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Title: BS EN 14973 Conveyor belts for use in underground installations - Electrical and flammability safety requirements

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

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Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

English Version

Conveyor belts for use in underground installations -
Electrical and flammability safety requirements

Courroies transporteuses pour usage dans les
installations souterraines - Exigences de sécurité
électrique et de protection contre l'inflammabilité

Fördergurte für die Verwendung unter Tage -
Elektrische und brandtechnische
Sicherheitsanforderungen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 188.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 14973:2024) has been prepared by Technical Committee CEN/TC 188 “Conveyor belts”, the secretariat of which is held by SNV.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 14973:2015.

Significant technical changes between this document and the previous edition of this European Standard:

- The EN 1554 standard has been replaced by EN ISO 20238:2019. The corresponding technical revisions have been made.
- A new Clause 10 “10 Test reports for conveyor belts used in underground installations” has been added. The definition of the construction series has been revised and described in details.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, Annex ZB and Annex ZC, which are an integral part of this document.

Introduction

This document is a type C standard as stated in EN ISO 12100:2010.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

The approach taken in this European Standard is to identify the main hazards encountered in underground conveying applications and to specify requirements for conveyor belts that will provide the necessary operational safety. Three Classes are specified, A, B and C, as defined in 3.9 to 3.11.

NOTE According to national authorities Class C (C1/C2) conveyor belts are requested for use in EU coal mining.

1 Scope

This document specifies electrical and flammability safety requirements for conveyor belts intended for use in underground installations, in the presence of flammable or non-flammable atmospheres.

Conveyor belts covered by this document and intended for use in flammable atmospheres are intended for use on conveyor belt installations (machinery in mines). The belt is a component or part of equipment, which can be incorporated into the conveyor, which is an equipment of Group I, Category M2, as defined in 3.2.2 of EN ISO 80079-36:2016.

This document is not applicable to light conveyor belts as described in EN ISO 21183-1:2006 nor is it applicable to conveyor belts which are manufactured before the date of publication of this document by CEN.

This document deals with those significant hazards detailed in A.1.

Attention is drawn to Annexes ZA and ZB.

NOTE A summary of the requirements of this document is given in Table 2. This is intended for quick reference only.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 12881-1:2014, *Conveyor belts — Fire simulation flammability testing — Part 1: Propane burner tests*

EN 12881-2:2005+A1:2008, *Conveyor belts — Fire simulation flammability testing — Part 2: Large scale fire test*

EN ISO 284:2012, *Conveyor belts — Electrical conductivity — Specification and test method (ISO 284:2012)*

EN ISO 340:2022, *Conveyor belts — Laboratory scale flammability characteristics — Requirements and test method (ISO 340:2022)*

EN ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100:2010)*

EN ISO 15236-3:2017, *Steel cord conveyor belts — Part 3: Special safety requirements for belts for use in underground installations (ISO 15236-3:2017)*

EN ISO 20238:2019, *Conveyor belts — Drum friction testing (ISO 20238:2018)*

EN ISO 22721:2023, *Conveyor belts — Specification for rubber- or plastics-covered conveyor belts of textile construction for underground mining (ISO 22721:2023)*

EN ISO 80079-36:2016, *Explosive atmospheres — Part 36: Non-electrical equipment for explosive atmospheres — Basic method and requirements (ISO 80079-36:2016)*

EN IEC 31010:2019, *Risk management — Risk assessment techniques (IEC 31010:2019)*