

**Aerospace series - Screws, pan head, six lobe recess,
coarse tolerance normal shank, medium length thread,
in titanium alloy, anodized, MoS2 lubricated - 1 100 MPa
(at ambient temperature) / 315 °C**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 4178:2010 sisaldab Euroopa standardi EN 4178:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 28.02.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

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Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 4178:2010 consists of the English text of the European standard EN 4178:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 28.02.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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English Version

Aerospace series - Screws, pan head, six lobe recess, coarse tolerance normal shank, medium length thread, in titanium alloy, anodized, MoS2 lubricated - 1 100 MPa (at ambient temperature) / 315 °C

Série aérospatiale - Vis à tête cylindrique, à empreinte six lobes, tige normale à tolérance large, filetage moyen, en alliage de titane, anodisées, lubrifiées MoS2 - 1 100 MPa (à température ambiante) / 315 °C

Luft- und Raumfahrt - Flachkopfschrauben mit Sechsbogenzahn; mit mittlerer Gewindelänge, aus Titanlegierung, anodisiert, MoS2-geschmiert - 1 100 MPa (bei Raumtemperatur) / 315 °C

This European Standard was approved by CEN on 17 September 2009.

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 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 Management Centre has the same status as the official versions.

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Foreword

This document (EN 4178:2009) 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 May 2010, and conflicting national standards shall be withdrawn at the latest by May 2010.

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1 Scope

This European Standard specifies the characteristics of screws, pan head, six lobe recess, coarse tolerance normal shank, medium length thread, in titanium alloy, anodized, MoS₂ lubricated.

Classification : 1 100 MPa¹⁾ / 315 °C²⁾.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applied. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

EN 2491, *Aerospace series — Molybdenum disulphide dry lubricants — Coating methods*

EN 3042, *Aerospace series — Quality assurance — EN aerospace products — Qualification procedure*

EN 3911, *Aerospace series — Six lobe recess — Geometrical definition*³⁾

EN 9100, *Quality Management Systems — Requirements for Aviation, Space and Defense Organizations*

TR 3775, *Aerospace series — Bolts and pins — National materials*⁴⁾

TR 4070, *Aerospace series — Molybdenum disulphide dry lubricants — List of commercial products*⁴⁾

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

ISO 9152, *Aerospace — Bolts, with MJ threads, in titanium alloys, strength class 1 100 MPa — Procurement specification*

NAS 1800-90, *Recess, Six Lobe Drive — Internal — Dimensions for Recess and Gages*⁵⁾

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 Prestandard at the date of publication of this standard.

4) Published as ASD-STAN Technical Report at the date of publication of this standard.

5) Published by: Aerospace Industries Association of America, Inc., 1250 Eye street, NW Washington, DC 20005, United States.