Aerospace series - X5CrNiCu15-5 (1.4545) - Consumable electrode remelted (ESR or VAR) - Solution treated and precipitation treated (H1025) - Bar for **machining - a or D ≤ 250 mm - 1 070 MPa ≤ Rm ≤ 1 200** MPa - Premium quality (pq)

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 4842:2019 sisaldab Euroopa standardi EN 4842:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 4842:2019 consists of the English text of the European standard EN 4842:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 29.05.2019.	Date of Availability of the European standard is 29.05.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 49.025.15

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 4842

May 2019

ICS 49.025.15

English Version

Aerospace series - X5CrNiCu15-5 (1.4545) - Consumable electrode remelted (ESR or VAR) - Solution treated and precipitation treated (H1025) - Bar for machining - a or D ≤ 250 mm - 1 070 MPa ≤ Rm ≤ 1 200 MPa - Premium quality (pq)

Série aérospatiale - X5CrNiCu15-5 (1.4545) - Refondu à l'électrode consommable (ESR ou VAR) - Mis en solution et vieilli (H1025) - Barres pour usinage - a ou D ≤ 250 mm - 1 070 MPa ≤ Rm ≤ 1 200 MPa - Première qualité (pq)

Luft- und Raumfahrt - X5CrNiCu15-5 (1.4545) - Mit selbstverzehrender Elektrode umgeschmolzen (ESR oder VAR - lösungsgeglüht und ausgelagert (H1025) - Stangen zur spanenden Bearbeitung - a oder D ≤ 250 mm - 1 070 MPa ≤ Rm ≤ 1 200 MPa - Beste Güte (pq)

This European Standard was approved by CEN on 14 October 2018.

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 4842:2019 E

Contents Page

European foreword

This document (EN 4842:2019) 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 November 2019, and conflicting national standards shall be withdrawn at the latest by November 2019.

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 organizations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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.

1 Scope

This document specifies the requirements relating to:

X5CrNiCu15-5 (1.4545)
Consumable electrode remelted (ESR or VAR)
Solution treated and precipitation treated (H1025)
Bar for machining
a or $D \leq 250$ mm
1 070 MPa ≤ R_m ≤ 1 200 MPa
Premium quality (pq)

for aerospace applications.

NOTE Other designation:
Only the chemical composition of this standard must be considered.

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 2950, *Aerospace series — Test method — Wrought heat resisting alloys semifinished products and parts — Conditions for macrographic and micrographic examination — Atlas of structures and defects*

EN 3874, *Aerospace series — Test methods for metallic materials — Constant amplitude force-controlled low cycle fatigue testing* [1)]

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

EN 4258, *Aerospace series — Metallic materials — General organization of standardization — Links between types of EN standards and their use*

EN 4500-005, *Aerospace series — Metallic materials — Rules for drafting and presentation of material standards — Part 005: Specific rules for steels*

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

ISO 1143, *Metallic materials — Rotating bar bending fatigue testing*

ASTM E45, *Standard Test Methods for Determining the Inclusion Content of Steel*

AMS 2315, *Determination of Delta Ferrite Content* [2)]

1) Published as ASD-STAN Prestandard at the date of publication of this standard, http://www.asd-stan.org/

2) Published by: National (US) Society of Automotive Engineers (SAE), http://www.sae.org/