

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 4161

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Supersedes EN 4161:2009

English Version

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

Série aérospatiale - Vis à tête cylindrique, 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 - Flachkopfschrauben, mit
Flügelkreuzschlitz, grobe Schafttoleranz, langes
Gewinde, aus legiertem Stahl, verkadmet - Klasse: 1
100 MPa (bei Raumtemperatur)/235 °C

This European Standard was approved by CEN on 1 March 2019.

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

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European foreword

This document (EN 4161:2019) 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of an identical text or by endorsement, at the latest by April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

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 4161:2009, EN 4161/AC:2010.

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EN 4161:2019 (E)**1 Scope**

This European standard specifies the characteristics of screws, pan head, offset cruciform recess, coarse tolerance normal shank, long thread, in alloy steel, cadmium plated, for aerospace applications.

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*

EN 2442, *Steel FE-PL711 — $1\,100\text{ MPa} \leq R_m \leq 1\,300\text{ MPa}$ — Bars and wires — $D_e \leq 25\text{ mm}$*

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*

ASD-STAN/TR 3775, *Aerospace series — Bolts and pins — Materials*³

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

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.

3 Published as ASD-STAN Technical Report at the date of publication of this European standard by AeroSpace and Defence Industries Association of Europe – Standardization (ASD-STAN) (www.asd-stan.org).