National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 2882:2006

ICS 49.030.30

AEROSPACE SERIES - NUTS, HEXAGONAL, SELF-LOCKING, WITH COUNTERBORE AND CAPTIVE WASHER, IN STEEL, CADMIUM PLATED, MOS2 LUBRICATED - CLASSIFICATION: 1 100 MPA (AT AMBIENT TEMPERATURE) / 235 °C

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EUROPEAN STANDARD

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English Version

Aerospace series - Nuts, hexagonal, self-locking, with counterbore and captive washer, in steel, cadmium plated, MoS2 lubricated - Classification: 1 100 MPa (at ambient temperature) / 235 °C

Série aérospatiale - Ecrous hexagonaux, à freinage interne, avec chambrage et rondelle captive, en acier, cadmiés, lubrifiés MoS2 - Classification : 1 100 MPa (à température ambiante) / 235 °C

Luft-und Raumfahrt - Sechskantmuttern, selbstsichernd, mit Aussenkung und Bördelscheibe, aus Stahl, verkadmet, MoS2 geschmiert - Klasse: 1 100 MPa (bei Raumtemperatur) / 235 °C

This European Standard was approved by CEN on 20 April 2006.

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

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Contents

Page

Foreword

This European Standard (EN 2882:2006) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-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 AECMA, 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of an identical text or by endorsement, at the latest by January 2007, and conflicting national standards shall be withdrawn at the latest by January 2007.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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1 Scope

This standard specifies characteristics for hexagon nuts, with counterbore and captive washer, with a self-locking feature achieved by forming the upper portion out-of-round, in steel, cadmium plated, MoS_2 lubricated, classification 1 100 MPa [1] / 235 °C [2]

2 Normative references

The following referenced documents are indispensable for the application 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.

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

ISO 5858, *Aerospace — Nuts, self-locking, with maximum operating temperature less than or equal to 425 °C — Procurement specification.*

ISO 8538, *Aerospace — Nuts, hexagonal, self-locking, with counterbore and captive washer, with MJ threads, classifications: 1 100 MPa (at ambient temperature)/235 °C, 1 100 MPa (at ambient temperature)/315 °C and 1 100 MPa (at ambient temperature)/425 °C — Dimensions.*

ISO 8788, *Aerospace — Nuts, metric — Tolerances of form and position.*

EN 2133, *Aerospace series — Cadmium plating of steels with specified tensile strength ≤ 1 450 MPa, copper, copper alloys and nickel alloys.*

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

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

EN 2543, *Aerospace series — Steel FE-PL43S — Annealed — Sheet and strip — 0,3 ≤ a ≤ 2 mm — for prevailing torque nuts.* [3]

EN 3329, *Aerospace series — Steel FE-PL45 — Annealead — Sheet and strip — 0,3 ≤ a ≤ 2 mm — for prevailing torque nuts.* [3]

EN 3330, *Aerospace series — Steel FE-PL45 — Annealed — Bar and wire — De ≤ 40 mm — for prevailing torque nuts*. [3]

EN 9100, *Aerospace series — Quality management systems — Requirements (based on ISO 9001:2000) and Quality systems — Model for quality assurance in design, development, production, installation and servicing (based on ISO 9001:1994).*

EN 9133, *Aerospace series — Quality management systems — Qualification Procedure for aerospace standard parts.*

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1) Corresponds to strength class of the associated bolt, the 100 per cent load of which it is able to withstand, when tested at ambient temperature, without breaking or cracking.

2) Maximum temperature that the nut is able to withstand, without permanent alteration of its original characteristics, after ambient temperature has been restored. The maximum temperature is conditioned by the cadmium plating.

3) Published as ASD Prestandard at the date of publication of this standard.