INTERNATIONAL STANDARD

ISO 583-1

First edition
1999-12-15

Conveyor belts with a textile carcass — Total thickness and thickness of elements —

Part 1: Methods of test

Courroies transporteuses à carcasse textile — Épaisseur totale et épaisseur des éléments —

Partie 1: Méthodes d'essai

Reference number
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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to member bodies for voting. Publication as an International Standard requires approval by at least 75 % of member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 583 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 583-1 was prepared by the European Committee for Standardization (CEN) in collaboration with ISO Technical Committee TC 41, *Pulleys and belts (including veebelts)*, Subcommittee SC 3, *Conveyor belts*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Throughout the text of this standard, read "...this European Standard..." to mean "...this International Standard...".

This first edition of ISO 583-1 together with ISO 583-2 cancels and replaces ISO 583:1990, which has been technically revised.

ISO 583 consists of the following parts, under the general title *Conveyor belts with a textile carcass — Total thickness and thickness of elements*:

— *Part 1: Methods of test*

— *Part 2: Performance requirements*

Contents

Foreword

The text of EN ISO 583-1:1999 has been prepared by Technical Committee CEN/TC 188 "Conveyor belts", the secretariat of which is held by BSI, in collaboration with Technical Committee ISO/TC 41 "Pulleys and belts (including veebelts)".

This European Standard supersedes ISO 583:1990.

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 June 2000, and conflicting national standards shall be withdrawn at the latest by June 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard describes four methods for the measurement of thickness of conveyor belts having a textile carcass.

Method A describes a method for the determination of total belt thickness.
Method B describes a method for the determination of thickness of covers.
Method C describes a method for the determination of thickness of carcass.
Method D describes a method for the determination of the thickness of the interlayers.

This European Standard is applicable only to belts having a textile carcass.

Methods are included which are suitable for belt constructions where the covers can be removed, and for constructions where covers cannot be removed.

This standard is not suitable or valid for light conveyor belts as described in EN 873.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to, or revisions of, any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies (including amendments).

EN 873	Light conveyor belts - Principal characteristics and applications
ISO 4648:1991	Rubber, vulcanized or thermoplastic - Determination of dimensions of test pieces and products for test purposes.

3 Method A - Determination of total belt thickness

3.1 Apparatus

A dial gauge micrometer, graduated at least every 0,1 mm, with flat feet, a circular foot 10 mm in diameter, and exerting a pressure of (22 ± 5) kPa on the test piece, or of (10 ± 2) kPa according to the material, and as specified in ISO 4648.

3.2 Test Piece

For the measurement of total belt thickness either Test Piece 1 or Test Piece 2 shall be used:

Test Piece 1: cut a rectangular piece of full width belt, with a length of 50 mm (see Figure 1).

Test Piece 2: cut a wedge shaped piece of full width belt, as shown in Figure 2.

Dimensions in millimetres

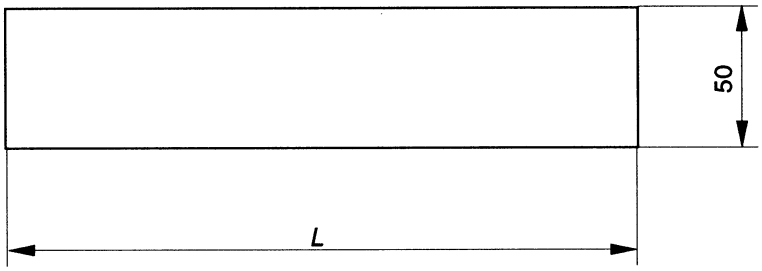


Figure 1 - Test Piece 1 (Rectangular)

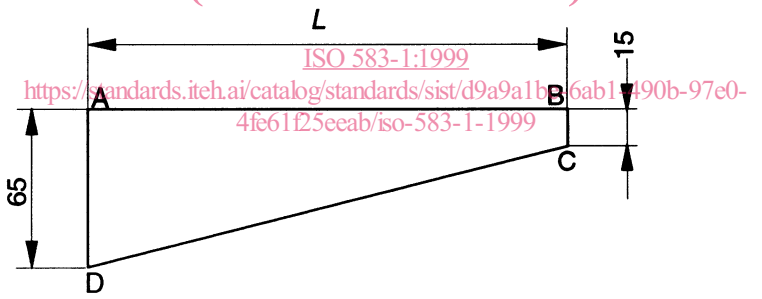
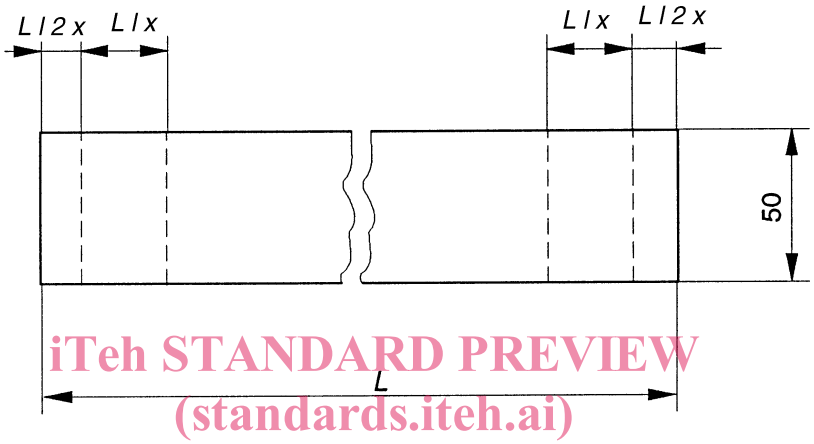


Figure 2 - Test Piece 2 (Wedge shaped)

3.3 Measurement Points

The measurement points shall be spaced equidistantly along the long axis of the test piece (i.e. the belt width) as shown in Figure 3.

Dimensions in millimetres



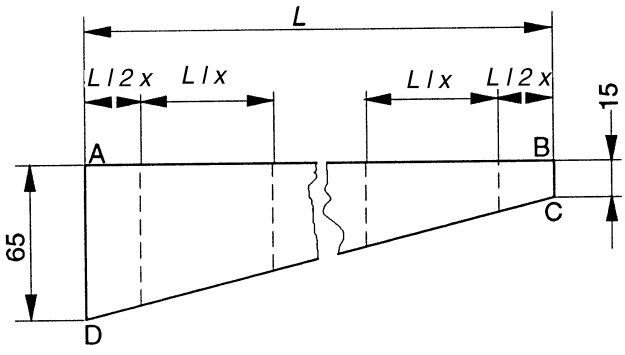


Figure 3 - Measurement Points