

Specification for mechanical and spliced joints in conveyor belting for use underground

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Committees responsible for this British Standard

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- British Rubber Manufacturers Association Ltd
- Health and Safety Executive
- Institute of Materials
- Tun Abdul Razak Research Centre
- UK Steel Association

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Foreword

This British Standard has been prepared by PRI/67, Conveyor belting.

For some years the industry has adopted informal specifications which have provided a satisfactory level of operational safety, but with the increased use and value of risk assessments a more formalized approach is necessary.

This document is intended to be used in conjunction with BS 3289 and British Coal Specification 730 until such time as these specifications are replaced by harmonized European Standards.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

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1 Scope

This British Standard specifies requirements for joints made in conveyor belting for use underground.

It specifies performance requirements for the following properties:

- joints made with mechanical fasteners (static strength);
- joints made with mechanical fasteners (dynamic strength);
- joints made by chemical splicing/vulcanization (static strength);
- joints made by chemical splicing/vulcanization (dynamic strength).

The methods of test to be used to validate the requirements are specified in the annexes. This standard is not applicable or valid for light conveyor belts as specified in BS EN 873.

NOTE Although this standard is intended to specify the requirements for conveyor belting, the test methods specified in 4.1.1 and 4.2.1 can also be used to assess the performance of mechanical fasteners when used with specific types of conveyor belting. For this reason, an alternative test configuration is specified in Annex A.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS EN ISO 1120, *Conveyor belts — Determination of strength of mechanical fastenings — Static test method*.

BS 3289, *Specification for textile carcass conveyor belting for use in underground mines (including fire performance)*.

BS 1610, *Methods for the load verification of testing machines*.

3 Terms and definitions

For the purpose of this standard, the following terms and definitions apply:

3.1

fastener pitch

the nominal distance between a point on a fastener unit and the corresponding point on the next fastener unit (see Figure A.1 and Figure A.2)

3.2

fastened width

the number of fastener units inserted in one end of a test piece multiplied by the pitch (see Figure A.1 and Figure A.2)

3.3

nominal tensile strength

the specified minimum value of the tensile strength of the conveyor belt, expressed in N/mm

3.4

joints

the joining of individual lengths of conveyor belting to produce a longer length

NOTE This should not be confused with transverse (or longitudinal) fabric joints made during the production process for multi-ply belting.