



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 10151:2002

ICS 77.140.25

National Standards
Authority of Ireland
Dublin 9
Ireland

Tel: (01) 807 3800
Tel: (01) 807 3838

**STAINLESS STEEL STRIP FOR SPRINGS -
TECHNICAL DELIVERY CONDITIONS**

*This Irish Standard was
published under the
authority of the National
Standards Authority of
Ireland
and comes into effect on:
January 17, 2003*

**NO COPYING WITHOUT NSAI
PERMISSION EXCEPT AS
PERMITTED BY COPYRIGHT
LAW**

© NSAI 2002

Price Code J

Údarás um Chaighdeán Náisiúnta na hÉireann

EUROPEAN STANDARD

EN 10151

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2002

ICS 77.140.25

English version

Stainless steel strip for springs - Technical delivery conditions

Bandes pour ressorts en aciers inoxydables - Conditions
techniques de livraison

Federband aus nichtrostenden Stählen - Technische
Lieferbedingungen

This European Standard was approved by CEN on 14 September 2002.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

| | page |
|--|------|
| Foreword..... | 3 |
| 1 Scope | 4 |
| 2 Normative references | 4 |
| 3 Terms and definitions..... | 5 |
| 4 Classification and designation | 5 |
| 4.1 Classification..... | 5 |
| 4.2 Designation..... | 5 |
| 4.2.1 Steel names | 5 |
| 4.2.2 Steel numbers | 5 |
| 5 Information to be supplied by the purchaser..... | 5 |
| 5.1 Mandatory information | 5 |
| 5.2 Options..... | 6 |
| 6 Manufacturing process | 7 |
| 6.1 General..... | 7 |
| 6.2 Delivery | 7 |
| 6.2.1 Delivery form | 7 |
| 6.2.2 Delivery condition..... | 7 |
| 7 Requirements | 7 |
| 7.1 Chemical composition..... | 7 |
| 7.2 Mechanical properties | 7 |
| 7.3 Technological properties and surface condition..... | 8 |
| 7.4 Internal soundness | 8 |
| 7.5 Dimensions and tolerances on dimensions..... | 8 |
| 8 Inspection and testing..... | 8 |
| 8.1 General..... | 8 |
| 8.2 Types and contents of inspection documents | 8 |
| 8.3 Specific inspection and testing..... | 9 |
| 8.3.1 Extent of testing..... | 9 |
| 8.3.2 Selection and preparation of samples and test pieces..... | 9 |
| 8.3.3 Methods of test | 9 |
| 9 Disputes | 10 |
| Annex A (informative) Additional information | 17 |
| A.1 Selection of stainless steels for use in precision strip form for spring applications..... | 17 |
| A.2 Further details on ferritic steel X6Cr17 (1.4016)..... | 17 |
| A.3 Further details on martensitic steels | 18 |
| A.4 Further details on precipitation hardening steel X7CrNiAl17-7 (1.4568)..... | 18 |
| A.5 Further details on austenitic steels..... | 18 |
| A.6 Further general guidelines on processing | 18 |
| A.6.1 Physical properties | 18 |
| A.6.2 Cleaning and heat treatment..... | 18 |
| A.6.3 Mean surface roughness..... | 19 |

Foreword

This document (EN 10151:2002) has been prepared by Technical Committee ECISS/TC 23 "Steels for heat treatment, alloy steels and free-cutting steels - Qualities and dimensions", the secretariat of which is held by DIN.

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 May 2003, and conflicting national standards shall be withdrawn at the latest by May 2003.

Annex A is informative.

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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

EN 10151:2002 (E)

1 Scope

1.1 This European Standard applies to cold rolled narrow strip of thicknesses up to and including 3 mm in rolled widths less than 600 mm made from the stainless steel grades listed in Table 1. The steels are used in the conditions given in Table 4 for the production of springs and spring parts that are exposed to corrosive effects and sometimes slightly increased temperatures.

1.2 Other steel grades than those listed in Table 1, but covered by prEN 10088-2 can be supplied in the above conditions after agreement between supplier and customer (see also annex A).

1.3 The general technical delivery conditions specified in EN 10021 apply in addition to the specifications of this European Standard, unless otherwise specified in this European Standard.

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).

CR 10260, *Designation systems for steels - Additional symbols.*

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

EN 10002-1, *Metallic materials - Tensile testing - Part 1: Method of test at ambient temperature.*

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

EN 10027-1, *Designation systems for steel - Part 1: Steel names, principal symbols.*

EN 10027-2, *Designation systems for steel - Part 2: Numerical system.*

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

EN 10079, *Definition of steel products.*

prEN 10088-2, *Stainless steels - Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general and construction purposes.*

prEN 10168, *Iron and steel products – Inspection documents – List of information and description.*

EN 10204, *Metallic products - Types of inspection documents.*

EN 10258, *Cold-rolled stainless steel narrow strip and cut lengths - Tolerances on dimensions and shape.*

EN ISO 377, *Steel and steel products - Location and preparation of samples and test pieces for mechanical testing (ISO 377:1997).*

EN ISO 6507-1, *Metallic materials – Vickers hardness test – Part 1: Test method (ISO 6507-1:1997).*

EN ISO 7438, *Metallic materials – Bend test (ISO 7438:1985).*

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

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-