Steel wire and wire products - Steel wire for ropes - Part 3: Cold drawn and cold shaped non alloyed steel wire for high duty applications

Steel wire and wire products - Steel wire for ropes - Part 3: Cold drawn and cold shaped non alloyed steel wire for high duty applications



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 10264-
3:2002 sisaldab Euroopa standardi EN
10264-3:2002 ingliskeelset teksti.

Käesolev dokument on jõustatud 13.12.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 10264-3:2002 consists of the English text of the European standard EN 10264-3:2002.

This document is endorsed on 13.12.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

Steel wire and wire products - Steel wire for ropes - Part 3: Cold drawn and cold shaped non alloyed steel wire for high duty applications

Scope:

Steel wire and wire products - Steel wire for ropes - Part 3: Cold drawn and cold shaped non alloyed steel wire for high duty applications

ICS 77.140.65

Võtmesõnad: acceptance, cables: ropes, circular form, measurement, sampling, specifications, steel products, steel wires, steels, steel-wire ropes, strength of materials, tensile strength, tolerances, tolerances (measurement), unalloyed steels, wire rope, wire ropes, wires

Hinnagrupp H

EN 10264-3

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

November 2002

ICS 77.140.65

English version

Steel wire and wire products
Steel wire for ropes

Part 3: Round and shaped unalloyed steel wire for high duty applications

Fils et produits tréfilés en acier – Fils pour câbles – Partie 3: Fils ronds et profilés, en acier non allié, pour fortes sollicitations Stahldraht und Drahterzeugnisse – Stahldraht für Seile – Teil 3: Runder und profilierter Draht aus unlegiertem Stahl für hohe Beanspruchungen

This European Standard was approved by CEN on 2002-10-09.

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, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, 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

Contents

	P	age
Forew	ord	2
1	Scope	3
2	Normative references	3
3	Designation of the product	3
4	General conditions of manufacture	4
5	Characteristics of wire	4
5.1	Tensile strength grades	4
5.2	Profiles	5
5.2.1	Definition of shaped wire	5
5.2.2	Equivalent diameter	7
5.3	Minimum requirements for wire characteristics	7
5.3.1	Dimension – measured values	7
5.3.2	Reverse bend test	8
5.3.3	Torsion test	· 12
5.3.4	Zinc and Zn95/Al5 coatings	. 14
6	Test methods	. 15
6.1	General	. 15
6.2	Reverse bend test	

Foreword

This document EN 10264-3:2002 has been prepared by Technical Committee ECISS/TC 30 "Steel wires", 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 May 2003, and conflicting national standards shall be withdrawn at the latest by May 2003.

This European Standard for wire for ropes is made up of the following parts:

- Part 1: General requirements
- Part 2: Cold drawn unalloyed steel wire for ropes for general applications
- Part 3: Round and shaped unalloyed steel wire for high duty applications
- Part 4: Stainless steel wire

in accordance with 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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Page 3 EN 10264-3 : 2002

1 Scope

This part of this European Standard specifies round and shaped unalloyed steel wire for use in the manufacture of ropes for mine hoisting, man-riding haulage, cableways for the transportation of passengers and other high duty applications.

This part of this European Standard refers to round wires and three types of shaped wire: full lock (Z), half lock (H) and trapezoidal (T).

In addition to the requirements of this part of EN 10264, the requirements of EN 10264-1 also apply.

It does not apply to steel wire taken from manufactured ropes.

This part of this European Standard specifies the following for cold drawn unalloyed steel wire for ropes for high duty applications:

- dimensional tolerances;
- mechanical characteristics;
- requirements relating to the chemical composition of the steel wire;
- conditions to be satisfied by any coating.

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 10016-1, Non-alloy steel rod for drawing and/or cold rolling – Part 1: General requirements.

EN 10016-2, Non-alloy steel rod for drawing and/or cold rolling – Part 2: Specific requirements for general purposes rod.

EN 10016-4, Non-alloy steel rod for drawing and/or cold rolling – Part 4: Specific requirements for rod for special applications.

EN 10218-1, Steel wire and wire products – General – Part 1: Test methods.

EN 10244-2, Steel wire and wire products – Non ferrous metallic coatings on steel wire – Part 2: Zinc or zinc alloy coatings.

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

3 Designation of the product

The designation of wire for ropes manufactured in accordance with this European Standard shall be based on the nominal dimension, surface appearance and tensile strength.

The indicator of dimension for round wire is the nominal diameter; for shaped wire it is the value of the height (h), followed by a letter specifying the profile. In the case of H profiles, this indicator shall be followed by the value of the narrowing.

The surface appearance is indicated as defined in EN 10264-1 with U for uncoated or bright wire, with a letter indicating the class of coating (A, B, ...) and in the case of zinc alloy coatings, indicating in brackets (Zn/Al).