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



### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 22721:2023 sisaldab Euroopa standardi EN ISO 22721:2023 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 22721:2023 consists of the English text of the European standard EN ISO 22721:2023.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 02.08.2023.

Date of Availability of the European standard is 02.08.2023.

Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.

The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

#### ICS 53.040.20

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# EUROPEAN STANDARD

## **EN ISO 22721**

# NORME EUROPÉENNE EUROPÄISCHE NORM

August 2023

ICS 53.040.20

Supersedes EN ISO 22721:2007

### **English Version**

# Conveyor belts - Specification for rubber- or plasticscovered conveyor belts of textile construction for underground mining (ISO 22721:2023)

Courroies transporteuses - Spécification pour courroies transporteuses à structure textile recouvertes de caoutchouc ou de plastique, pour utilisation dans les mines souterraines (ISO 22721:2023)

Fördergurte - Anforderungen an Textilfördergurte mit Gummi- oder Kunststoff-Deckplatten für Anwendungen unter Tage (ISO 22721:2023)

This European Standard was approved by CEN on 27 July 2023.

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.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

### **European foreword**

This document (EN ISO 22721:2023) has been prepared by Technical Committee ISO/TC 41 "Pulleys and belts (including veebelts)" in collaboration with 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 February 2024, and conflicting national standards shall be withdrawn at the latest by February 2024.

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

This document supersedes EN ISO 22721:2007.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

### **Endorsement notice**

The text of ISO 22721:2023 has been approved by CEN as EN ISO 22721:2023 without any modification.

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### Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

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This document was prepared by Technical Committee ISO/TC 41 *Pulleys and belts (including veebelts)*, Subcommittee SC 3, *Conveyor belts*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 188, *Conveyor belts*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces first edition (ISO 22721:2007), which has been technically revised.

The main changes are as follows:

- the warning before the Scope was removed;
- the footnote and related widths were removed from Table 3;
- editorial changes were done.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

# Conveyor belts — Specification for rubber- or plasticscovered conveyor belts of textile construction for underground mining

### 1 Scope

This document specifies requirements for rubber- or plastics-covered conveyor belting of textile construction for use in underground mines and disposed on flat or troughed idlers. It is not applicable to light conveyor belts as described in ISO 21183-1.

This document does not include requirements for plastics covers. These are agreed upon by the manufacturer and purchaser, taking into account the type of plastics to be used.

Related items that are not requirements of this document, but which it is recommended be agreed upon by the manufacturer and purchaser, are included in <u>Annex A</u>.

Details recommended to be supplied by the purchaser of belting with an enquiry are given in Annex B.

The ability of a belt to run straight cannot be assessed until the belt is installed. Requirements for this are, therefore, outside the scope of this document; nevertheless, recommendations for lateral drift are given in Annex C.

Attention is drawn to local regulations for safety which might be in place where the belts are to be used.

#### 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.

ISO 37, Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties

ISO 188, Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests

ISO 252, Conveyor belts — Adhesion between constitutive elements — Test methods

ISO 282, Conveyor belts — Sampling

ISO 283, Conveyor belts — Full thickness tensile strength, elongation at break and elongation at the reference force — Test method

ISO 583, Conveyor belts with a textile carcass — Total belt thickness and thickness of constitutive elements — Test methods

ISO 703, Conveyor belts — Transverse flexibility (troughability) — Test method

ISO 1120, Conveyor belts — Determination of strength of mechanical fastenings — Static test method

ISO 4649:2017, Rubber, vulcanized or thermoplastic — Determination of abrasion resistance using a rotating cylindrical drum device

ISO 16851, Textile conveyor belts — Determination of the net length of an endless (spliced) conveyor belt

EN 14973, Conveyor belts for use in underground installations — Electrical and flammability safety requirements