
**Steel cord conveyor belts — Methods
for the determination of total
thickness and cover thickness**

*Courroies transporteuses à câbles d'acier — Méthodes de
détermination de l'épaisseur totale et de l'épaisseur des revêtements*



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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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For an explanation on 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 the following URL: 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*.

This sixth edition cancels and replaces the fifth edition (ISO 7590:2009), which has been technically revised. The main change compared to the previous edition is as follows:

- [Figure 4](#) has been corrected.

Steel cord conveyor belts — Methods for the determination of total thickness and cover thickness

1 Scope

This document specifies three methods for the measurement of total belt thickness and the thickness of covers of steel cord conveyor belts.

Methods A1 and A2 (micrometer methods) can be used for all steel cord conveyor belts for the measurement of both total belt thickness and cover thickness.

Method B (optical method) is intended for the measurement of cover thickness only. It is not suitable if there is a textile or metal weft, nor if the ends of the steel cords become twisted when cut.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

3.1

breaker

transverse reinforcement in the conveyor belt, typically of a textile material, inserted both above and below or either above or below the steel cords at a distance of at least 1 mm and considered to be part of the cover

Note 1 to entry: It is used to protect the longitudinal cords from impact or trapped material damage.

3.2

weft

transverse component of a protective reinforcement of either steel or textile cords, typically inserted both above and below, or either above or below, the steel cords at a distance of less than 1 mm and considered to be part of the belt carcass

4 Principle

The total thickness is measured using a micrometer at a number of specified points depending on belt width.

The cover thicknesses are measured either:

- a) by removing the covers, taking further measurements at the same specified points and calculating each of the cover thicknesses by subtraction; or
- b) by direct measurement using an optical measuring instrument.