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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 10264-3:2023 sisaldab Euroopa standardi EN 10264-3:2023 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 13.12.2023.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 10264-3:2023 consists of the English text of the European standard EN 10264-3:2023.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 13.12.2023.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 77.140.65

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EUROPEAN STANDARD

EN 10264-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN 10264-3:2012

English Version

## Steel wire and wire products - Steel wire for ropes - Part 3: Round and shaped non alloyed steel wire for high duty applications

Fils et produits tréfilés en acier - Fils en acier pour câbles - Partie 3: Fils ronds et profilés, en acier non aillé, 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 20 November 2023.

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-CENELEC 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-CENELEC 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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## European foreword

This document (EN 10264-3:2023) has been prepared by Technical Committee CEN/TC 459 “ECISS - European Committee for Iron and Steel Standardization”<sup>1</sup>, 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 June 2024, and conflicting national standards shall be withdrawn at the latest by June 2024.

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

This document supersedes EN 10264-3:2012.

This document has been technically revised to incorporate the following changes:

- “zinc alloy coatings” and “Zn95/Al5” have been replaced with “Zn/Al alloy coating”;
- addition of tensile strength 2 260 and 2 360 for “round – Class B”;
- addition of tensile strength 1 960 for “round – Class A”;
- data Table 8 has been replaced with data Table 4B from ISO 2232;
- addition of requirements for “Coating requirements to salt-spray test”.

EN 10264, *Steel wire and wire products — Steel wire for ropes*, is currently composed with 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*

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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<sup>1</sup> Through its sub-committee SC 6 “Wire rod and wires” (secretariat: AFNOR).

## 1 Scope

This document specifies round and shaped non alloyed 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. Heavy duty refers to situations where the stresses applied to the rope are either high or vary by a large amount during service.

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

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

This document specifies the following for cold drawn non alloyed 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

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1179, *Zinc and zinc alloys — Primary zinc*

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*

EN ISO 16120-1, *Non-alloy steel wire rod for conversion to wire — Part 1: General requirements (ISO 16120-1)*

EN ISO 16120-2, *Non-alloy steel wire rod for conversion to wire — Part 2: Specific requirements for general purpose wire rod (ISO 16120-2)*

EN ISO 16120-4, *Non-alloy steel wire rod for conversion to wire — Part 4: Specific requirements for wire rod for special applications (ISO 16120-4)*

## 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp/>
- IEC Electropedia: available at <https://www.electropedia.org/>