

Steel cord conveyor belts - Cord-to-coating bond test -
Initial test and after thermal treatment (ISO 7623:2015)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 7623:2015 sisaldab Euroopa standardi EN ISO 7623:2015 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 7623:2015 consists of the English text of the European standard EN ISO 7623:2015.
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.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 11.11.2015.	Date of Availability of the European standard is 11.11.2015.
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ICS 53.040.20

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English Version

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Initial test and after thermal treatment (ISO 7623:2015)**

Courroies transporteuses à câbles d'acier - Adhérence
des câbles dans l'enrobage - Essais à l'état original et
après traitement thermique (ISO 7623:2015)

Stahlseil-Fördergurte - Haftung zwischen den Seilen
und Kernschicht - Prüfung im Anlieferzustand und
nach thermischer Behandlung (ISO 7623:2015)

This European Standard was approved by CEN on 26 September 2015.

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

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European foreword

This document (EN ISO 7623:2015) 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of an identical text or by endorsement, at the latest by May 2016, and conflicting national standards shall be withdrawn at the latest by May 2016.

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 7623:1997.

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 7623:2015 has been approved by CEN as EN ISO 7623:2015 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 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).

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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 WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

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

This third edition cancels and replaces the second edition (ISO 7623:1996), which has been technically revised.

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

1 Scope

This International Standard specifies a method for determining the bond strength of metal cords to their surrounding coating, either in the initial state or after thermal treatment.

It applies exclusively to metal-carcass conveyor belts.

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 18573, *Conveyor belts — Test atmospheres and conditioning periods*

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

3 Principle

Measurement of the force required to tear one of the steel warp cords out of the carcass by applying tensile stress along the axis of the cord.

4 Apparatus

4.1 Dynamometric tensile testing machine with jaws, in accordance with that described in ISO 7622-2.

4.2 Press, having two heated platens, temperature controlled to $145\text{ °C} \pm 5\text{ °C}$, and capable of applying a pressure on the specimen (see [Clause 6](#)) of between 1 MPa and 5 MPa.

5 Test conditions

Unless otherwise specified and cited in the test report, the tests shall be carried out at a temperature of $23\text{ °C} \pm 2\text{ °C}$ and at a relative humidity of $(50 \pm 5)\%$, in accordance with ISO 18573, Atmosphere B.

5.1 Test in the initial state, carry out the test described in [Clause 8](#) at least five days after manufacture of the belt.

5.2 Test after thermal treatment, carry out the test described in [Clause 8](#) after thermal treatment of a sample of the belt by heating it between the two platens of the press ([4.2](#)) for $150\text{ min} \pm 1\text{ min}$, at a temperature of $145\text{ °C} \pm 5\text{ °C}$ and at a surface pressure of about 1 MPa but not exceeding 5 MPa.

If different temperatures or pressures or the duration of their application are used, details should be specified in the test report.

NOTE An adequate surface pressure can be obtained using spacers of a thickness of the belt test piece minus $1\text{ mm} \pm 0,5\text{ mm}$ between the platens of the press.