

**Steel cord conveyor belts - Part 1: Design,  
dimensions and mechanical requirements  
for conveyor belts for general use**

Steel cord conveyor belts - Part 1: Design,  
dimensions and mechanical requirements for  
conveyor belts for general use

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 15236-1:2005 sisaldab Euroopa standardi EN ISO 15236-1:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 25.11.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 15236-1:2005 consists of the English text of the European standard EN ISO 15236-1:2005.</p> <p>This document is endorsed on 25.11.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This part of ISO 15236 specifies the performance and constructional requirements applicable to conveyor belts having steel cords in the longitudinal direction as reinforcement.</p>	<p><b>Scope:</b> This part of ISO 15236 specifies the performance and constructional requirements applicable to conveyor belts having steel cords in the longitudinal direction as reinforcement.</p>
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**Võtmesõnad:** breaking load, conveyor belts, design, dimensions, marking

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English Version

**Steel cord conveyor belts - Part 1: Design, dimensions and  
mechanical requirements for conveyor belts for general use (ISO  
15236-1:2005)**

Courroies transporteuses à câbles d'acier - Partie 1:  
Exigences de conception, de dimensions et mécaniques  
des courroies transporteuses à usage général (ISO 15236-  
1:2005)

Stahlseilfördergurte - Teil 1: Aufbau, Maße und  
mechanische Anforderungen an Fördergurte für allgemeine  
Einsatzbedingungen (ISO 15236-1:2005)

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## Foreword

This document (EN ISO 15236-1:2005) has been prepared by Technical Committee CEN/TC 188 "Conveyor belts", the secretariat of which is held by BSI, in collaboration with Technical Committee ISO/TC 41 "Pulleys and belts (including veebelts)".

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**Steel cord conveyor belts —**

Part 1:

**Design, dimensions and mechanical  
requirements for conveyor belts for  
general use**

*Courroies transporteuses à câbles d'acier —*

*Partie 1: Exigences de conception, de dimensions et mécaniques des  
courroies transporteuses à usage général*



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 15236-1 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 188 *Conveyer belts*, in collaboration with Technical Committee ISO/TC 41, *Pulleys and belts (including veebelts)*, Subcommittee SC 3, *Conveyor belts*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 15236 consists of the following parts, under the general title *Steel cord conveyor belts*:

- *Part 1: Design, dimensions and mechanical requirements for conveyor belts for general use*
- *Part 2: Preferred belt types*
- *Part 3: Special safety requirements for belts for use in underground installations*
- *Part 4: Vulcanized belt joints*



# Steel cord conveyor belts —

## Part 1:

## Design, dimensions and mechanical requirements for conveyor belts for general use

### 1 Scope

This part of ISO 15236 specifies the performance and constructional requirements applicable to conveyor belts having steel cords in the longitudinal direction as reinforcement. The requirements for construction given in Clause 6 apply to the design of single belts as well as the design of complete type series such as those covered in ISO 15236-2.

### 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.

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 284, *Conveyor belts — Electrical conductivity — Specification and test method*

ISO 340, *Conveyor belts — Laboratory scale flammability characteristics — Requirements and test method*

ISO 703, *Conveyor belts — Transverse flexibility (troughability) — Test method*<sup>1)</sup>

ISO 4649:2002, *Rubber, vulcanized or thermoplastic — Determination of abrasion resistance using a rotating cylindrical drum device*

ISO 7590:2001, *Steel cord conveyor belts — Methods for the determination of total thickness and cover thickness*

ISO 7622-2, *Steel cord conveyor belts — Longitudinal traction test — Part 2: Measurement of tensile strength*

ISO 7623, *Steel cord conveyor belts — Cord-to-coating bond test — Initial test and after thermal treatment*

ISO 8094, *Steel cord conveyor belts — Adhesion strength test of the cover to the core layer*

ISO 10247, *Conveyor belts — Characteristics of covers — Classification*

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1) To be published. (Revision of ISO 703:1988 and ISO 703-1:1999)

ISO 15236-2:2004, *Steel cord conveyor belts — Part 2: Preferred belt types*

EN 12882, *Conveyor belts for general purpose use — Electrical and flammability safety requirements*

EN 13827, *Steel cord conveyor belts — Determination of the lateral and vertical displacement of steel cords*

### 3 Terms and definitions

For the purposes of this part of ISO 15236, the following terms and definitions apply.

#### 3.1

##### **edge width**

$b_k$

thickness of rubber between the outer cord and the belt edge

See Figure 1.

#### 3.2

##### **breaker**

transverse reinforcement in the conveyor belt, normally of a textile material, attached both above and below or either above or below the layer of longitudinal cords at a distance of at least 1 mm and considered to be part of the cover

See Figure 2.

NOTE Adapted from ISO 7590:2001, 2.1.

#### 3.3

##### **weft**

transverse reinforcement in the conveyor belt, normally of steel wires, attached both above and below, or either above or below, the layer of longitudinal cords at a distance of less than 1 mm and considered to be part of the belt core

See Figure 3.

NOTE Adapted from ISO 7590:2001, 2.2.