



NSAI
Standards

Irish Standard
I.S. EN 10028-7:2016&LC:2016

Flat products made of steels for pressure purposes - Part 7: Stainless steels

I.S. EN 10028-7:2016&LC:2016

Incorporating amendments/corrigenda/National Annexes issued since publication:

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I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

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SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

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National Foreword

I.S. EN 10028-7:2016&LC:2016 is the adopted Irish version of the European Document EN 10028-7:2016, Flat products made of steels for pressure purposes - Part 7: Stainless steels

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

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Correction Notice

Reference: EN 10028-7:2016

Title: Flat products made of steels for pressure purposes - Part 7: Stainless steels

Work Item: EC107053

Brussels, 2016-07-27

please include the following minor editorial correction(s) in the document related to:

the following language version(s) :

- English
- French
- German

for the following procedure :

- PQ/UQ
- Enquiry
- 2nd Enquiry
- Parallel Enquiry
- 2nd Parallel Enquiry
- Formal Vote
- 2nd Formal Vote
- Parallel Formal Vote
- 2nd Parallel Formal Vote
- UAP
- TC Approval
- 2nd TC Approval
- Publication
- Parallel Publication

It has been brought to our attention that this document, issued on 2016-07-13, requires modification.

- 1) In the Foreword, delete the third paragraph.
- 2) Replace the entire text of the Introduction with the new one.

Please find enclosed the updated English version.

We apologise for any inconvenience this may cause.

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EUROPEAN STANDARD

EN 10028-7

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2016

ICS 77.140.30; 77.140.50

Supersedes EN 10028-7:2007

English Version

Flat products made of steels for pressure purposes - Part 7: Stainless steels

Produits plats en aciers pour appareils à pression -
Partie 7: Aciers inoxydables

Flacherzeugnisse aus Druckbehälterstählen - Teil 7:
Nichtrostende Stähle

This European Standard was approved by CEN on 15 April 2016.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 2016-07-27.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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EN 10028-7:2016 (E)

European foreword

This document (EN 10028-7:2016) has been prepared by Technical Committee ECISS/TC 107 “Steels for pressure purposes”, 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 January 2017, and conflicting national standards shall be withdrawn at the latest by January 2017.

This document supersedes EN 10028-7:2007.

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, see informative Annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

The European Committee for Standardization (CEN) draws attention to the fact that it is claimed that compliance with this document may involve the use of patents concerning eight steel grades given in Clause 12, Annex A, Annex B, Annex C and Annex E.

CEN takes no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured CEN that he/she is willing to negotiate licences either free of charge or under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with CEN. Information may be obtained from:

Outokumpu Oyj

FI-02200 Espoo, Finland

for steel grades 1.4420, 1.4622, 1.4162 (but also consider footnote c in Table 4) and 1.4662

Industeel

F-71200 Creusot,

56 Rue Clemenceau, France

for steel grade 1.4062

Acciai Speciali Terni S.p.A.

I-05100 Terni, Italy

for steel grades 1.4646, 1.4611 and 1.4613

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those identified above. CEN shall not be held responsible for identifying any or all such patent rights.

CEN and CENELEC maintain online lists of patents relevant to their standards. Users are encouraged to consult the lists for the most up to date information concerning patents (<ftp://ftp.cencenelec.eu/EN/IPR/Patents/IPRdeclaration.pdf>).

EN 10028-7:2016 (E)

1 Scope

This European Standard specifies requirements for flat products for pressure purposes made of stainless steels, including austenitic creep resisting steels, in thicknesses as indicated in Tables 7 to 10.

The requirements of EN 10028-1 also apply.

NOTE 1 The steel grades covered by this European Standard have been selected from EN 10088-1.

NOTE 2 Once this European Standard is published in the Official Journal of the European Union (OJEU) under Directive 2014/68/EU, presumption of conformity to the Essential Safety Requirements (ESRs) of Directive 2014/68/EU is limited to technical data of materials in this European Standard (Part 1 and Part 7) and does not presume adequacy of the material to a specific item of equipment. Consequently, the assessment of the technical data stated in this material standard against the design requirements of this specific item of equipment to verify that the ESRs of the Pressure Equipment Directive are satisfied, needs to be done.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 10028-1, *Flat products made of steels for pressure purposes — Part 1: General requirements*

EN 10088-1:2014, *Stainless steels — Part 1: List of stainless steels*

EN ISO 3651-2, *Determination of resistance to intergranular corrosion of stainless steels — Part 2: Ferritic, austenitic and ferritic-austenitic (duplex) stainless steels — Corrosion test in media containing sulfuric acid (ISO 3651-2)*

EN ISO 9444-2, *Continuously hot-rolled stainless steel — Tolerances on dimensions and form — Part 2: Wide strip and sheet/plate (ISO 9444-2)*

EN ISO 9445-2, *Continuously cold-rolled stainless steel — Tolerances on dimensions and form — Part 2: Wide strip and plate/sheet (ISO 9445-2)*

EN ISO 18286, *Hot-rolled stainless steel plates — Tolerances on dimensions and shape (ISO 18286)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 10028-1 and the following apply.

3.1

cryogenic temperature

temperature lower than -75 °C used in the liquefaction of gases

4 Tolerances on dimensions

Shall be according to the following standards:

- EN ISO 9445-2 for product form C;
- EN ISO 9444-2 for product form H;
- EN ISO 18286 for product form P.

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