



**NSAI**  
Standards

Irish Standard  
I.S. EN 2862:2009

Aerospace series - Nuts, anchor, self-locking, fixed, 90 ° corner, with counterbore, in alloy steel, cadmium plated, MoS<sub>2</sub> lubricated - Classification : 1  
100 MPa (at ambient temperature)  
/ 235 °C

## I.S. EN 2862:2009

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Údarás um Chaighdeáin Náisiúnta na hÉireann

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English Version

Aerospace series - Nuts, anchor, self-locking, fixed, 90° corner,  
with counterbore, in alloy steel, cadmium plated, MoS<sub>2</sub>  
lubricated - Classification : 1 100 MPa (at ambient temperature)  
/ 235 °C

Série aérospatiale - Écrous à river, à freinage interne, fixes,  
d'angle 90°, avec chambrage, en acier allié, cadmiés,  
lubrifiés MoS<sub>2</sub> - Classification : 1 100 MPa (à température  
ambiante) / 235 °C

Luft- und Raumfahrt - Anniemuttern, selbstsichernd, 90°  
Eckflansch, mit zylindrischer Aussenkung, aus legiertem  
Stahl, verkadmet, MoS<sub>2</sub>-geschmiert - Klasse : 1 100 MPa  
(bei Raumtemperatur / 235 °C)

This European Standard was approved by CEN on 29 September 2009.

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## **Foreword**

This document (EN 2862:2009) 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of an identical text or by endorsement, at the latest by June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.

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.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies the characteristics of 90° corner, counterbored, fixed, anchor nuts, with a self-locking feature achieved by forming the upper portion out-of-round, in alloy steel, cadmium plated, MoS<sub>2</sub> lubricated.

Classification: 1 100 MPa <sup>1)</sup> / 235 °C. <sup>2)</sup>

## 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.

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

EN 2424:2008, *Aerospace series — Marking of aerospace products*

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

EN 2542, *Aerospace series — Steel FE-PL1502 (25CrMo4) — Annealed — Bar and wire —  $D_e \leq 40$  mm — For prevailing torque nuts*

EN 2543, *Aerospace series — Steel FE-PL1502 (25CrMo4) — Annealed — Sheet and strip —  $0,3 \leq a \leq 2$  mm For prevailing torque nuts*

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

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

ISO 3221, *Aerospace — Nuts, anchor, self-locking, fixed, 90° corner, with counterbore, 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 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 8788, *Aerospace — Nuts, metric — Tolerances of form and position*

TR 3791, *Aerospace series — Materials for self-locking nuts, threaded inserts and screw thread inserts of temperature classes  $\leq 425$  °C <sup>3)</sup>*

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1) Corresponds to strength class of the associated bolt, the 100 % 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 to its original characteristics, after ambient temperature has been restored. The maximum temperature is conditioned by the surface treatment.

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

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