

Australian/New Zealand Standard™

Underground mining—Shaft equipment

Part 8: Conveyances for inclined shafts



AS/NZS 3785.8:2016

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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
Construction and Mining Equipment Industry Group
Department of Industry, Skills and Regional Development, NSW
Department of Mines and Petroleum, WA
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Australian/New Zealand Standard™

Underground mining—Shaft equipment
Part 8: Conveyances for inclined shafts

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee ME-018, Mining Equipment, to supersede AS 3785.8—1994, *Underground mining—Shaft equipment, Part 8: Personnel conveyances in other than vertical shafts*.

The objective of this Standard is to specify general requirements for conveyances used in inclined shafts that do not exceed a gradient of one in three.

It is one of a series of Standards on shaft equipment for underground mines. The other Standards in the series are as follows:

AS/(NZS)

3785	Underground mining—Shaft equipment
3785.1	Part 1: Shaft overwind safety catch system
3785.2	Part 2: Shaft 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: Fixed guides, rope guides and rubbing ropes for conveyances
3785.7	Part 7: Sheaves

The principal differences between this and the previous edition are as follows:

- (a) Expansion of the scope to cover all types of conveyances.
- (b) Introduction of functional safety principles in the design philosophy of conveyances.
- (c) Introduction of commissioning the conveyance on site.
- (d) Introduction of in-service brake testing of the emergency braking system.
- (e) Introduction of maintenance of conveyances.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

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Australian/New Zealand Standard
Underground mining—Shaft equipment

Part 8: Conveyances for inclined shafts

1 SCOPE

This Standard specifies general requirements for conveyances used in inclined shafts that do not exceed a gradient of one in three. The conveyance system may be driven by a winder mounted or remote operator.

The conveyances are mounted on flanged wheels that operate on a railway track and hauled by a rope driven by a winder.

This Standard does not include requirements for the winder, rope, rope guidance system in the incline or the railway track.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

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| 1710 | Non-destructive testing—Ultrasonic testing of carbon and low alloy steel plate and universal sections—Test methods and quality classification |
| 3637 | Underground mining—Winding suspension equipment |
| 3637.1 | Part 1: General requirements |
| 3637.3 | Part 3: Rope cappings |
| 3637.4 | Part 4: Drawbars and connecting links |
| 3751 | Underground mining—Rope haulage—Couplings, drawbars, and safety chains |
| 3990 | Mechanical equipment—Steelwork |
| 4100 | Steel structures |
| 60204 | Safety of machinery—Electrical equipment of machines |
| 60204.1 | Part 1: General requirements (IEC 60204-1, Ed. 5 (FDIS) MOD) |

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| 1269 | Occupational noise management |
| 1269.1 | Part 1: Measurement and assessment of noise immission and exposure |
| 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 |
| 2080 | Safety glass for land vehicles |
| 4024.1 | Safety of machinery (series) |
| 4871 | Electrical equipment for mines and quarries (series) |

AS/NZS ISO

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| 31000 | Risk management—Principles and guidelines |
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