

Australian Standard<sup>®</sup>

**Underground mining—Shaft equipment**

**Part 7: Sheaves**



This Australian Standard® was prepared by Committee ME-018, Mining Equipment. It was approved on behalf of the Council of Standards Australia on 14 August 2006. This Standard was published on 7 December 2006.

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The following are represented on Committee ME-018:

- Australasian Institute of Mining and Metallurgy
  - Australian Chamber of Commerce and Industry
  - Australian Industry Group
  - Department of Consumer and Employment Protection (W.A.)
  - Department of Natural Resources, Mines and Water (Qld)
  - Department of Primary Industries, Mine Safety (NSW)
  - Engineers Australia
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This Standard was issued in draft form for comment as DR 15511.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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**Underground mining—Shaft equipment**

**Part 7: Sheaves**

First published as AS 3785.7—1993.  
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## PREFACE

This Standard was prepared by the Standards Australia Committee ME-018, Mining Equipment, to supersede AS 3785.7—1993.

*This Standard incorporates Amendment No. 1 (May 2011). 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 provide nationally consistent requirements for the safety and functionality of sheaves used in underground mines for reference by manufacturers, users and regulators.

This Standard is Part 7 in a series of Standards on shaft equipment for underground mines as follows:

AS

- 3785 Underground mining—Shaft equipment
- 3785.1 Part 1: Drum winding overwind safety catch system
- 3785.2 Part 2: Friction winding arresting systems
- 3785.3 Part 3: Drum winding gripper systems
- 3785.4 Part 4: Conveyances for vertical shafts
- 3785.5 Part 5: Headframes
- 3785.6 Part 6: Guides and rubbing ropes for conveyance
- 3785.7 Part 7: Sheaves (this Standard)

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## STANDARDS AUSTRALIA

**Australian Standard**  
**Underground mining—Shaft equipment****Part 7: Sheaves****1 SCOPE**

This Standard specifies requirements for sheaves manufactured from ferrous materials used in mine winding systems. This Standard does not apply to drive pulleys used in friction winder installations.

## NOTES:

- 1 Information to be provided by the purchaser is given in Appendix A.
- 2 Information to be provided by the supplier is given in Appendix B.

**2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

## AS

- 1065 Non-destructive testing—Ultrasonic testing of carbon and low alloy steel forgings
- 1171 Non-destructive testing—Magnetic particle testing of ferromagnetic products, components and structures
- 1403 Design of rotating steel shafts
- 1988 Welding of ferrous castings
- 1988.1 Part 1: Steel castings
- 2536 Surface texture
- 2729 Rolling bearings—Dynamic load ratings and rating life
- 3507 Non-destructive testing
- 3507.1 Part 1: Guide to radiography for ferrous castings
- 3507.2 Part 2: Radiographic determination of quality of ferrous castings
- 4100 Steel structures

## AS/NZS

- 1554 Structural steel welding
- 1554.1 Part 1: Welding of steel structures
- 1554.4 Part 4: Welding of high strength quenched and tempered steels
- 1554.5 Part 5: Welding of steel structures subject to high levels of fatigue loading
- 2574 Non-destructive testing—Ultrasonic testing of ferritic steel castings

## BS

- 7608 Code of practice for fatigue design and assessment of steel structures