Terastraadist trossid. Ohutus. Osa 10: Spiraalköied kasutamiseks üldkonstruktsioonides

Steel wire ropes - Safety - Part 10: Spiral ropes for general structural applications



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12385-10:2004 sisaldab rahvusvahelise standardi ingliskeelset teksti.

Käesolev dokument on jõustatud 27.04.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12385-10:2004 consists of the English text of the international standard.

This document is endorsed on 27.04.2004 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 Part of this European Standard specifies the additional materials, manufacturing and testing requirements to those given in Part 1 for full locked coil and spiral strand ropes incorporating zinc or zinc alloy coated wires for general structural applications. It shall be used in conjunction with Parts 1 and 2 of this standard. For information only, typical breaking forces for both full-locked coil rope and spiral strand rope are given in annexes B and C for some of the more common sizes

Scope:

This Part of this European Standard specifies the additional materials, manufacturing and testing requirements to those given in Part 1 for full locked coil and spiral strand ropes incorporating zinc or zinc alloy coated wires for general structural applications. It shall be used in conjunction with Parts 1 and 2 of this standard. For information only, typical breaking forces for both full-locked coil rope and spiral strand rope are given in annexes B and C for some of the more common sizes

ICS 77.140.65

Võtmesõnad: acceptance testing, cables, elongation at break, ropes, specifications, stranded, strength class, zinc, zinc alloys, testing, user information, weight per length, winding ropes, winding tests, wire rope, wire ropes, wires, wrapping tests

EUROPEAN STANDARD NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 12385-10

December 2003

ICS 77.140.65

English version

Steel wire ropes - Safety - Part 10: Spiral ropes for general structural applications

Câbles en acier - Sécurité - Partie 10: Câbles spiraloïdaux pour applications générales de structures

Drahtseile aus Stahldraht - Sicherheit - Teil 10: Spiralseile für den allgemeinen Baubereich

This European Standard was approved by CEN on 3 November 2003.

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.

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.



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

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

Contents

Normative references		O'	page
Normative references			
2 Normative references	Introdu		
Terms and definitions 5 List of significant hazards 5 Safety requirements and/or measures 6 Annex A (normative) Ductility and adherence wraps and % total elongation at fracture properties of hot zinc coated round wires 8 Annex B (informative) Typical breaking forces and approximate nominal length masses for full-locked coil rope 10 Annex C (informative) Typical breaking forces and nominal length masses for spiral strand rope 16 Annex D (informative) Information which should be provided with an enquiry or an order 23 Annex ZA (informative) Relationship of this document with EC Directives 24	1		
4 List of significant hazards 5 5 Safety requirements and/or measures 6 6 Annex A (normative) Ductility and adherence wraps and % total elongation at fracture properties of hot zinc coated round wires 8 6 Annex B (informative) Typical breaking forces and approximate nominal length masses for full-locked coil rope 10 6 Annex C (informative) Typical breaking forces and nominal length masses for spiral strand rope 11 6 Annex D (informative) Information which should be provided with an enquiry or an order 23 6 Annex ZA (informative) Relationship of this document with EC Directives 24	2		
Annex A (normative) Ductility and adherence wraps and % total elongation at fracture properties of hot zinc coated round wires	3		
Annex A (normative) Ductility and adherence wraps and % total elongation at fracture properties of hot zinc coated round wires	4		
hot zinc coated round wires	5	Safety requirements and/or measures	6
coil rope	Annex		
Annex D (informative) Information which should be provided with an enquiry or an order	Annex	B (informative) Typical breaking forces and approximate nominal length masses for coil rope	full-locked 10
Annex ZA (informative) Relationship of this document with EC Directives	Annex	C (informative) Typical breaking forces and nominal length masses for spiral strand	rope 16
Tion Send and Send an	Annex	D (informative) Information which should be provided with an enquiry or an order	23
	Annex	ZA (informative) Relationship of this document with EC Directives	24
2			
	2		

Foreword

This document (EN 12385-10:2003) 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 June 2004, and conflicting national standards shall be withdrawn at the latest by June 2004.

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, see informative annex ZA, which is an integral part of this document.

The other Parts of this European Standard are:

- Part 1: General requirements
- Part 2: Definitions, designation and classification
- Part 3: Information for use and maintenance
- Part 4: Stranded ropes for general lifting applications
- 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 1 of this European Standard provides the general requirements for each of the other Parts. For the relationship of this Part with EU Directives, see informative annex ZA of Part 1 and informative annex ZA of this part of the standard.

This is the first edition of this Part of this European Standard.

Annex A is normative. The annexes B, C and D are informative.

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.

Introduction

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

This European Standard is a type C standard as stated in EN 1070.

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.

a julid registration of the property of the pr Specifiers, purchasers and users should recognise that spiral ropes for structural purposes are, more often than not, specially designed by the rope manufacturer to meet particular conditions.

1 Scope

This Part of this European Standard specifies the additional materials, manufacturing and testing requirements to those given in Part 1 for spiral ropes incorporating zinc or zinc alloy coated wires for general structural applications.

This standard deals with all significant hazards, hazardous situations and events relevant to spiral ropes for general structural applications, when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer (see clause 4 of EN 12385-1:2002).

This standard applies to spiral ropes for general structural applications which are manufactured after the date of its publication.

NOTE For information only, typical breaking forces for both full-locked coil rope and spiral strand rope are given in annexes B and C for some of the more common sizes.

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 292-1:1991, Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology.

EN 292-2, Safety of machinery — Basic concepts, general principles for design — Part 2:Technical principles and specifications.

EN 1070:1998, Safety of machinery - Terminology.

EN 10264-1, Steel wire and wire products – Steel wire for ropes – Part 1: General requirements.

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

EN 10264-3, Steel wire and wire products – Steel wire for ropes – Part 3: Round and shaped non alloyed steel wire for high duty 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.

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 292-1:1991, EN 1070:1998 and EN 12385-2:2002 apply.

4 List of significant hazards

For the purposes of this European Standard, the hazards and associated requirements given in EN 292-2 and EN 12385-1 apply.