National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 4497:2006

ICS 49.030.20

AEROSPACE SERIES - SCREWS, PAN HEAD, OFFSET CRUCIFORM RECESS, CLOSE TOLERANCE NORMAL SHANK, SHORT THREAD, IN TITANIUM ALLOY, ANODIZED, WITH ALUMINIUM PIGMENTED COATING - CLASSIFICATION: 1 100 MPA (AT AMBIENT TEMPERATURE) / 315 °C

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 4497

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English Version

Aerospace series - Screws, pan head, offset cruciform recess, close tolerance normal shank, short thread, in titanium alloy, anodized, with aluminium pigmented coating - Classification: 1 100 MPa (at ambient temperature) / 315 °C

Série aérospatiale - Vis à tête cylindrique, à empreinte cruciforme déportée, fût normal à tolérance serrée, filetage court, en alliage de titane, anodisées, avec revêtement alumino-organique - Classification : 1 100 MPa (à température ambiante) / 315 °C

Luft- und Raumfahrt - Flachkopf-Paßschrauben, mit Flügelkreuzschlitz, kurzes Gewinde, aus Titanlegierung, anodisiert, mit Aluminium pigmenttete Beschichtung - Klasse: 1 100 MPa (bei Raumtemperatur) / 315 °C

This European Standard was approved by CEN on 26 October 2005.

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

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Foreword

This European Standard (EN 4497:2005) 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of an identical text or by endorsement, at the latest by June 2006, and conflicting national standards shall be withdrawn at the latest by June 2006.

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 the characteristics of screws, pan head, offset cruciform recess, close tolerance normal shank, short thread, in titanium alloy, anodized, with aluminium pigmented coating.

Classification: 1 100 MPa [1] / 315 °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 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 7994, *Aerospace — Internal drive, offset cruciform recess (Torq-Set®) for rotary fastening devices — Metric series.*

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

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

EN 4016, *Aerospace series — Oversized bolts*.[3]

EN 4474, *Aerospace series — Aluminium pigmented coatings — Coating methods.*[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.*

MIL-L-87132B, *Lubricant, Cetyl Alcohol, 1-Hexadecanol, Application to Fasteners*.[4]

TR 3775, *Aerospace series — Bolts and pins — Materials*.[5]

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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 coating.

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

4) Published by: Department of Defense (DoD), the Pentagon, Washington, D.C.20301, USA.

5) Published as AECMA Technical Report at the date of publication of this standard.