



BSI Standards Publication

Steel wire and wire products — Steel wire for ropes

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

This is a preview of BS EN 10264-3:2023. [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN 10264-3:2023. It supersedes BS EN 10264-3:2012, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ISE/106, Wire Rod and Wire.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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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.

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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”¹, 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of an identical text or by endorsement, at the latest by June 2024, and conflicting national standards shall be withdrawn at the latest by June 2024.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.

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

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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/>