



NSAI
Standards

Irish Standard
I.S. EN 13195:2013

Aluminium and aluminium alloys - Specifications for wrought and cast products for marine applications (shipbuilding, marine and offshore)

I.S. EN 13195:2013

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

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

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

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

This document replaces:
EN 13195:2009

<i>This document is based on:</i> EN 13195:2013 EN 13195:2009	<i>Published:</i> 11 October, 2013 23 December, 2009
---------------------------------------------------------------------	------------------------------------------------------------

This document was published under the authority of the NSAI and comes into effect on:
11 October, 2013

ICS number:
77.150.10

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

English Version

Aluminium and aluminium alloys - Specifications for wrought and cast products for marine applications (shipbuilding, marine and offshore)

Aluminium et alliages d'aluminium - Spécifications des produits corroyés et des pièces moulées pour applications marines (construction navale, maritime et offshore)

Aluminium und Aluminiumlegierungen - Spezifikationen für Knetzeugnisse und Gussstücke für Seewasseranwendungen (Schiffbau, Meeres- und Offshoretechnik)

This European Standard was approved by CEN on 22 August 2013.

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.

CEN members are the national standards bodies of 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 United Kingdom.



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

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

Contents	Page
Foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	6
4 Selection of materials	6
5 Ordering information	7
6 Wrought aluminium alloy products for marine applications	7
6.1 Technical conditions for inspection and delivery	7
6.2 Mechanical properties	7
6.3 Tolerances on dimensions and form	7
6.4 Special requirements for corrosion-testing of EN AW-5059, EN AW-5083, EN AW-5086, EN AW-5383, EN AW-5456 alloys	8
7 Castings	9
7.1 Mechanical properties	9
7.2 Technical conditions for delivery of castings	9
Annex A (informative) Recommendations for the proper use of certain alloys	12
A.1 Materials selection	12
A.2 Wrought alloys	12
A.2.1 Wrought heat treatable alloys	12
A.2.2 Wrought non-heat treatable alloys	13
A.3 Casting alloys	13
A.4 Welding	14
Annex B (normative) Mechanical properties of aluminium alloy EN AW-5383 for extruded products	19
Annex C (informative) Explanation of temper designations	20
Bibliography	21

Foreword

This document (EN 13195:2013) has been prepared by Technical Committee CEN/TC 132 "Aluminium and aluminium alloys", the secretariat of which is held by AFNOR.

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 2014, and conflicting national standards shall be withdrawn at the latest by April 2014.

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.

CEN/TC 132 affirms its policy that if a patentee refuses to grant licences on standardized products under reasonable and not discriminatory conditions, this product will be removed from the corresponding document.

This document supersedes EN 13195:2009.

The main changes in this revision are the addition of the alloy EN AW-5456 in 6.4, in Table 1, in A.2.2.1, in A.2.2.3 and in Table A.1.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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.

1 Scope

This European Standard specifies properties and technical conditions for inspection and delivery of wrought and cast aluminium and aluminium alloy products recommended for marine applications, including shipbuilding and offshore applications.

Additional information is given about high magnesium alloys, with special regard to their sensitivity to intergranular and exfoliation corrosion.

This European Standard is intended to be used in conjunction with relevant European, national or international regulations as applicable, to which it comes in support.

For products intended to be used in marine constructions to be classified by a Classification Society, the relevant requirements of this Society apply.

This European Standard covers:

- wrought products in aluminium alloys (see Clause 6);
- castings in aluminium alloys (see Clause 7).

Information is given in Annex A to guide the user in the selection of aluminium and aluminium alloys and tempers for various applications.

This European Standard does not cover:

- execution and design, covered by the rules of the Classification Societies or EN 1090-3 and EN 1999-1-1 to EN 1999-1-5;
- welding, covered by EN 1011-4.

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 485-1, *Aluminium and aluminium alloys — Sheet, strip and plate — Part 1: Technical conditions for inspection and delivery*

EN 485-2, *Aluminium and aluminium alloys — Sheet, strip and plate — Part 2: Mechanical properties*

EN 485-3, *Aluminium and aluminium alloys — Sheet, strip and plate — Part 3: Tolerances on dimensions and form for hot-rolled products*

EN 485-4, *Aluminium and aluminium alloys — Sheet, strip and plate — Part 4: Tolerances on shape and dimensions for cold-rolled products*

EN 515, *Aluminium and aluminium alloys — Wrought products — Temper designations*

EN 573-3, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 3: Chemical composition and form of products*

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](#)
-