standard was prepared by Committee ME-018, Mining Equipment. It was approved on behalf of the Council of Standards Australia on 21 April 2005. This Standard was published on 15 June 2005.

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Australian Chamber of Commerce and Industry  
Australian Coal Association  
Australian Industry Group  
Department of Industry and Resources WA  
Department of Labour New Zealand  
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STANDARDS AUSTRALIA

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RECONFIRMATION

OF

AS 3637.5—2005

**Underground mining—Winding suspension equipment  
Part 5: Rope swivels and swivel hooks**

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Technical Committee ME-018 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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## PREFACE

This Standard was prepared by the Standards Australia Committee ME-018, Mining Equipment to supersede AS 3637.5—1989.

The objective of this Standard is to provide requirements for the safe and effective operation of rope swivels and swivel hooks for reference by manufacturers, users and regulators.

This Standard is one of a series of Standards on underground mine winding suspension equipment, as follows:

## AS

- 3637     Underground mining—Winding suspension equipment
- 3637.1   Part 1:   General requirements
- 3637.2   Part 2:   Detaching hooks
- 3637.3   Part 3:   Rope cappings
- 3637.4   Part 4:   Drawbars and connecting links
- 3637.5   Part 5:   Rope swivels and swivel hooks (this Standard)
- 3637.6   Part 6:   Shackles and chains

Reference was made to the British Coal document, *Design Guide for Cage Suspension Gear*, in the preparation of Appendix A.

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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## STANDARDS AUSTRALIA

**Australian Standard****Underground mining—Winding suspension equipment****Part 5: Rope swivels and swivel hooks****1 SCOPE**

This Standard specifies requirements for the design and manufacture of rope swivels and swivel hooks for use in the suspension of conveyances in underground vertical mine shafts.

General requirements are specified in AS 3637.1.

## NOTES:

- 1 Guidelines for the design of threaded components are given in Appendix A.
- 2 The use of hooks may require approval of the statutory authorities.

**2 REFERENCED DOCUMENT**

The following document is referred to in this Standard:

AS  
3637 Underground mining—Winding suspension equipment  
3637.1 Part 1: General requirements

**3 DEFINITIONS**

For the purpose of this Standard, the definitions below apply.

**3.1 Rope swivel**

A rope suspension assembly that allows rotation between a rope and its attachment (see Figures 1 to 3).

**3.2 Swivel hook**

A rope suspension assembly that allows rotation between a rope and its attachment containing a hook for suspending a load (see Figures 4 and 5).

**3.3 Working load limit**

The maximum static load permitted to be carried by the suspension equipment.

**4 SIZE DESIGNATION**

The size designation for rope swivels and swivel hooks shall be the working load limit in tonnes. Rope swivels and swivel hooks should be manufactured to the following size designations:

3, 5, 10, 15 and 20 tonnes.

**5 MATERIALS****5.1 Component type designation**

The components of each of the various types of rope swivels and swivel hooks (see Figures 1 to 5) shall be designated Type A or Type B in accordance with Table 1. Components not listed in Table 1 shall be designated Type B (except shear pins).