

Irish Standard I.S. EN 3219:2020&LC:2020

Aerospace series - Heat resisting nickel base alloy (NI-P100HT) - Cold worked and softened - Bar and wire for continuous forging or extrusion for fasteners - 3 mm  $\leq$  D  $\leq$  30 mm

 $\ensuremath{\mathbb C}$  CEN 2020  $\hfill No copying without NSAI permission except as permitted by copyright law.$ 

#### I.S. EN 3219:2020&LC: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: Published: This document was published ICS number: under the authority of the NSAI and comes into effect on: 49.025.99 2020-03-12 NOTE: If blank see CEN/CENELEC cover page NSAI T +353 1 807 3800 Sales: 1 Swift Square, F +353 1 807 3838 T +353 1 857 6730 Northwood, Santry F +353 1 857 6729 E standards@nsai.ie Dublin 9 W NSAI.ie W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

#### **National Foreword**

I.S. EN 3219:2020&LC:2020 is the adopted Irish version of the European Document EN 3219:2020, Aerospace series - Heat resisting nickel base alloy (NI-P100HT) - Cold worked and softened - Bar and wire for continuous forging or extrusion for fasteners - 3 mm  $\leq$  D  $\leq$  30 mm

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 is a free page sample. Access the full version online.

This page is intentionally left blank

This is a free page sample. Access the full version online. I.S. EN 3219:2020&LC:2020



# **Correction Notice**

#### **Reference:** EN 3219:2020

Title: Aerospace series - Heat resisting nickel base alloy (NI-P100HT) - Cold worked and softened - Bar and wire for continuous forging or extrusion for fasteners - 3 mm  $\leq$  D  $\leq$  30 mm

Work Item: 04001384

Brussels, 2020-01-05

#### 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 : Enquiry 2nd Enguiry Parallel Enquiry 2<sup>nd</sup> Parallel Enquiry Formal Vote 2<sup>nd</sup> Formal Vote Parallel Formal Vote 2<sup>nd</sup> Parallel Formal Vote 🗌 UAP TC Approval 2<sup>nd</sup> TC Approval Publication Parallel Publication

It has been brought to our attention that this document, issued on 2020-01-15, requires modification.

The title was missing an "or" to read: "Aerospace series - Heat resisting nickel base alloy (NI-P100HT) - Cold worked and softened - Bar and wire for continuous forging **or** extrusion for fasteners -  $3 \text{ mm} \le D \le 30 \text{ mm}^3$ 

We apologise for any inconvenience this may cause.

This page is intentionally left BLANK.

#### This is a free page sample. Access the full version online. I.S. EN 3219:2020&LC:2020

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 3219

January 2020

ICS 49.025.99

**English Version** 

## Aerospace series - Heat resisting nickel base alloy (NI-P100HT) - Cold worked and softened - Bar and wire for continuous forging or extrusion for fasteners - $3 \text{ mm} \le D \le$ 30 mm

Série aérospatiale - Alliage résistant à chaud base nickel (Ni-P100HT) - Écroui et adouci - Barre et fil pour le forgeage ou l'extrusion en continu pour fixations - 3 mm  $\leq D \leq 30$  mm

Luft- und Raumfahrt - Hochwarmfeste Nickellegierung (Ni-P100HT) - Kaltverfestigt und abgeschreckt -Stangen und Drähte zum kontinuierlichen Verformen oder Strangpressen für Verbindungselemente - 3 mm  $\leq$ D  $\leq$  30 mm

This European Standard was approved by CEN on 14 January 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

Ref. No. EN 3219:2020 E

# This is a free page sample. Access the full version online. $I.S.\ EN\ 3219{:}2020\&LC{:}2020$

## EN 3219:2020 (E)

# Contents

# Page

	ean foreword	
Introduction		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Requirements	5
Bibliog	Bibliography	

## **European foreword**

This document (EN 3219:2020) 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 3219:2020 (E)

## Introduction

This document is part of the series of EN metallic material standards for aerospace applications. The general organisation of this series is described in EN 4258.

This document has been prepared in accordance with EN 4500-003.

## 1 Scope

This document specifies the requirements relating to:

#### Heat resisting nickel base alloy (NI-P100HT) Cold worked and softened Bar and wire for continuous forging or extrusion for fasteners $3 \text{ mm} \le D \le 30 \text{ mm}$

for aerospace applications.

### 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 2344, Aerospace series — Round bars, machined in heat resisting alloys — Diameter 10 mm  $\leq D \leq 180$  mm — Dimensions

EN 2369, Aerospace series — Wires, heat resisting alloys — Diameter 0,2 mm  $\leq D \leq 8$  mm — Dimensions

EN 2600, Aerospace series — Designation of metallic semi-finished products — Rules

EN 4700-002, Aerospace series — Steel and heat resisting alloys — Wrought products — Technical specification — Part 002: Bar and section  $^{1)}$ 

EN 4700-004, Aerospace series — Steel and heat resisting alloys — Wrought products — Technical specification — Part 004: Wire

EN 4800-002, Aerospace series — Titanium and titanium alloys — Technical specification — Part 002: Bar and section

EN 4800-004, Aerospace series — Titanium and titanium alloys — Technical specification — Part 004: Wire

### 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** Requirements

See Table 1.

<sup>1)</sup> Published as ASD-STAN Standard at the date of publication of this standard by AeroSpace and Defence industries Association of Europe — Standardization (ASD-STAN), http://www.asd-stan.org/



This is a free preview. Purchase the entire publication at the link below:

**Product Page** 

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation