ICS 49.025.10 SLOVENSKÁ TECHNICKÁ NORMA Marec 2026

| STN | **Letectvo a kozmonautika<br>Oceľ X5CrNiCu17-4 (1.4542)<br>Tavenie na vzduchu<br>Homogenizačne a precipitačne žíhané výkovky,<br>*a* alebo $D \leq 200$ mm, $R_m \geq 930$ MPa** | **STN<br>EN 3678<br><br>31 2187** |
|---|---|---|

Aerospace series - Steel X5CrNiCu17-4 (1.4542) - Air melted - Solution treated and precipitation treated - Forgings - a or D 200 mm - Rm 930 MPa

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/26

Obsahuje: EN 3678:2025

Oznámením tejto normy sa ruší
STN EN 3678 (31 2187) zo septembra 2007

**142028**

# EUROPEAN STANDARD
# NORME EUROPÉENNE
# EUROPÄISCHE NORM

# EN 3678

December 2025

ICS 49.025.10 Supersedes EN 3678:2007

English Version

# Aerospace series - Steel X5CrNiCu17-4 (1.4542) - Air melted - Solution treated and precipitation treated - Forgings - a or D ≤ 200 mm - Rm ≥ 930 MPa

Série aérospatiale - Acier X5CrNiCu17-4 (1.4542) - Élaboré à l'air - Mis en solution et précipité - Pièces forgées ou matricées - a ou D ≤ 200 mm - Rm ≥ 930 MPa

Luft- und Raumfahrt - Stahl X5CrNiCu17-4 (1.4542) - Lufterschmolzen - Lösungsgeglüht und ausscheidungsgehärtet - Schmiedestücke - a oder D ≤ 200 mm - Rm ≥ 930 MPa

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**



Ref. No. EN 3678:2025 E

**EN 3678:2025 (E)**

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# European foreword

This document (EN 3678:2025) 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 June 2026, and conflicting national standards shall be withdrawn at the latest by June 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 3678:2007.

EN 3678:2025 includes the following significant technical changes with respect to EN 3678:2007:

— update of the material designation;

— correction of the format of Table 1 to comply with the requirements of the EN 4500 series;

— update of Clause 2;

— addition of a bibliography.

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.

# 1 Scope

This document specifies the requirements relating to:

Steel X5CrNiCu17-4 (1.4542)
Air melted
Solution treated and precipitation treated
Forgings
$a$ or $D \leq 200$ mm
$R_m \geq 930$ MPa

for aerospace applications.

W.nr: 1.4542.

ASD-STAN designation: FE-PM3801.

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