



NSAI
Standards

Irish Standard
I.S. EN 2516:2020

Aerospace series - Passivation of corrosion resisting steels and decontamination of nickel base alloys

I.S. EN 2516:2020

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

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN 2516:2020

Published:

2020-01-08

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

2020-01-26

ICS number:

49.040

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

National Foreword

I.S. EN 2516:2020 is the adopted Irish version of the European Document EN 2516:2020, Aerospace series - Passivation of corrosion resisting steels and decontamination of nickel base alloys

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

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

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

This page is intentionally left blank

EUROPEAN STANDARD

EN 2516

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2020

ICS 49.040

Supersedes EN 2516:1997

English Version

Aerospace series - Passivation of corrosion resisting steels and decontamination of nickel base alloys

Série aérospatiale - Passivation des aciers résistants à
la corrosion et décontamination des alliages base
nickel

Luft- und Raumfahrt - Passivieren von
korrosionsbeständigen Stählen und Dekontaminierung
von Nickellegierungen

This European Standard was approved by CEN on 11 November 2019.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, 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: Rue de la Science 23, B-1040 Brussels

| Contents | Page |
|--|-------------|
| European foreword | 3 |
| 1 Scope | 4 |
| 2 Normative references | 4 |
| 3 Terms and definitions | 4 |
| 4 Purpose of process | 4 |
| 5 Applicability and limitations of the process | 4 |
| 6 Information for the processor | 5 |
| 7 Condition of the parts prior to processing | 5 |
| 8 Pre-treatments | 5 |
| 9 Treatment | 6 |
| 10 Required characteristics and inspections | 7 |
| 11 Quality assurance | 8 |
| 12 Health, safety and environmental aspects | 8 |
| 13 Designation | 9 |
| Annex A (normative) Recommended passivation solutions | 10 |
| Annex B (informative) Standard evolution form | 12 |
| Bibliography | 13 |

European foreword

This document (EN 2516:2020) has been prepared by the Aerospace and Defence Industries Association of Europe — Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2020, and conflicting national standards shall be withdrawn at the latest by July 2020.

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

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 2516:2020 (E)

1 Scope

This standard specifies several chemical methods of passivation for corrosion resisting steels (austenitic, ferritic, martensitic and precipitation hardenable) and of decontamination for nickel or cobalt base alloys.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 9227, *Aerospace series — Corrosion tests in artificial atmospheres — Salt spray tests*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

4 Purpose of process

To improve the corrosion resistance characteristics of a part after such treatments as machining, forming, tumbling and shot peening by removing foreign metal contamination due to these operations.

Passivation shall not be used on castings, welded or brazed parts, carburized or nitrided surfaces nor on parts with mating surfaces when entrapment of acids may occur.

5 Applicability and limitations of the process

This specification is applicable for the following corrosion resisting alloys:

- austenitic steels;
- austenitic ferritic steels;
- martensitic chromium steels;
- ferritic steels;
- austenitic precipitation hardenable steels;
- martensitic precipitation hardenable steels;
- heat resisting nickel or cobalt base alloys.

This specification is not applicable for:

- unalloyed or low-alloyed carbon steel;

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](#)
-