

Steel cord conveyor belts - Part 2: Preferred belt types

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 15236-2:2004 sisaldab Euroopa standardi EN ISO 15236-2:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.09.2004 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 15236-2:2004 consists of the English text of the European standard EN ISO 15236-2:2004.</p> <p>This document is endorsed on 23.09.2004 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>
<p>Käsitlusala:</p> <p>This part of EN ISO 15236 specifies preferred types of conveyor belts with steel cords in the longitudinal direction as reinforcement. The belt type series in this part of EN ISO 15236 are based on the general requirements for construction given in EN ISO 15236-1.</p>	<p>Scope:</p> <p>This part of EN ISO 15236 specifies preferred types of conveyor belts with steel cords in the longitudinal direction as reinforcement. The belt type series in this part of EN ISO 15236 are based on the general requirements for construction given in EN ISO 15236-1.</p>

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English version

Steel cord conveyor belts

**Part 2: Preferred belt types
(ISO 15236-2 : 2004)**

Courroies transporteuses à câbles
d'acier – Partie 2: Types de courroies
recommandés (ISO 15236-2 : 2004)

Stahlseil-Fördergurte – Teil 2: Bevor-
zugte Gurttypen (ISO 15236-2 : 2004)

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CEN

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Foreword

This document (EN ISO 15236-2:2004) 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)".

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of an identical text or by endorsement, at the latest by November 2004, and conflicting national standards shall be withdrawn at the latest by November 2004.

EN ISO 15236 will consist 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 applications*
- Part 4: *Vulcanized belt joints*
- Part 5: *Marking*

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Introduction

Steel cord conveyors belts are mainly long belts which have to be manufactured by joining several delivery lengths on the site. To achieve joints with a high dynamic capability from belts supplied by various manufacturers, it is necessary to standardize some features, e.g. thickness of carcass or cord pitch and cord diameter.

1 Scope

This part of EN ISO 15236 specifies preferred types of conveyor belts with steel cords in the longitudinal direction as reinforcement. The belt type series in this part of EN ISO 15236 are based on the general requirements for construction given in EN ISO 15236-1.

2 General remarks

The belt types described in this part of EN ISO 15236 are a selection out of the unlimited number of possible constructions; belts of the types A and B have been manufactured and installed in large quantities.

It is the general conception of these belt types that belts of a certain nominal breaking strength have equal cords and cord pitches or at least equal thickness of the carcass.

The requirements regarding belt design, i.e. cord diameter and cord pitch, depend on the mode of joint that will be applied. In accordance with EN ISO 15236-4 there are three types of vulcanized joints:

- interlaced stepped joints;
- plain stepped joints;
- finger joints.

For high performance stepped joints, it is essential that the belts to be joined have equal cord pitch and cord diameter. For belts to be joined by finger joints, the cord pitch and cord diameter are of less importance; what matters is a similar thickness of the carcass. In the following Tables for different belt types, therefore, cord diameter, cord pitch and number of cords are specified only for those types which are usually joined by stepped joints, i.e. belt types A1, A2 and B2.

The cord numbers given in Tables 2, 3, and 5 are for guidance only. They result from the equation:

$$n_{\min} = \frac{K_N \times B}{F_{bs} \times 1000}$$

and from the requirement that the edge width shall be not larger than 40 mm and not smaller than 15 mm, i.e.

$$15 \leq b_k \leq 40$$

A higher number of cords as well as a smaller number of cords can be applied provided that the requirements for minimum breaking strength specified in prEN ISO 15236-1 and EN ISO 15236-4 are met.

$$K_N = \frac{F_{bs} \times n \times 1000}{B}$$

For the purposes of this document, the symbols and units given in Table 1 apply.