

Steel wire for mechanical springs - Part 1: Patented cold drawn unalloyed spring steel wire

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 10270-1:2011+A1:2017 sisaldab Euroopa standardi EN 10270-1:2011+A1:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 10270-1:2011+A1:2017 consists of the English text of the European standard EN 10270-1:2011+A1:2017.
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.
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English Version

Steel wire for mechanical springs - Part 1: Patented cold drawn unalloyed spring steel wire

Fils en acier pour ressorts mécaniques - Partie 1 : Fils
pour ressorts en acier non allié, patentés, tréfilés à
froid

Stahldraht für Federn - Teil 1: Patentiert gezogener
unlegierter Federstahldraht

This European Standard was approved by CEN on 10 September 2011 and includes Amendment 1 approved by CEN on 24 March 2017.

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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 10270-1:2011+A1:2017) 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of an identical text or by endorsement, at the latest by November 2017, and conflicting national standards shall be withdrawn at the latest by November 2017.

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 includes Amendment 1 approved by CEN on 24 March 2017.

This document supersedes A1 EN 10270-1:2011 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

This European Standard for steel wire for mechanical springs is composed of the following parts:

- *Part 1: Patented cold drawn unalloyed spring steel wire;*
- *Part 2: Oil hardened and tempered spring steel wire;*
- *Part 3: Stainless spring steel wire.*

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1 Scope

1.1 This European Standard applies to patented cold drawn unalloyed steel wire of circular cross-section for the manufacture of mechanical springs for static duty and dynamic duty applications.

1.2 In addition to this European Standard, the general technical delivery requirements of EN 10021 are applicable.

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 conditions for steel products*

EN 10052, *Vocabulary of heat treatment terms for ferrous products*

EN 10204:2004, *Metallic products — Types of inspection documents*

EN 10218-1:2011, *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 10244-2:2009, *Steel wire and wire products — Non-ferrous metallic coatings on steel wire — Part 2: Zinc or zinc alloy coatings*

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CEN/TR 10261, *Iron and steel — European standards for the determination of chemical composition*

EN ISO 377, *Steel and steel products — Location and preparation of samples and test pieces for mechanical testing (ISO 377)*

EN ISO 3887, *Steels — Determination of depth of decarburization (ISO 3887)*

EN ISO 6892-1, *Metallic materials — Tensile testing — Part 1: Method of test at room temperature (ISO 6892-1)*

EN ISO 14284, *Steel and iron — Sampling and preparation of samples for the determination of chemical composition (ISO 14284)*

EN ISO 16120-1, *Non-alloy steel 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)* **A1**