## **INTERNATIONAL STANDARD**

Fourth edition 2022-11

# Steel cord conveyor belts — Cord-tocoating bond test — Initial test and after thermal treatment

oies L s dans L Courroies transporteuses à câbles d'acier — Essai d'adhérence des câbles dans l'enrobage — Essai initial et après traitement thermique



Reference number ISO 7623:2022(E)



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Published in Switzerland

Page

### Contents

Fore	word	iv
1	Scope	
2	Normative references	
3	Terms and definitions	
4	Principle	
5	Apparatus   5.1 Dynamometric tensile testing machine with jaws   5.2 Press	
6	Test conditions6.1General6.2Test in the initial state6.3Test after thermal treatment	
7	Specimens	
8	Conditioning	
9	Procedure	
10	Expression of results	
11	Test report	3
	Chier Conche Con	

#### 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).

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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 7623:2015), which has been technically revised.

The main changes are as follows:

— added cover reduction permission of the grip areas in <u>Clause 7</u> c)

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 <u>www.iso.org/members.html</u>.

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

#### 1 Scope

This document 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 are referred to in the text in such a way that some or all of their content constitutes requirements 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 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 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 <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at https://www.electropedia.org/

#### 4 Principle

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

#### **5** Apparatus

#### 5.1 Dynamometric tensile testing machine with jaws

In accordance with that described in ISO 7622-2.

#### 5.2 Press

Having two heated platens, temperature controlled to 145 °C  $\pm$  5 °C, and capable of applying a pressure on the specimen (see <u>Clause 7</u>) of between 1 MPa and 5 MPa.