



**SLOVENSKI STANDARD**  
**SIST EN ISO 583:2023**

**01-maj-2023**

---

**Naprave za kontinuirni transport - Trakovi tračnih transporterjev s tekstilnim vložkom - Debelina celotnega traku in debelina posameznih sestavnih elementov traku - Preskusne metode (ISO 583:2023)**

Conveyor belts with a textile carcass - Total belt thickness and thickness of constitutive elements - Test methods (ISO 583:2023)

Textilfördergurte - Gesamtdicke und Dicke der Aufbauelemente - Prüfverfahren (ISO 583:2023)

Courroies transporteuses à carcasse textile - Épaisseur totale de la courroie et épaisseur des éléments constitutifs - Méthodes d'essai (ISO 583:2023)

**Ta slovenski standard je istoveten z: EN ISO 583:2023**

---

**ICS:**

53.040.20      Deli za transporterje      Components for conveyors

**SIST EN ISO 583:2023**      en,fr,de



EUROPEAN STANDARD

EN ISO 583

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2023

ICS 53.040.20

Supersedes EN ISO 583:2007

English Version

## Conveyor belts with a textile carcass - Total belt thickness and thickness of constitutive elements - Test methods (ISO 583:2023)

Courroies transporteuses à carcasse textile - Épaisseur totale de la courroie et épaisseur des éléments constitutifs - Méthodes d'essai (ISO 583:2023)

Textilfördergurte - Gesamtdicke und Dicke der Aufbauelemente - Prüfverfahren (ISO 583:2023)

This European Standard was approved by CEN on 27 February 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.

CEN members are the national standards bodies of 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 United Kingdom.



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

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

Contents	Page
European foreword.....	3

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN ISO 583:2023

<https://standards.iteh.ai/catalog/standards/sist/259f0601-5625-43bd-ad4f-f8d6e2d2426c/sist-en-iso-583-2023>

## European foreword

This document (EN ISO 583:2023) 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 September 2023, and conflicting national standards shall be withdrawn at the latest by September 2023.

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 583:2007.

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.

(standards.iteh.ai)

## Endorsement notice

The text of ISO 583:2023 has been approved by CEN as EN ISO 583:2023 without any modification.



INTERNATIONAL  
STANDARD

ISO  
583

Fourth edition  
2023-02

---

---

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

*Courroies transporteuses à carcasse textile — Épaisseur totale de la  
courroie et épaisseur des éléments constitutifs — Méthodes d'essai*

iTeh STANDARD PREVIEW  
(standards.iteh.ai)

[SIST EN ISO 583:2023](https://standards.iteh.ai/catalog/standards/sist/259f0601-5625-43bd-ad4f-f8d6e2d2426c/sist-en-iso-583-2023)

<https://standards.iteh.ai/catalog/standards/sist/259f0601-5625-43bd-ad4f-f8d6e2d2426c/sist-en-iso-583-2023>



Reference number  
ISO 583:2023(E)

© ISO 2023

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 583:2023

<https://standards.iteh.ai/catalog/standards/sist/259f0601-5625-43bd-ad4f-f8d6e2d2426c/sist-en-iso-583-2023>



## **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2023

All rights reserved. Unless otherwise specified, or required in the context of its implementation, 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  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland



# Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Determination of total belt thickness</b> .....	<b>1</b>
4.1 Apparatus.....	1
4.2 Test piece.....	1
4.3 Measurement points.....	2
4.4 Procedure.....	3
4.5 Expression of results.....	3
<b>5 Determination of thickness of covers</b> .....	<b>3</b>
5.1 General.....	3
5.2 Method used when covers can be removed completely from carcass.....	3
5.2.1 Principle.....	3
5.2.2 Apparatus.....	3
5.2.3 Test piece.....	3
5.2.4 Measurement points.....	3
5.2.5 Procedure.....	3
5.2.6 Expression of results.....	4
5.3 Method used when covers cannot be removed completely from carcass.....	5
5.3.1 Principle.....	5
5.3.2 Apparatus.....	5
5.3.3 Test piece.....	5
5.3.4 Measurement points.....	5
5.3.5 Procedure.....	5
5.3.6 Expression of results.....	6
<b>6 Determination of carcass thickness</b> .....	<b>6</b>
6.1 Carcass thickness without covers.....	6
6.2 Carcass thickness with covers.....	6
6.3 Expression of results.....	6
<b>7 Determination of thickness of interlayer</b> .....	<b>7</b>
7.1 General.....	7
7.2 Method used when elastomeric material in interlayer can be removed completely from adjacent fabric ply.....	7
7.2.1 Principle.....	7
7.2.2 Apparatus.....	7
7.2.3 Test piece.....	7
7.2.4 Measurement points.....	7
7.2.5 Procedure.....	7
7.2.6 Expression of results.....	7
7.3 Method for use when elastomeric material in interlayer cannot be separated completely from adjacent fabric ply.....	8
7.3.1 Principle.....	8
7.3.2 Apparatus.....	8
7.3.3 Test piece.....	8
7.3.4 Measurement points.....	8
7.3.5 Procedure.....	8
7.3.6 Expression of results.....	8
<b>8 Test report</b> .....	<b>8</b>
<b>Bibliography</b> .....	<b>10</b>

## ISO 583:2023(E)

### 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 [www.iso.org/directives](http://www.iso.org/directives)).

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 [www.iso.org/patents](http://www.iso.org/patents)).

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

For an explanation of the voluntary nature of standards, 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 [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

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 fourth edition cancels and replaces the third edition (ISO 583:2007), which has been technically revised.

The main changes are as follows:

- a requirement was added regarding the expression of results (see 4.5).

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 [www.iso.org/members.html](http://www.iso.org/members.html).

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

## 1 Scope

This document specifies test methods for the determination of total belt thickness and the thickness of constitutive elements of conveyor belts having a textile carcass. The constitutive elements include the covers, the carcass and interlayers, i.e. the material between adjoining plies.

This document does not apply to light conveyor belts as described in ISO 21183-1<sup>[1]</sup>.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

## 4 Determination of total belt thickness

### 4.1 Apparatus

The apparatus shall consist of a flat, rigid baseplate, on which the test piece rests, and a gauge having a flat circular foot, 10 mm in diameter, by means of which a specified pressure is applied to the test piece.

The gauge shall be capable of measuring to at least 0,1 mm.

The pressure applied shall be  $(22 \pm 5)$  kPa for materials with a hardness equal to or greater than 35 IRHD; otherwise, the pressure shall be  $(10 \pm 2)$  kPa.

NOTE The masses needed to give these specified pressures using a 10 mm diameter foot are 176 g and 80 g, respectively.

### 4.2 Test piece

Either test piece 1 or test piece 2, according to the following, shall be used.

**Test piece 1:** cut a rectangular piece of full-width belt, designated as dimension  $L$ , with a length of 50 mm, as shown in [Figure 1](#).