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Aerospace series - Sensor based clamp load determination / high tensile bolts - Technical specification

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

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 4859

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English Version

**Aerospace series - Sensor based clamp load determination
/ high tensile bolts - Technical specification**

Série aérospatiale - Détermination de la tension de serrage avec capteur / Boulons fortement contraints -
Spécification technique

Luft- und Raumfahrt - Sensorbasierte
Vorspannkraftmessung/hochfeste Schrauben -
Technische Lieferbedingungen

This European Standard was approved by CEN on 6 August 2018.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European foreword

This document (EN 4859:2019) 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of an identical text or by endorsement, at the latest by August 2019, and conflicting national standards shall be withdrawn at the latest by August 2019.

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.

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EN 4859:2019 (E)**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 concerning “Connector component with temperature-resistant sensor element” EP 2010883 B1, US 8,177,464 B2.

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 licenses 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:

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1 Scope

This European standard specifies the technical, qualification and quality assurance requirements for sensor based clamp load measurement systems for high tensile bolts and other clamp load sensitive elements. Primarily for aerospace applications, it is applicable to such products when referenced on the product standard or drawing.

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 2424, *Aerospace series — Marking of aerospace products*

EN 10204:2014, *Metallic products — Types of inspection documents*

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