

**Steel wire and wire products - Steel wire for ropes - Part  
1: General requirements**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 10264-1:2012 sisaldab Euroopa standardi EN 10264-1:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 10264-1:2012 consists of the English text of the European standard EN 10264-1:2012.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 11.01.2012.	Date of Availability of the European standard is 11.01.2012.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

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English Version

## Steel wire and wire products - Steel wire for ropes - Part 1: General requirements

Fils et produits tréfilés en acier - Fils pour câbles - Partie 1:  
Prescriptions générales

Stahldraht und Drahterzeugnisse - Stahldraht für Seile -  
Teil 1: Allgemeine Anforderungen

This European Standard was approved by CEN on 19 November 2011.

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

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## Foreword

This document (EN 10264-1:2012) has been prepared by Technical Committee ECISS/TC 106 "Wire rod and wires", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by July 2012, and conflicting national standards shall be withdrawn at the latest by July 2012.

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

This document supersedes EN 10264-1:2002.

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

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

This European Standard has been technically revised to incorporate the following changes:

- a) other tensile strength grades than those specified in EN 10264 parts 2, 3 and 4, have been allowed subject to an agreement between supplier and user at the time of order (see 5.2.1);
- b) the length of the test sample given in the procedure for tensile test has been deleted in order to avoid misunderstanding (see 5.2.2);
- c) the reverse bend test has been allowed for wires under 0,5 mm diameter, subject to an agreement between customer and supplier at the time of order (see 5.3);
- d) the torsion test has been allowed for wires below 0,5 mm diameter, subject to an agreement between parties (see 5.4);
- e) additional specifications have been added concerning the result of tensile test on knotted wire (see 5.5);
- f) the clause on inspection documents has been simplified (see Clause 6);
- g) for sampling and compliance criteria, the usage of statistical methods has been recommended, in order to reduce the number of tests required (see Clause 7);
- h) the values of Table 2 "Size of batches and samples and number of results" have been modified as well as the titles of the third and fourth column concerning the number of results for compliance and non-compliance. The footnote b) has also been updated;
- i) a general clause has been added for explaining the purpose of Annex A "Definition of terms relating to sampling and acceptance".

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, Croatia, 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, Turkey and the United Kingdom.

## 1 Scope

This part of this European Standard defines the general requirements for wire intended for mechanical steel ropes. Additional requirements are given in the following parts of this European Standard, which are specific to each category of wire.

This part of this European Standard specifies:

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

## 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.

EN 10021, *General technical delivery requirements for steel products*

EN 10204, *Metallic products — Types of inspection documents*

EN 10218-1, *Steel wire and wire products — General — Part 1: Test methods*

EN 10218-2, *Steel wire and wire products — General — Part 2: Wire dimensions and tolerances*

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

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 10264-4, *Steel wire and wire products — Steel wire for ropes — Part 4: Stainless steel wire*

## 3 Terms and definitions

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

### 3.1

#### **nominal diameter $d$**

diameter used to designate the wire, expressed in millimetres and specified by the purchaser

NOTE It is the basis for the determination of the values of all the characteristics of the wire for acceptance purposes.