

Flat products made of steels for pressure purposes —

Part 3: Weldable fine grain steels, normalized

The European Standard EN 10028-3:2003 has the status of a
British Standard

ICS 77.140.30; 77.140.50

National foreword

This British Standard is the official English language version of EN 10028-3:2003. It supersedes BS EN 10028-3:1993 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ISE/73/2, Steel plates and bars for pressure purposes, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 15 and a back cover.

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English version

Flat products made of steels for pressure purposes - Part 3: Weldable fine grain steels, normalized

Produits plats en aciers pour appareils à pression - Partie
3: Aciers soudables à grains fins, normalisés

Flacherzeugnisse aus Druckbehälterstählen - Teil 3:
Schweißgeeignete Feinkornbaustähle, normalgeglüht

This European Standard was approved by CEN on 20 January 2003.

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Foreword

This document (EN 10028-3:2003) has been prepared by Technical Committee ECISS /TC 22, "Steels for pressure purposes - Qualities", 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of an identical text or by endorsement, at the latest by December 2003, and conflicting national standards shall be withdrawn at the latest by December 2003.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative annex ZA, which is an integral part of this document.

This document supersedes EN 10028-3:1992.

EN 10028 consists of the following parts under the general title *Flat products made of steels for pressure purposes*:

Part 1: General requirements

Part 2: Non-alloy and alloy steels with specified elevated temperature properties

Part 3: Weldable fine grain steels, normalized

Part 4: Nickel alloy steels with specified low temperature properties

Part 5: Weldable fine grain steels, thermomechanically rolled

Part 6: Weldable fine grain steels, quenched and tempered

Part 7: Stainless steels

NOTE The clauses marked by two points (••) contain information relating to agreements that may be made at the time of enquiry and order.

Annex A is normative.

This document includes a bibliography.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies requirements for flat products for pressure equipment made of weldable fine grain steels as specified in Table 1.

NOTE Fine grain steels are understood as steels with a ferritic grain size of 6 or finer when tested in accordance with EURONORM 103.

The requirements and definitions of EN 10028-1 also apply.

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 10028-1:2000 + A1:2002, *Flat products made of steels for pressure purposes – Part 1: General requirements*.

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

EN 10229, *Evaluation of resistance of steel products to hydrogen induced cracking (HIC)*.

3 Terms and definitions

For the purposes of this European Standard the terms and definitions given in EN 10028-1 apply.

4 Dimensions and tolerances on dimensions

See EN 10028-1.

5 Calculation of mass

See EN 10028-1.

6 Classification and designation

6.1 Classification

6.1.1 The steel grades covered by this European Standard are given in four qualities:

- a) the room temperature quality (P ... N),
- b) the elevated temperature quality (P...NH),
- c) the low temperature quality (P...NL1) and
- d) the special low temperature quality (P...NL2).

6.1.2 In accordance with EN 10020, the grades P275NH, P275NL1, P355N, P355NH and P355NL1 are non-alloy quality steels, the grades P275NL2 and P355NL2 are non-alloy special steels and the grades P460NH, P460NL1 and P460NL2 are alloy special steels.