



**NSAI**  
Standards

Irish Standard  
I.S. EN 4570:2020

Aerospace series - Heat resisting alloy  
X12CrNiCoMoW21-20 - Solution treated -  
Forgings -  $De \leq 100$  mm

**I.S. EN 4570:2020**

*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 4570:2020

*Published:*

2020-02-26

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

2020-03-15

ICS number:

49.025.05

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 4570:2020 is the adopted Irish version of the European Document EN 4570:2020, Aerospace series - Heat resisting alloy X12CrNiCoMoW21-20 - Solution treated - Forgings -  $D_e \leq 100$  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 page is intentionally left blank

**EUROPEAN STANDARD**

**EN 4570**

**NORME EUROPÉENNE**

**EUROPÄISCHE NORM**

February 2020

ICS 49.025.05

English Version

**Aerospace series - Heat resisting alloy X12CrNiCoMoW21-  
20 - Solution treated - Forgings - De ≤ 100 mm**

Série aérospatiale - Alliage résistant à chaud  
X12CrNiCoMoW21-20 - Mis en solution - Pièces forgées  
ou matricées - De ≤ 100 mm

Luft- und Raumfahrt - Hochwarmfeste Legierung FE-  
PA4901 (X12CrNiCoMoW21-20) - Lösungsgeglüht -  
Schmiedestücke - De ≤ 100 mm

This European Standard was approved by CEN on 8 December 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**

| <b>Contents</b>                      | <b>Page</b> |
|--------------------------------------|-------------|
| <b>European foreword</b> .....       | <b>3</b>    |
| <b>Introduction</b> .....            | <b>4</b>    |
| <b>1 Scope</b> .....                 | <b>5</b>    |
| <b>2 Normative references</b> .....  | <b>5</b>    |
| <b>3 Terms and definitions</b> ..... | <b>5</b>    |
| <b>4 Requirements</b> .....          | <b>5</b>    |
| <b>Bibliography</b> .....            | <b>8</b>    |

## **European foreword**

This document (EN 4570:2020) 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 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 August 2020, and conflicting national standards shall be withdrawn at the latest by August 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 4570:2020 (E)**

## **Introduction**

This document is part of the series of EN metallic material standards for aerospace applications. The general organization 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 alloy X12CrNiCoMoW21-20  
Solution treated  
Forgings  
 $De \leq 100$  mm

for aerospace applications.

ASD-STAN Designation: FE-PA4901.

## 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 4263, *Aerospace series — Heat resisting alloy FE-PA4901 (X12CrNiCoMoW21-20) — As forged — Forging stock —  $a$  or  $D \leq 200$  mm —  $690$  MPa  $\leq R_m \leq 960$  MPa*

EN 4700-006, *Aerospace series — Steel and heat resisting alloys — Wrought products — Technical specification — Part 006: Pre-production and production forgings*

## 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.

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](#)
-