

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

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 10264-4:2012 sisaldab Euroopa standardi EN 10264-4:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 10264-4:2012 consists of the English text of the European standard EN 10264-4:2012.
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English Version

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

Fils et produits tréfilés en acier - Fils pour câbles - Partie 4:
Fils tréfilés en acier inoxydable

Stahldraht und Drahterzeugnisse - Stahldraht für Seile -
Teil 4: Draht aus nichtrostendem Stahl

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

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Foreword

This document (EN 10264-4:2012) 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of an identical text or by endorsement, at the latest by July 2012, and conflicting national standards shall be withdrawn at the latest by July 2012.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 10264-4:2002.

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) clarification has been given in Table 2 "Chemical analysis in % by mass" because some values are ranges. A note has also been added in order to mention that other steel grades can be agreed between purchaser and supplier;
- b) modification has been made on the maximum value for the tensile strength (see 5.1);
- c) the nominal diameter and the minimum tensile strength given in Table 3 "Tensile strength requirements" have been changed;
- d) a note has been added to allow other diameters or tensile strength than those given in Table 3, subject to an agreement between purchaser and supplier;
- e) the ranges of nominal diameter given in Table 4 "Diameter tolerances" have been clarified.

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 specifies the characteristics of stainless steel wire for the manufacture of ropes that are exposed to corrosion and in some cases to a moderate temperature.

This part of this European Standard specifies the following for stainless steel wire for ropes:

- dimensional tolerances;
- mechanical characteristics;
- requirements relating to the chemical composition of the stainless 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 10088-3, *Stainless steels — Part 3: Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes*

EN 10095, *Heat resisting steels and nickel alloys*

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

EN 10264-1, *Steel wire and wire products — Steel wire for ropes — Part 1: General requirements*

ASTM A342, *Standard Test Methods for Permeability of Feebly Magnetic Materials*

3 Designation of product

The designation of the product is based on the nominal diameter, chemical composition and minimum tensile strength of the wire.

EXAMPLE Stainless steel wire for rope, diameter 1,5 mm - grade X4CrNi18-12 - strength 1 450 MPa.

Designation: Wire for rope EN 10264-4—1,5—X4CrNi18-12—1 450.

NOTE The grade of steel can be designated numerically, see Table 1.

4 General conditions of manufacture

4.1 Main steel grades and characteristic applications

The grades given in Table 1 are widely used mainly in accordance with EN 10088-3 and EN 10095 with requirements as specified in this part of EN 10264. However, for other specific applications other steel grades specified in EN 10088-3 or EN 10095 may be used with requirements to be agreed between the parties.

Table 1 gives an informative indication of characteristic applications of the mentioned steel grades.