



SLOVENSKI STANDARD SIST EN ISO 9856:2004

01-junij-2004

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SIST EN ISO 9856:1997

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Conveyor belts - Determination of elastic and permanent elongation and calculation of elastic modulus (ISO 9856:2003)

Fördergurte - Bestimmung der elastischen und dauerhaften Dehnung und Berechnung des Elastizitätsmoduls (ISO 9856:2003)

Courroies transporteuses - Détermination de l'allongement élastique et permanent et calcul du module d'élasticité (ISO 9856:2003)

Ta slovenski standard je istoveten z: EN ISO 9856:2003

ICS:

53.040.20 Deli za transporterje Components for conveyors

SIST EN ISO 9856:2004 en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 9856

December 2003

ICS 53.040.20

Supersedes EN ISO 9856:1995

English version

Conveyor belts - Determination of elastic and permanent elongation and calculation of elastic modulus (ISO 9856:2003)

Courroies transporteuses - Détermination de l'allongement élastique et permanent et calcul du module d'élasticité (ISO 9856:2003)

Fördergurte - Bestimmung der elastischen und dauerhaften Dehnung und Berechnung des Elastizitätsmoduls (ISO 9856:2003)

This European Standard was approved by CEN on 2 December 2003.

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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 Management Centre 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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

EN ISO 9856:2003 (E)**Foreword**

This document (EN ISO 9856:2003) 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 BSI.

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 2004, and conflicting national standards shall be withdrawn at the latest by June 2004.

This document supersedes EN ISO 9856:1995.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

NOTE FROM CMC The foreword is susceptible to be amended on reception of the German language version. The confirmed or amended foreword, and when appropriate, the normative annex ZA for the references to international publications with their relevant European publications will be circulated with the German version.

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Endorsement notice

The text of ISO 9856:2003 has been approved by CEN as EN ISO 9856:2003 without any modifications.

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INTERNATIONAL STANDARD

ISO
9856

Second edition
2003-12-15

Conveyor belts — Determination of elastic and permanent elongation and calculation of elastic modulus

Courroies transporteuses — Détermination de l'allongement élastique et permanent et calcul du module d'élasticité

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Reference number
ISO 9856:2003(E)

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Published in Switzerland

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 2.

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

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

ISO 9856 was prepared by Technical Committee ISO/TC 41, *Pulleys and belts (including veebelts)*, Subcommittee SC 3, *Conveyor belts*.

This second edition cancels and replaces the first edition (ISO 9856:1989), which has been technically revised.

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ISO 9856:2003(E)**Introduction**

This International Standard is used in a number of situations where the permanent elongation of the conveyor belt after mechanical conditioning is of some practical relevance and in particular in the implementation of ISO 3870 and the application of ISO 5293.

The equation for the calculation of the elastic modulus in the 1989 edition contained an error and omitted to calculate the permanent elongation of the conveyor belt. In addition the figure illustrating the hysteresis loop of the conveyor belt during mechanical conditioning was misleading and ambiguous.

These omissions and anomalies have been corrected in the present edition.

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Conveyor belts — Determination of elastic and permanent elongation and calculation of elastic modulus

1 Scope

This International Standard specifies a method for determining the elastic and permanent elongation of a conveyor belt and the calculation of the elastic modulus.

It is not applicable or valid for light conveyor belts as described in EN 873.

2 Normative references

The following referenced documents are indispensable for the application 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 282, *Conveyor belts — Sampling*

ISO 283-1, *Textile conveyor belts — Full thickness tensile testing — Part 1: Determination of tensile strength, elongation at break and elongation at the reference load*

ISO 7500-1:—¹⁾, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

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

3 Terms, definitions and symbols

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

3.1

tensile strength

greatest measured force during the tensile test (see ISO 283-1) divided by the width of the test piece, expressed in newtons per millimetre

3.2

nominal tensile strength

T

specified minimum value of the tensile strength, expressed in newtons per millimetre

3.3

upper reference force

F_U

force equivalent to 10 % of T multiplied by the test piece width, expressed in newtons

1) To be published. (Revises ISO 7500-1:1999 and will replace EN 10002-2:1991)