ICS 49.030.20 SLOVENSKÁ TECHNICKÁ NORMA Júl 2022

STN	**Letectvo a kozmonautika Skrutky so 100° zapustenou hlavou, špirálovou drážkou, neopracovaným driekom, strednou dĺžkou závitu, z legovanej ocele, pokovované kadmiom Trieda: 1 100 MPa (pri teplote okolia)/235 °C**	**STN EN 4850** 31 3159

Aerospace series - Screw, 100 countersunk normal head, Spiral Drive Recess, coarse tolerance normal shank, medium length thread, in alloy steel, cadmium plated - Classification: 1 100 MPa (at ambient temperature)/235 C

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/22

Obsahuje: EN 4850:2022

135007

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2022
Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 4850

March 2022

ICS 49.030.20

English Version

Aerospace series - Screw, 100° countersunk normal head, Spiral Drive Recess, coarse tolerance normal shank, medium length thread, in alloy steel, cadmium plated - Classification: 1 100 MPa (at ambient temperature)/235 °C

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

Luft und Raumfahrt - 100° Senkschraube mit Spiral Antrieb, grobe Schafttoleranz, mittlere Gewindelänge, aus legiertem Stahl, kadmiert - Klasse: 1 100 MPa (bei Raumtemperatur)/235 °C

This European Standard was approved by CEN on 10 January 2022.

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

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Ref. No. EN 4850:2022 E

EN 4850:2022 (E)

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European foreword

This document (EN 4850:2022) 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 September 2022, and conflicting national standards shall be withdrawn at the latest by September 2022.

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.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

Aerospace and Defence Standardisation (ASD-STAN) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent “Spiral Drive System for Threaded Fasteners” EP1025370B1.

ASD-STAN takes no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured ASD-STAN that he/she is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with ASD-STAN. Information may be obtained from:

Phillips Screw Company

301 Edgewater Drive, Suite 320

Wakefield, Massachusetts 01880

USA

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those identified above. ASD-STAN shall not be held responsible for identifying any or all such patent rights.

1 Scope

This document specifies the characteristics of externally threaded fasteners, 100° countersunk normal head, Spiral Drive Recess, coarse tolerance normal shank, medium length thread, in alloy steel, cadmium plated, for aerospace applications.

Classification: 1 100 MPa[1]/235 °C[2].

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 ≤1 450 MPa, copper, copper alloys and nickel alloys*

EN 2137, *Aerospace series — Steel FE-PL75 — 1 100 MPa ≤R_m ≤1 250 MPa — Bars — D_e ≤100 mm*

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

EN 3514, *Steel FE-PL711 — Hardened and tempered — 1 100 ≤R_m ≤1 300 MPa — Bar and wire for bolts — D_e ≤ 25 mm*[3]

EN 4609, *Aerospace series — Spiral drive recesses for threaded fasteners — Geometrical definition and technical requirements*

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

ISO 4520, *Chromate conversion coatings on electroplated zinc and cadmium coatings*

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 8168, *Aerospace — Bolts, with MJ threads, made of heat and corrosion resisting steel, strength class 1 100 MPa — Procurement specification*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

1 Minimum tensile strength of the material at ambient temperature.

2 Maximum temperature that the externally threaded fastener can withstand without continuous change in its original characteristics, after return to ambient temperature. The maximum temperature is determined by the material.

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