AS 4606—2012

Australian Standard®

Grade S fire resistant and antistatic requirements for conveyor belting and conveyor accessories

This Australian Standard® was prepared by Committee RU-002, Conveyor and Elevator Belting. It was approved on behalf of the Council of Standards Australia on 11 July 2012. This Standard was published on 3 September 2012.

The following are represented on Committee RU-002:

- Australian Chamber of Commerce and Industry
- Department of Industry and Investment, NSW
- Department of Labour, New Zealand
- Engineers Australia
- NSW Department of Industry and Investment
- TestSafe Australia

Additional Interests:

- Australasian Institute of Mining and Metallurgy
- Australasian Plastics and Rubber Institute
- Australian Coal Association
- Australian Industry Group
- Bureau of Steel Manufacturers of Australia
- Department of Employment, Economic Development and Innovation
- Energy Networks Association
- The Institute of Quarrying Australia

This Standard was issued in draft form for comment as DR AS 4606.

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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PREFACE

This Standard was prepared by the Standards Australia Committee RU-002, Conveyor and Elevator Belting, to supersede AS 4606—2000, *Fire resistant and antistatic requirements for conveyor belting used in underground coal mines*.

The objective of this Standard is to contemporize requirements for fire resistant and antistatic conveyor belting to ensure safe belting is supplied to industry.

This Standard was initially developed for the underground coal mining industry and has been contemporized to reflect requirements for fire resistant and anti-static conveyor belting and accessories as may be required for use in potentially explosive atmospheres.

Mandatory statements in notes to figures are deemed to be requirements of this Standard.

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.

CONTENTS

STANDARDS AUSTRALIA

Australian Standard

Grade S fire resistant and antistatic requirements for conveyor belting and conveyor accessories

1 SCOPE

This Standard sets out minimum safety requirements for fire resistant and antistatic conveyor belting and conveyor accessories (Grade S).

NOTE: For other conveyor belting properties and other grades, reference should be made to AS 1332 and AS 1333.

2 APPLICATION

This Standard applies to conveyor belts and conveyor accessories used in underground coal mines.

It may be relevant in other situations where there is the hazard of a potentially explosive atmosphere. A risk assessment process should be used to determine whether Grade S belting or Grade S accessories are required in these environments.

NOTES:

1 This Standard does not apply to idlers or conveyor structure made from or covered with non-metallic materials. Appendix D provides guidance on the hazards and risks associated with the use of such products.

2 This Standard is intended to apply to all conveyor belts including conventional and non-conventional belts such as cable and pouch belt.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1199	Sampling procedures for inspection by attributes	
1199.0	Part 0:	Introduction to the ISO 2859 attribute sampling system
1199.1	Part 1:	Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection
1332	Conveyor belting—Textile reinforced	
1333	Conveyor belting of elastomeric and steel cord construction	
1334	Methods of testing conveyor and elevator belting	
1334.9	Part 9:	Determination of electrical resistance of conveyor belting
1334.10	Part 10:	Determination of ignitability and flame propagation characteristics of conveyor belting
1334.11	Part 11:	Determination of ignitability and maximum surface temperature of belting subjected to friction
1334.12	Part 12:	Determination of combustion propagation characteristics of conveyor belting
4024	Safety of machinery	
4024.1	Part 1:	General principles (series)

AS/NZS

1020	Control of undesirable static electricity
3678	Structural steel—Hot-rolled plates, floorplates and slabs