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National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 10270-1:2001

ICS 77.140.25
77.140.65

STEEL WIRE FOR MECHANICAL SPRINGS - PART 1: PATENTED COLD DRAWN UNALLOYED SPRING STEEL WIRE

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 10270-1

April 2001

ICS 77.140.25; 77.140.65

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

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COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This European Standard has been prepared by Technical Committee ECISS/TC 30 "Steel wires ", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by October 2001, and conflicting national standards shall be withdrawn at the latest by October 2001.

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*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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1 Scope

1.1 This Part of EN 10270 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 part of EN 10270 the general technical delivery requirements of EN 10021 are applicable.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 10002-1, *Metallic materials — Tensile test — Part 1 : Method of test (at ambient temperature)*

EN 10016-1, *Non alloy steel rod for drawing and/or cold rolling — Part 1: General requirements*

EN 10016-2, *Non alloy steel rod for drawing and/or cold rolling — Part 2: Specific requirements for general purposes*

EN 10016-4, *Non alloy steel rod for drawing and/or cold rolling — Part 4: Specific requirements for rod for special applications*

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

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

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

EN 10218-1:1994, *Steel wire and wire products — General – Part 1: Test methods*

EN 10218-2:1996, *Steel wire and wire products — General – Part 2: Dimensions and tolerances*

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

CR 10261, *Iron and steel — Review of available methods of chemical analysis*

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

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

EU 104[1)] , *Determination of the decarburization depth of unalloyed and low alloyed structural steels*

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1) It may be agreed at the time of ordering, until this EURONORM has been adopted as a European Standard, that either this EURONORM or a corresponding national standard should be applied

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