EESTI STANDARD EVS-EN ISO 9856:2004

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

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EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 9856:2004 sisaldab Euroopa standardi EN ISO 9856:2003 ingliskeelset teksti. Käesolev dokument on jõustatud 18.05.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 9856:2004 consists of the English text of the European standard EN ISO 9856:2003. This document is endorsed on 18.05.2004 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

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

ICS 53.040.20

Võtmesõnad:

EUROPEAN STANDARD
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EUROPÄISCHE NORM

EN ISO 9856

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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 2003-12-02.

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 Management Centre or to any CEN member.

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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

Ref. No. EN ISO 9856 : 2003 E

Foreword

International Standard

ISO 9856 : 2003 Conveyor belts – Determination of elastic and permanent elongation and calculation of elastic modulus,

which was prepared by ISO/TC 41 'Pulleys and belts (including veebelts' of the International Organization for Standardization (ISO), has been adopted by CEN/TC 188 'Conveyor belts' as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by June 2004 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 9856 : 2003 was approved by CEN as a European Standard without any modification.

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.

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)