



National Standards Authority of Ireland

IRISH STANDARD

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**NITRIDING STEELS - TECHNICAL DELIVERY
CONDITIONS**

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English version

Nitriding steels - Technical delivery conditions

Aciers pour nitruration - Conditions techniques de livraison

Nitrierstähle - Technische Lieferbedingungen

This European Standard was approved by CEN on 19 January 2001.

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



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Foreword

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of an identical text or by endorsement, at the latest by September 2001, and conflicting national standards shall be withdrawn at the latest by September 2001.

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.

1 Scope

1.1 This European Standard specifies the technical delivery requirements for

- semi-finished products, e. g. blooms, billets, slabs (see NOTE 3);
- bars (see NOTE 3);
- rod;
- wide flats;
- hot- or cold-rolled strip and sheet/plate;
- forgings (see NOTE 3)

manufactured from the nitriding steels listed in Table 3 and supplied in one of the heat-treatment conditions given for the different types of products in Table 1, line 2 to 4 and in one of the surface conditions given in Table 2.

The steels are, in general, intended for the fabrication of quenched and tempered and generally machined and subsequently nitrided parts.

NOTE 1 Some grades from EN 10083-1 are also used for nitriding treatment.

NOTE 2 Related European Standards are given in Bibliography.

NOTE 3 Hammer-forged semi-finished products (blooms, billets, slabs etc.) and hammer-forged bars are in the following covered under semi-finished products or bars and not under the term "forgings".

1.2 In special cases, variations in these technical delivery requirements or additions to them may form the subject of an agreement at the time of enquiry and order (see annex B).

1.3 In addition to the specifications of this European Standard, 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 testing - Part 1: Test method (at ambient temperature)* "including Addendum AC1:1990"

EN 10020, *Definition and classification of grades of steel*

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