



SLOVENSKI STANDARD
oSIST prEN 4163:2025

01-januar-2025

Aeronavtika - Vijaki, 100° ugrezna glava, križna zarez, polno steblo, ozka toleranca, dolg navoj, iz legiranega jekla, prevlečeni s kadmijem - Klasifikacija: 1 100 MPa (pri temperaturi okolice)/235 °C

Aerospace series - Screws 100° countersunk normal head, offset cruciform recess, coarse tolerance normal shank, long thread, in alloy steel, cadmium plated - Classification: 1 100 MPa (at ambient temperature) / 235 °C

Luft- und Raumfahrt - 100° Senkschrauben mit Flügelkreuzschlitz, langes Gewinde, aus legiertem Stahl, verkadmet - Klasse: 1 100 MPa (bei Raumtemperatur)/235 °C

Série aérospatiale - Vis à tête fraisée 100° normale, à empreinte cruciforme déportée, tige normale à tolérance large, filetage long, en acier allié, cadmiées - Classification: 1 100 MPa (à température ambiante)/235 °C

<https://standards.iteh.ai/catalog/standards/sist/e9fb2b76-aec7-4afe-88aa-4340519a4073/osist-pren-4163-2025>

Ta slovenski standard je istoveten z: prEN 4163

ICS:

49.025.10	Jekla	Steels
49.030.20	Sorniki, vijaki, stebelni vijaki	Bolts, screws, studs

oSIST prEN 4163:2025

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 4163

November 2024

ICS 49.030.20

Will supersede EN 4163:2016

English Version

**Aerospace series - Screws 100° countersunk normal head,
offset cruciform recess, coarse tolerance normal shank,
long thread, in alloy steel, cadmium plated - Classification:
1 100 MPa (at ambient temperature) / 235 °C**

Série aérospatiale - Vis à tête fraisée 100° normale, à
empreinte cruciforme déportée, tige normale à
tolérance large, filetage long, en acier allié, cadmiées -
Classification: 1 100 MPa (à température
ambiante)/235 °C

Luft- und Raumfahrt - 100° Senkschrauben mit
Flügelkreuzschlitz, langes Gewinde, aus legiertem
Stahl, verkadmet - Klasse: 1 100 MPa (bei
Raumtemperatur)/235 °C

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee ASD-STAN.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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

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European foreword

This document (prEN 4163:2024) has been prepared by ASD-STAN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 4163:2016.

This document includes the following significant technical changes with respect to EN 4163:2016:

- normative references updated;
- Figure 1, *Configuration*, updated;
- surface treatment updated;
- Table 2, *Drive Code*, updated;
- Bibliography updated;
- document editorially revised.

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prEN 4163:2024 (E)**1 Scope**

This document specifies the characteristics of screws, 100° countersunk normal head, offset cruciform recess, coarse tolerance normal shank, long thread, in alloy steel, cadmium plated.

Classification: 1 100 MPa¹/235 °C².

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 2133, *Aerospace series — Cadmium plating of steels with specified tensile strength $\leq 1\ 450$ MPa, copper, copper alloys and nickel alloys*

EN 2137, *Aerospace series — Steel FE-PL75 — $1\ 100\ \text{MPa} \leq R_m \leq 1\ 250\ \text{MPa}$ — Bars — $D_e \leq 100\ \text{mm}$*

EN 2424, *Aerospace series — Marking of aerospace products*

ISO 3353-1, *Aerospace — Lead and runout threads — Part 1: Rolled external threads*

ISO 5855-2, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts*

ISO 7689, *Aerospace — Bolts, with MJ threads, made of alloy steel, strength class 1 100 MPa — Procurement specification*

ISO 7913, *Aerospace — Bolts and screws, metric — Tolerances of form and position*

ISO 14275, *Aerospace — Drives, internal, offset cruciform, ribbed — Metric series*

ISO 14276, *Aerospace — Drives, internal, offset cruciform — Metric series*

TR 3775, *Bolts and pins — Materials*

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 Required characteristics**4.1 Configuration – Dimensions – Masses**

Configuration, dimensions and masses shall be according to Figure 1 and Table 1.

Dimensions and tolerances are expressed in millimetres and apply after surface treatment.

¹ Minimum tensile strength of the material at ambient temperature.

² Maximum temperature that the screw can withstand without continuous change in its original characteristics, after return to ambient temperature. The maximum temperature is determined by the surface treatment.