

Aerospace series - Insert, MJ and M screw threads,
helical coil - Technical specification

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 2943:2024 sisaldab Euroopa standardi EN 2943:2024 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 06.03.2024.</p> <p>Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 2943:2024 consists of the English text of the European standard EN 2943:2024.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 06.03.2024.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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English Version

Aerospace series - Insert, MJ and M screw threads, helical coil - Technical specification

Série aérospatiale - Filets rapporté, filetages MJ et M -
Spécification technique

Luft- und Raumfahrt - Draht-Gewindeeinsatz, MJ- und
M-Gewinde - Technische Lieferbedingungen

This European Standard was approved by CEN on 15 January 2024.

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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 2943:2024) has been prepared by ASD-STAN.

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, 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of an identical text or by endorsement, at the latest by September 2024, and conflicting national standards shall be withdrawn at the latest by September 2024.

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 2943:2019.

This document includes the following significant technical changes with respect to EN 2943:2019:

- a) normative references updated;
- b) subclauses 4.1 and 4.2 updated;
- c) Table 1 “Technical requirements and test methods” revised;
- d) Table 3 “Test equipment” revised;
- e) Table 4 “Values of breakaway torque, self-locking torque and seating torque” and Table 5 “Values of breakaway torque, self-locking torque and seating torque” extended by more thread types;
- f) Annex A extended in accordance with the revised Table 4 and Table 5;
- g) document editorially revised.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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1 Scope

This document specifies the characteristics, qualification and acceptance requirements for helical coil screw thread inserts.

It is applicable whenever referenced.

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 2398, *Aerospace series — Heat resisting steel FE-PA2601 (X6NiCrTiMoV26-15) — $R_m \geq 900$ MPa — Bars for machined bolts — $D \leq 25$ mm*

EN 2945, *Aerospace series — Inserts, screw thread, helical coil, self-locking — Assembly procedure*

EN 3044, *Aerospace series — Installation holes for inserts, screw thread, helical coil, self-locking — Design standard*

EN 3219, *Aerospace series — Heat resisting nickel base alloy (NI-P100HT) — Cold worked and softened — Bar and wire for continuous forging or extrusion for fasteners — $3 \text{ mm} \leq D \leq 30 \text{ mm}$*

EN 9138, *Aerospace Series — Quality Management Systems — Statistical Product — Acceptance Requirements*

ISO 965-2, *ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose external and internal screw threads — Medium quality*

ISO 3353 (all parts), *Aerospace — Lead and runout threads*

ISO 5855-1, *Aerospace — MJ threads — Part 1: General requirements*

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

ISO 21920-3, *Geometrical product specifications (GPS) — Surface texture: Profile — Part 3: Specification operators*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

batch

quantity of finished thread inserts, of the same type and same diameter, produced from a material obtained from the same melt, manufactured in the course of the same production cycle, following the same manufacturing route and having undergone all the relevant heat treatments and surface treatments