SLOVENSKI STANDARD
SIST EN ISO 505:2001

01-februar-2001

Naprave za kontinuirni transport - Trakovi traḷ nih transporterjev - Postopek doloḷ anja odpornosti proti vzdolǵnemu trganju tekstilnih trakov traḷ nih transporterjev (ISO 505:1999)

Conveyor belts - Method for the determination of the tear propagation resistance of textile conveyor belts (ISO 505:1999)

Fördergurte - Verfahren zur Bestimmung der Weiterreißfestigkeit von Textil-Fördergurten (ISO 505:1999)

Courroies transporteuses - Méthode de détermination de la résistance a la propagation d'une déchirure dans les courroies transporteuses a carcasse textile (ISO 505:1999)

Ta slovenski standard je istoveten z: **EN ISO 505:1999**

ICS:

53.040.20 Deli za transporterje Components for conveyors

SIST EN ISO 505:2001 **en**

EUROPEAN STANDARD
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English version

Conveyor belts - Method for the determination of the tear propagation resistance of textile conveyor belts (ISO 505:1999)

Courroies transporteuses - Méthode de détermination de la résistance à la propagation d'une déchirure dans les courroies transporteuses à carcasse textile (ISO 505:1999)

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This European Standard was approved by CEN on 5 September 1999.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Contents

Foreword

The text of EN ISO 505:1999 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 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2000, and conflicting national standards shall be withdrawn at the latest by May 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 Standard specifies a method of test for the measurement of the propagation resistance of an initial tear in textile conveyor belts, either in full thickness or of the carcass only.

This test is intended for application to textile belts in installations where there is a risk of longitudinal tearing.

2 Normative references

This European Standard incorporates by dated and 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.

ISO 6133:1998 Rubber and plastics - Analysis of multi-peak traces obtained in determinations of tear strength and adhesion strength

3 Principle

The test consists in measuring, by means of tensile testing at a given speed, the force necessary to propagate an initial tear made in a test piece.

4 Apparatus

The apparatus consists of a dynamometric tensile testing machine with the following essential characteristics:

a) the machine shall be chosen so that the forces to be measured come within the upper 90 % range of its full rated capacity;

b) the speed of separation of the jaws shall be capable of being adjusted to (50 ± 10) mm/min;

c) the free distance between the jaws shall be capable of being adjusted to at least 300 mm.

The machine shall be provided with a device for the graphical recording of the force necessary to continue tearing the test piece.

5 Test pieces

5.1 Method of sampling

Test pieces shall be taken from the sample in the longitudinal direction of the belt and at a minimum distance of 50 mm from the edges of the belt.

5.2 Shape and dimensions

Shape : rectangular.

Length: 300 mm.

Width : (100 ± 1) mm.

Thickness: Full belt thickness or without covers.

NOTE. If it is found that weft threads are pulled out of the test piece instead of breaking, the width of the test piece should be increased to 300 mm.

5.3 Number

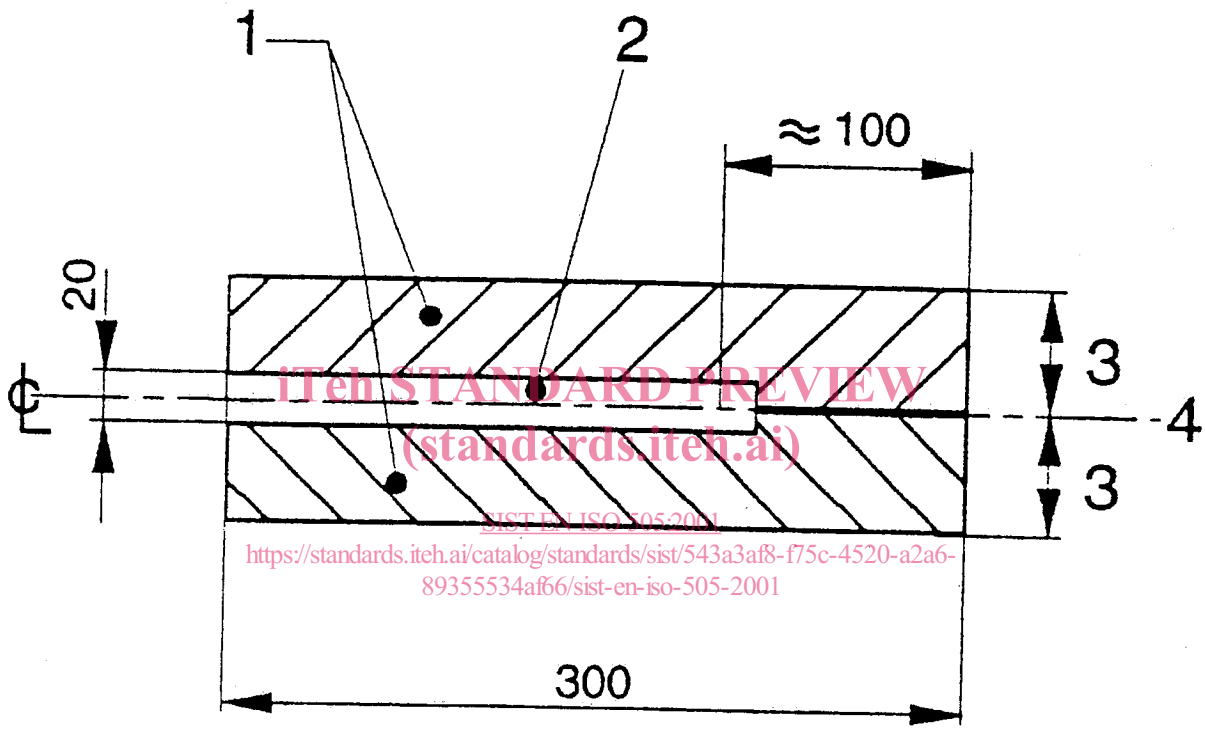
Two test pieces shall be used : one in sense A and one in sense B (see Figure 4).

