



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 10087:1999

ICS 77.140.50
77.140.60
77.140.65

**FREE-CUTTING STEELS - TECHNICAL
DELIVERY CONDITIONS FOR
SEMI-FINISHED PRODUCTS, HOT-ROLLED
BARS AND RODS**

National Standards
Authority of Ireland
Dublin 9
Ireland

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

*This Irish Standard was
published under the
authority of the National
Standards Authority of
Ireland
and comes into effect on:
April 23, 1999*

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

© NSAI 1999

Price Code I

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

EN 10087

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 1998

ICS 77.140.50; 77.140.60; 77.140.65

Descriptors: iron and steel products, hot-rolled products, metal bars, wire rod, free machining steels, grades:quality, chemical composition, mechanical properties, heat treatment, delivery condition, surface defects, inspection, tests

English version

Free-cutting steels - Technical delivery conditions for semi-finished products, hot-rolled bars and rods

Aciers de décolletage - Conditions techniques de livraison pour les demi-produits, barres et fils-machine laminés à chaud

Automatenstähle - Technische Lieferbedingungen für Halbzeug, warmgewalzte Stäbe und Walzdraht

This European Standard was approved by CEN on 4 September 1998.

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 Central Secretariat 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 Central Secretariat 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.



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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Contents	Page
Foreword	3
1 Scope	4
2 Normative references	4
3 Definitions	5
4 Classification and designation	5
4.1 Classification	5
4.2 Designation	5
5 Information to be supplied by the purchaser	6
5.1 Mandatory information	6
5.2 Options	6
6 Manufacturing process	6
6.1 General	6
6.2 Treatment condition at delivery	7
6.3 Cast separation	7
7 Requirements	7
7.1 Chemical composition and mechanical properties	7
7.2 Weldability	7
7.3 Structure	7
7.4 Internal soundness	7
7.5 Surface quality	7
7.6 Dimensions, tolerances on dimensions and shape	8
8 Inspection and testing	8
8.1 Types and contents of inspection documents	8
8.2 Specific inspection and testing	8
9 Marking	9

Annex A (normative):	Ruling section for the mechanical properties	16
Annex B (normative):	Supplementary or special requirements	18
Annex C (informative):	Bibliography	20
Annex D (informative):	Dimensional standards applicable to products complying with this European Standard	21

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.

ECISS/TC 23 met on 1st/2nd July 1997 in Düsseldorf and agreed on the text for submission of this draft European Standard to COCOR-Vote. The following countries were represented in the meeting:

Finland, France, Germany, Italy and United Kingdom.

The United Kingdom issues a non-conflicting national addition which describes a steel used in the United Kingdom but not included in this European Standard.

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 March 1999, and conflicting national standards shall be withdrawn at the latest by March 1999.

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.

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
-