

Aerospace series - Steel 31NiMoCr10-5-3 - $1\ 230\ \text{MPa} \leq R_m \leq 1\ 420\ \text{MPa}$ - Forgings - $De \leq 40\ \text{mm}$

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 2451:2025 sisaldab Euroopa standardi EN 2451:2025 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 19.11.2025.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 2451:2025 consists of the English text of the European standard EN 2451:2025.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 19.11.2025.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 49.025.10

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EUROPEAN STANDARD

EN 2451

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2025

ICS 49.025.10

Supersedes EN 2451:2019

English Version

**Aerospace series - Steel 31NiMoCr10-5-3 - 1 230 MPa ≤
Rm ≤ 1 420 MPa - Forgings - De ≤ 40 mm**

Série aérospatiale - Acier 31NiMoCr10-5-3 - 1 230 MPa
≤ Rm ≤ 1 420 MPa - Pièces forgées ou matricées - De ≤
40 mm

Luft- und Raumfahrt - Stahl 31NiMoCr10-5-3 - 1 230
MPa ≤ Rm ≤ 1 420 MPa - Gesenk- und
Freiformschmiedestücke - De ≤ 40 mm

This European Standard was approved by CEN on 5 October 2025.

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, Türkiye and United Kingdom.



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

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European foreword

This document (EN 2451:2025) has been prepared by 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-STAN, 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 May 2026, and conflicting national standards shall be withdrawn at the latest by May 2026.

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.

This document supersedes EN 2451:2019.

EN 2451:2025 includes the following significant technical changes with respect to EN 2451:2019:

- correction of the French title for global consistency throughout the standard titles.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this document: 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, Türkiye 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.

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1 Scope

This document specifies the requirements relating to:

$$\begin{aligned} & \text{Steel 31NiMoCr10-5-3} \\ & 1\,230 \text{ MPa} \leq R_m \leq 1\,420 \text{ MPa} \\ & \text{Bars} \\ & D_e \leq 40 \text{ mm} \end{aligned}$$

for aerospace applications.

ASD-STAN designation: FE-PL73.

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 4700-005, *Aerospace series — Steel and heat resisting alloys — Wrought products — Technical specification — Part 005: Forging stocks*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

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

4 Requirements

The requirements of Table 1 shall be applied.

The documents listed in Table 1 shall be applied.