5.4 Preparation

Where the test is to be conducted without covers, the covers of the test pieces shall be removed by stripping or by buffing.

If there is a breaker ply, strip the corresponding covers without cutting the breaker ply over a width of 20 mm only, i.e. 10 mm on each side of the longitudinal axis of the test piece with the exception of the zone held in the jaws of the machine (see Figure 1).

Dimensions in millimetres



Key

1 With covers

2 Covers removed

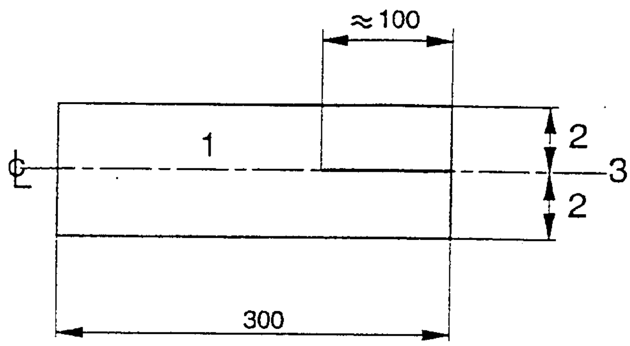
3 50 or 150 (see 5.2)

4 Cut line

Figure 1 - Test piece with breaker

Cut the test pieces from the middle of one of their ends over a length of about 100 mm parallel to the length (see Figure 2).

Dimensions in millimetres



Key

1 Without covers

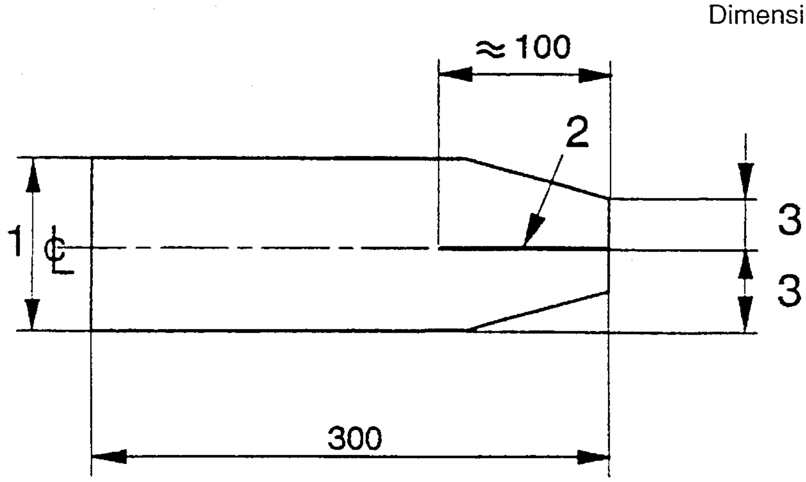
2 50 or 150 (see 5.2)

3 Cut line

Figure 2 - Test piece without breaker

If necessary, the width of the test piece (cut-edge) may be adjusted to the gripping width of the jaws by tapering the edges symmetrically on a length at most the same as that of the cut, as indicated in Figure 3, with the width at the end of the cut part as great as the width of the jaws permits.

Dimensions in millimetres



Key

1 300 or 100 (see 5.2)
2 Cut line
3 see 5.4

Figure 3 - Tapered test piece