

Aerospace series - Steel FE-PM1503 (X3CrNiMoAl 13-8-2) - Vacuum induction melted and consumable electrode remelted - Solution treated and precipitation treated - **Bar for machining - a or D ≤ 150 mm - 1 200 MPa ≤ Rm ≤ 1 400 MPa**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 3357:2019 sisaldab Euroopa standardi EN 3357:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 3357:2019 consists of the English text of the European standard EN 3357:2019.
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 19.06.2019.	Date of Availability of the European standard is 19.06.2019.
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](mailto:standardiosakond@evs.ee).

ICS 49.025.10

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

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English Version

**Aerospace series - Steel FE-PM1503 (X3CrNiMoAl 13-8-2)  
- Vacuum induction melted and consumable electrode  
remelted - Solution treated and precipitation treated - Bar  
for machining - a or D ≤ 150 mm - 1 200 MPa ≤ Rm ≤ 1 400  
MPa**

Série aérospatiale - Acier FE-PM1503 (X3CrNiMoAl 13-8-2) - Élaboré sous vide par induction et refondu à l'électrode consommable - Mis en solution et vieilli - Barres pour usinage - a ou D ≤ 150 mm - 1 200 MPa ≤ Rm ≤ 1 400 MPa

Luft- und Raumfahrt - Stahl FE-PM1503 (X3CrNiMoAl 13-8-2) - Vakuuminduktionserschmolzen und mit selbstverzehrender Elektrode umgeschmolzen - Lösungsgeglüht und ausgehärtet - Stangen zur spanenden Bearbeitung - a oder D ≤ 150 mm - 1 200 MPa ≤ Rm ≤ 1 400 MPa

This European Standard was approved by CEN on 8 July 2018.

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, 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 United Kingdom.



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

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

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## European foreword

This document (EN 3357:2019) 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 December 2019, and conflicting national standards shall be withdrawn at the latest by December 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 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.

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## 1 Scope

This document specifies the requirements relating to:

Steel FE-PM1503 (X3CrNiMoAl 13-8-2)  
 Vacuum induction melted and consumable electrode remelted  
 Solution treated and precipitation treated  
 Bar for machining  
 $a$  or  $D \leq 150$  mm  
 $1\ 200\ \text{MPa} \leq R_m \leq 1\ 400\ \text{MPa}$

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 2003-7, *Aerospace series — Steel — Test methods — Part 7: Macrographic test* <sup>1)</sup>

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

EN 4050-1, *Aerospace series — Test method for metallic materials — Ultrasonic inspection of bars, plates, forging stock and forgings — Part 1: General requirements*

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

EN 4436, *Aerospace series — Steel — Test methods — Determination of 'delta' ferrite content* <sup>1)</sup>

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*

## 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:

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

## 4 Requirements

See Table 1.

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