

საქართველოს სტანდარტი

კონვეიერის ქამრები მიწისქვეშა ნაგებობებში გამოყენებისათვის -
უსაფრთხოების მოთხოვნები ელექტრული და აალებადის წინააღმდეგ

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

სსტ ენ 14973:2015/2017

საინფორმაციო მონაცემები

1 შემუშავებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ

2 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს 2017 წლის 27 დეკემბრის № 104 განკარგულებით

3 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 14973:2015 „კონვეიერის ქამრები მიწისქვეშა ნაგებობებში გამოყენებისათვის - უსაფრთხოების მოთხოვნები ელექტრული და აალებადის წინააღმდეგ“

4 პირველად

5 რეგისტრირებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2017 წლის 27 დეკემბერი №268-1.3-012513

აკრძალულია ამ სტანდარტის გადაცემა მესამე პირებისათვის ან/და მისი სხვა ფორმით გავრცელება

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

EUROPEAN STANDARD

EN 14973

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2015

ICS 53.040.10; 13.220.40

Supersedes EN 14973:2006+A1:2008

English Version

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

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

Fördergurte für die Verwendung unter Tage -
Elektrische und brandtechnische
Sicherheitsanforderungen

This European Standard was approved by CEN on 26 September 2015.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists 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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
European foreword.....	4
Introduction	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions	7
4 Ignition hazard assessment.....	8
5 Electrical resistance	8
6 Frictional heating.....	8
6.1 Conveyor belts intended for general use in underground installations (Class A), and for use in hazardous installations where secondary safety devices are present (Classes B2 and C2).....	8
6.2 Conveyor belts intended for use in installations where there is a potentially flammable atmosphere and where secondary safety devices are not present (Class B1)	8
6.3 Conveyor belts intended for use in installations where there is a potentially flammable atmosphere plus combustible dust or material conveyed, and where secondary safety devices are not present (Class C1)	9
7 Resistance to ignition	9
7.1 Conveyor belts intended for general use in underground installations (Class A), for use where there is a potentially flammable atmosphere (Classes B1 and B2), and for use in hazardous installations where secondary safety devices are present (Class C2)	9
7.2 Conveyor belts intended for use in installations where there is a potentially flammable atmosphere plus combustible dust or material conveyed, and where secondary safety devices are not present (Class C1)	9
8 Fire propagation.....	9
8.1 Introduction.....	9
8.2 Conveyor belts intended for general use in underground installations (Class A) and for use where there is a potentially flammable atmosphere (Classes B1 and B2).....	10
8.2.1 General.....	10
8.2.2 Two metre propane burner test	10
8.2.3 Double burner test.....	10
8.2.4 Mid-scale high energy test	10
8.3 Conveyor belts intended for use in installations where there is a potentially flammable atmosphere plus combustible dust or material conveyed, and where secondary safety devices are not present (Class C1)	10
8.4 Conveyor belts intended for use in installations where there is a potentially flammable atmosphere plus combustible dust or material conveyed, plus additional fuel sources (fire load) and where secondary safety devices are present (Class C2)	11
8.4.1 Full scale gallery.....	11
8.4.2 Laboratory scale gallery	11
9 Marking.....	11
Annex A (informative) Hazards and risk assessment.....	13

საინფორმაციო ნაწილი. სრული ტექსტის სახანძრავად შექმნილი სტანდარტი.

A.1 Identification of hazards 13

A.2 Risk assessment 13

A.3 Methods for addressing hazards 14

Annex B (informative) Example of an ignition hazard assessment for a conveyor belt intended for use in a potentially explosive atmosphere 15

Annex C (informative) Suggested conveyor belt approval / compliance options 16

Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 94/9/EC 17

Annex ZB (informative) Relationship between this European Standard and the Essential Requirements of EC Directive 2006/42/EC 18

Bibliography 19

საინფორმაციო ნაწილი. სრული ტექსტის სახსრად შეიძინეთ სტანდარტი.

European foreword

This document (EN 14973:2015) has been prepared by Technical Committee CEN/TC 188 “Conveyor belts”, the secretariat of which is held by SNV.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2016, and conflicting national standards shall be withdrawn at the latest by May 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14973:2006+A1:2008.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are an integral part of this document.

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

Requirements for alternative Fire Propagation test, method D, added. For a defined range of belts this laboratory scale test can be substituted for the full scale test specified in EN 12881-2 and 8.4 of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

საინფორმაციო ნაწილი. სრული ტექსტის სახსრავად შეიძინეთ სტანდარტი.

Introduction

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

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.