



NSAI
Standards

Irish Standard
I.S. EN 10088-1:2014

Stainless steels - Part 1: List of stainless steels

I.S. EN 10088-1:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

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This document is based on:

EN 10088-1:2014

Published:

2014-10-22

*This document was published
under the authority of the NSAI
and comes into effect on:*

2014-11-08

ICS number:

77.140.20

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

EN 10088-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2014

ICS 77.140.20

Supersedes EN 10088-1:2005

English Version

Stainless steels - Part 1: List of stainless steels

Aciers inoxydables - Partie 1: Liste des aciers inoxydables

Nichtrostende Stähle - Teil 1: Verzeichnis der
nichtrostenden Stähle

This European Standard was approved by CEN on 9 August 2014.

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

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 10088-1:2014) has been prepared by Technical Committee ECISS/TC 105 “Steels for heat treatment, alloy steels, free-cutting and stainless steels”, 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of an identical text or by endorsement, at the latest by April 2015 and conflicting national standards shall be withdrawn at the latest by April 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 10088-1:2005.

This document mainly differs from the 2005 edition as follows:

- a) addition of austenitic grades 1.4615 (also part 3), 1.4618 (2), 1.4376 (2), 1.4640 (2), 1.4646 (2, 3), 1.4020 (3), 1.4378 (3), addition of austenitic-ferritic (duplex) grades 1.4162 (2, 3), 1.4662 (2, 3), 1.4658 (3), 1.4482 (2, 3), 1.4062 (2, 3), 1.4669 (3), addition of ferritic grades 1.4621 (2), 1.4600 (2), 1.4607 (2), 1.4611 (2, 3), 1.4613 (2, 3), 1.4630 (2), 1.4634 (2), addition of martensitic grade 1.4150 (3), addition of precipitation hardening grade 1.4612 (3);
- b) chemical composition was changed for following grades: austenitic grade 1.4371, 1.4597, austenitic-ferritic grade 1.4362.

Each of the tables for the chemical composition of steel grades now has a sub-section with grades designated as 'uncommon' (i.e. not produced in the past 10 years and which may be removed during the next revision).

EN 10088, under the general title *Stainless steels*, consists of the following parts:

- *Part 1: List of stainless steels* (including a table of European Standards, in which these stainless steels are further specified, see Annex B) [the present document];
- *Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes*;
- *Part 3: Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes*;
- *Part 4: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for construction purposes*;
- *Part 5: Technical delivery conditions for bars, rods, wire, sections and bright products of corrosion resisting steels for construction purposes*.

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.

EN 10088-1:2014 (E)

Introduction

The European Organization for Standardization (CEN) draws attention to the fact that it is claimed that compliance with this document may involve the use of patents applied to ten steel grades.

CEN takes no position concerning the evidence, validity and scope of these patent rights.

The holder of these patent rights has ensured CEN that they are willing to negotiate licences, under reasonable and non-discriminatory terms and conditions, with applicants throughout the world. In this respect, the statements of the holders of these patent rights are registered with CEN. Information may be obtained from:

Grade 1.4658
Sandvik AB
SE-81181 Sandviken, Sweden

Grade 1.4162, 1.4662
Outokumpu Stainless AB
SE-77480 Avesta, Sweden

Grade 1.4062, 1.4615, 1.4669
Ugitech
F-73403 Ugine Cedex, France

Grade 1.4062, 1.4669
Industeel
F-71200 Creusot, 56 Rue Clemenceau, France

Grade 1.4646, 1.4611, 1.4613
Acciai Speciali Terni
I-05100 Terni, Italy

1 Scope

This European Standard lists the chemical composition of stainless steels, which are subdivided in accordance with their main properties into corrosion resisting steels, heat resisting steels and creep resisting steels and specified in the European Standards given in Table 1.

Table 1 — Overview of material standards for stainless steels

Stainless steels		
Corrosion resisting steels	Heat resisting steels	Creep resisting steels
EN 10028-7		EN 10028-7
EN 10088-2		
EN 10088-3		
EN 10088-4		
EN 10088-5		
	EN 10095	
EN 10151		
EN 10216-5		EN 10216-5
EN 10217-7		
EN 10222-5		EN 10222-5
EN 10250-4		
EN 10263-5		
EN 10264-4	EN 10264-4	
EN 10269		EN 10269
EN 10270-3		
EN 10272		
EN 10296-2		
EN 10297-2		
		EN 10302
EN 10312		

Reference data on some physical properties are given in Tables E.1 to E.8.

NOTE 1 A matrix that shows which steels are included in which standard is given in Annex B.

NOTE 2 Valve steels are specified in EN 10090.

NOTE 3 Steel castings are specified in various European Standards (see Bibliography).

NOTE 4 Tool steels are specified in EN ISO 4957.

NOTE 5 Welding consumables are specified in various European Standards (see Bibliography).

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