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National Standards
Authority of Ireland
Northwood, Dublin 9
Ireland
Tel: +353 1 807 3800
Fax: +353 1 807 3838
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# AEROSPACE SERIES - FASTENERS, EXTERNALLY THREADED, IN HEAT RESISTING STEEL FE PA92HT (A286) - CLASSIFICATION: 900 MPA/650 °C, MANUFACTURING METHOD OPTIONAL - TECHNICAL SPECIFICATION

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# EN 3043

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English Version

# Aerospace series - Fasteners, externally threaded, in heat resisting steel FE PA92HT (A286) - Classification: 900 MPa/650 °C, manufacturing method optional - Technical specification

Série aérospatiale - Eléments de fixation, filetés, en acier résistant à chaud FE-PA92HT (A286) - Classification: 900 MPa/650 °C - Mode de fabrication non imposé - Spécification technique

Luft- und Raumfahrt - Verbindungselemente mit Außengewinde aus hochwarmfestem Stahl FE-PA92HT (A286) - Klasse: 900 MPa/650 °C, Herstellverfahren nach Wahl - Technische Lieferbedingungen

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# Foreword

This document (EN 3043:2008) 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of an identical text or by endorsement, at the latest by November 2008, and conflicting national standards shall be withdrawn at the latest by November 2008.

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## 1 Scope

This standard specifies the technical and quality assurance requirements for externally threaded fasteners in material FE-PA92HT (A286) of tensile strength class 900 MPa at room temperature, maximum test temperature of material 650 °C.

The externally threaded fasteners specified here may be manufactured by machining from bar or by forging at the manufacturer's option, if forged there is no requirement for control of grain flow.

Primarily for aerospace applications it is applicable to such externally threaded fasteners when referenced on the product standard or drawing.

## 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 2398, *Heat resisting steel FE-PA92-HT — $R_m \geq 900$ MPa — Bars for machined bolts $D \leq 25$ mm — Aerospace Series*[1)]

EN 2399, *Heat resisting steel FE-PA92-HT — $R_m \geq 900$ MPa — Bars for forged bolts $D \leq 25$ mm — Aerospace Series*[1)]

EN 3039, *Aerospace series — Quality systems — Supplementary requirements to ISO 9002 applicable for the manufacture/processing of material for propulsion standard parts*

EN 3639, *Heat resisting alloy FE-PA2601 — Softened and cold worked — Wire for forged fasteners — $D \leq 15$ mm, 900 MPa $\leq R_m \leq 1\,100$ MPa*[1)]

ISO 468*, Surface roughness; Parameters, their values and general rules for specifying requirements*

ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

ISO 3452, *Non destructive testing — Penetrant inspection — General principles*

ISO 3534-1, *Statistics — Vocabulary and symbols — Part 1: General statistical terms and terms used in probability*

ISO 3534-2, *Statistics — Vocabulary and symbols — Part 2: Applied statistics*

ISO 7961, *Aerospace — Bolts — Test methods*

ISO 9001, *Quality management systems — Requirements*

1) Published as AECMA prestandard at the date of publication of this standard.

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