### Terastraadist trossid. Ohutus. Osa 4: Üldotstarbeliste tõsteseadmete köistrossid KONSOLIDEERITUD TEKST

Steel wire ropes - Safety - Part 4: Stranded ropes for general lifting applications CONSOLIDATED TEXT



### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 12385-4:2003+A1:2008 sisaldab Euroopa standardi EN 12385-4:2002+A1:2008 ingliskeelset teksti. This Estonian standard EVS-EN 12385-4:2003+A1:2008 consists of the English text of the European standard EN 12385-4:2002+A1:2008.

Standard on kinnitatud Eesti Standardikeskuse 26.05.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 26.05.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 19.03.2008.

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Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

ICS 77.140.65

Võtmesõnad:

### Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

## EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

EN 12385-4:2002+A1

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### **English Version**

# Steel wire ropes - Safety - Part 4: Stranded ropes for general lifting applications

Câbles en acier - Sécurité - Partie 4: Câbles à torons pour applications de levage générales

Drahtseile aus Stahldraht - Sicherheit - Teil 4: Litzenseile für allgemeine Hebezwecke

This European Standard was approved by CEN on 12 November 2001, includes Amendment 1 approved by CEN on 14 February 2008 and includes Corrigendum 1 issued by CEN on 19 October 2005.

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 CEN Management Centre 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 CEN Management Centre has the same status as the official versions.

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

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### **Contents**

			page
	vord		
ntrod	luction		
	Scope		
	Normative references		
	Terms and definitions		
•	Hazards		
	Safety requirements and/or measures		5
	Verification of safety requirements and/or me		
1	Information for use		8
nnex	x A (normative) Calculation of minimum breakin		
nnex	x B (normative) Summary of factors for calculat		
nnex	x C (informative) Calculation of approximate no	minal length mass of ropes over 60mm diamo	eter24
nnex	x D (informative) Information which should be p	rovided with an enquiry or an order	25
nnex	x ZA (informative) A Relationship between this Requirements of EU Directive 98/37/EC		26
	x ZB (informative) A Relationship between this Requirements of EU Directive 2006/42/EC	· · · · · · · · · · · · · · · · · · ·	
Biblio	ography		28
		4	
		` _	

### **Foreword**

This document (EN 12385-4:2002+A1:2008) has been prepared by Technical Committee CEN/TC 168, "Chains, ropes, webbing, slings and accessories – Safety", 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 September 2008, and conflicting national standards shall be withdrawn at the latest by September 2008.

This document includes Amendment 1, approved by CEN on 2008-02-14 and includes Corrigendum 1 issued by CEN on 19 October 2005.

This document supersedes EN 12385-4:2002.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A].

The modifications of the related CEN Corrigendum have been implemented at the appropriate places in the text and are indicated by the tags [AC].

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document.

The other Parts of EN 12385 are:

- Part 1: General requirements
- Part 2: Definitions, designation and classification
- Part 3: Information for use and maintenance
- Part 5: Stranded ropes for lifts
- Part 6: Stranded ropes for mine shafts
- Part 7: Locked coil ropes for mine shafts
- Part 8: Stranded hauling and carrying-hauling ropes for cableway installations designed to carry persons
- Part 9: Locked coil carrying ropes for cableway installations designed to carry persons
- Part 10: Spiral ropes for general structural applications

Part 1 provides the general requirements of Parts 4 to 10.

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

### Introduction

This Part of this European Standard has been prepared to be a harmonized standard to provide one means of complying with the essential safety requirements of the Machinery Directive.

This Part of this European Standard is a type C standard as stated in EN 292.

For the purposes of the Certificate referred to in clause 7, this Part assumes a working load limit based on a safety factor of 5. The safety factor and the required minimum breaking force of the rope for a given application is the responsibility of the manufacturer of the machine of which the rope forms a part.

During the preparation of this standard, it was assumed that a negotiation would take place between the purchaser and the manufacturer concerning the intended purpose of the rope.

Although tables of breaking forces and masses are provided for a number of the more common classes, diameters and rope grades, this Part of this standard is not limited to those given, providing all of the other requirements are met.

Specifiers, purchasers and users should recognise that some ropes are specially designed by the manufacturer to meet particular lifting machinery requirements.

### 1 Scope

This Part of this European Standard specifies the particular materials, manufacturing and testing requirements for ropes for general lifting applications.

The particular hazards covered by this Part are identified in Clause 4.

This Part of this European Standard does not establish requirements for information for use other than those given in clause 7 of Part 1. Neither does it cover the requirements for ropes fitted with terminations.

Minimum breaking force values for the more common classes, sizes and grades of rope are provided in tables 5 to 17.

#### 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 10264-2, Steel wire and wire products – Steel wire for ropes – Part 2: Cold drawn non-alloyed steel wire for ropes for general applications.

EN 12385-1:2002, Steel wire ropes – Safety – Part 1: General requirements.

EN 12385-2:2002, Steel wire ropes – Safety – Part 2: Definitions, designation and classification.

ISO 4346, Steel wire ropes for general purposes – Lubricants – Basic requirements.