Irish Standard
I.S. EN 4825:2021

Aerospace series - Steel X12CrNiMoV12-3 (1.4938) - Air melted and consumable electrode remelted - Hardened and tempered - Bars - De ≤ 150 mm - 900 MPa ≤ Rm ≤ 1 100 MPa

I.S. EN 4825:2021

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National Foreword

I.S. EN 4825:2021 is the adopted Irish version of the European Document EN 4825:2021, Aerospace series - Steel X12CrNiMoV12-3 (1.4938) - Air melted and consumable electrode remelted - Hardened and tempered - Bars - De ≤ 150 mm - 900 MPa ≤ Rm ≤ 1 100 MPa

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 4825

May 2021

ICS 49.025.10

English Version

Aerospace series - Steel X12CrNiMoV12-3 (1.4938) - Air melted and consumable electrode remelted - Hardened and tempered - Bars - De ≤ 150 mm - 900 MPa ≤ Rm ≤ 1 100 MPa

Série aérospatiale - Acier X12CrNiMoV12-3 (1.4938) - Élaboré à l'air et refondu à l'électrode consommable - Trempé et revenu - Barres - De ≤ 150 mm - 900 MPa ≤ Rm ≤ 1 100 MPa

Luft- und Raumfahrt - Stahl X12CrNiMoV12-3 (1.4938) - Lufterschmolzen und mit selbstverzehrender Elektrode umgeschmolzen - Gehärtet- und angelassen - Stangen - De ≤ 150 mm - 900 MPa ≤ Rm ≤ 1 100 MPa

This European Standard was approved by CEN on 18 January 2021.

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

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European foreword

This document (EN 4825:2021) 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 document 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of an identical text or by endorsement, at the latest by November 2021, and conflicting national standards shall be withdrawn at the latest by November 2021.

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.

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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 4500-005.

This document allows to be in compliance with the requirements of the grade of WL 1.4939 and 1.4933 if the steel maker aims C 0,008-0,13 % max. and Si ≤ 0,35 %.

1 Scope

This document specifies the requirements relating to:

Steel X12CrNiMoV12-3 (1.4938)
Air melted and consumable electrode remelted
Hardened and tempered
Bars
$D_e \leq 150$ mm
900 MPa $\leq R_m \leq$ 1 100 MPa

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 2043, *Aerospace series — Metallic materials — General requirements for semi-finished product qualification (excluding forgings and castings)*

EN 2951, *Aerospace series — Metallic materials — Micrographic determination of content of non-metallic inclusions*

EN 4050-4, *Aerospace series — Test method for metallic materials — Ultrasonic inspection of bars, plates, forging stock and forgings — Part 4: Acceptance criteria*

EN 4700-002, *Aerospace series — Steel and heat resisting alloys — Wrought products — Technical specification — Part 002: Bar and section* [1)]

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.

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