

Oceľovokordové dopravné pásy. Časť 1: Konštrukcia, rozmery a mechanické požiadavky na dopravné pásy na všeobecné používanie (ISO 15236-1: 2016).

STN EN ISO 15236-1

26 0394

Steel cord conveyor belts - Part 1: Design, dimensions and mechanical requirements for conveyor belts for general use (ISO 15236-1:2016)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/17

Obsahuje: EN ISO 15236-1:2016, ISO 15236-1:2016

Oznámením tejto normy sa ruší STN EN ISO 15236-1 (26 0394) z augusta 2006 STN EN ISO 15236-1: 2017

# EUROPEAN STANDARD NORME EUROPÉENNE

# **EN ISO 15236-1**

EUROPÄISCHE NORM

November 2016

ICS 53.040.20

Supersedes EN ISO 15236-1:2005

### **English Version**

# Steel cord conveyor belts - Part 1: Design, dimensions and mechanical requirements for conveyor belts for general use (ISO 15236-1:2016)

Courroies transporteuses à câbles d'acier - Partie 1: Exigences de conception, de dimensions et mécaniques des courroies transporteuses à usage général (ISO 15236-1:2016) Stahlseilfördergurte - Teil 1: Aufbau, Maße und mechanische Anforderungen an Fördergurte für allgemeine Einsatzbedingungen (ISO 15236-1:2016)

This European Standard was approved by CEN on 2 October 2016.

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

## EN ISO 15236-1:2016 (E)

Contents	Page
European foreword	3

### **European foreword**

This document (EN ISO 15236-1:2016) 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 May 2017, and conflicting national standards shall be withdrawn at the latest by May 2017.

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 ISO 15236-1:2005.

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.

#### **Endorsement notice**

The text of ISO 15236-1:2016 has been approved by CEN as EN ISO 15236-1:2016 without any modification.

# INTERNATIONAL STANDARD

ISO 15236-1

Second edition 2016-10-15

# 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



ISO 15236-1:2016(E)



### COPYRIGHT PROTECTED DOCUMENT

#### © ISO 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Ch. de Blandonnet 8 • CP 401 CH-1214 Vernier, Geneva, Switzerland Tel. +41 22 749 01 11 Fax +41 22 749 09 47 copyright@iso.org www.iso.org

Contents			Page	
Forev	word		iv	
1	Scope	е	1	
2	-	Normative references		
3		s and definitions		
4		ools and units		
5	•	design		
3	5.1	Standard type		
	5.2	Conveyor belting having transverse reinforcements	3	
	5.3	Belt core		
6	Design and construction			
	6.1	Belt strengths		
	6.2	Belt widths		
	6.3	Belt edge and supporting belt width		
		6.3.1 Edge width		
		6.3.2 Supporting belt width		
	6.4	Number of cords		
	6.5	Cord pitch		
	6.6 6.7	Thickness of covers  Belt thickness		
	6.8	Belt length		
7		anical requirements		
,	7.1			
	7.1	Breaking strength of the steel cord		
	7.2	7.2.1 General		
		7.2.2 Horizontal position		
		7.2.3 Vertical position		
	7.3	Number and spacing of cord joints	7	
	7.4	Cord pull-out force		
	7.5	Covers — Quality classification		
	7.6	Ageing of covers		
	7.7 7.8	Adhesion		
	7.0	Transverse reinforcements 7.8.1 Breaker		
		7.8.2 Weft		
	7.9	Troughability		
	7.10	Tracking		
	7.11	Safety requirements		
8	Samp	oling	10	
9	Designation			
10	Ordering data			
11	Mark	ing	11	
Anne	<b>x A</b> (inf	formative) Helpful information to be supplied by the purchaser	13	
Bibli	ograph	y	15	

### 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.

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 documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: <a href="www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

The committee responsible for this document is ISO/TC 41, *Pulleys and belts (including veebelts)*, Subcommittee SC 3, *Conveyor belts*.

This second edition cancels and replaces the first edition (ISO 15236-1:2005), of which it constitutes a minor revision.

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 <u>Clause 6</u> 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 documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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

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

ISO 7590, 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

ISO 15236-2, 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

# koniec náhľadu – text ďalej pokračuje v platenej verzii STN