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Standards

Irish Standard
I.S. EN 3388:2009

Aerospace series - Fasteners,
externally threaded, in heat
resisting nickel base alloy NI-
PH2601 (Inconel 718) -
Classification 1 275 MPa/650 °C -
Manufacturing method optional -
Technical specification

I.S. EN 3388:2009

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English Version

**Aerospace series - Fasteners, externally threaded, in heat
resisting nickel base alloy NI-PH2601 (Inconel 718) -
Classification 1 275 MPa/650 °C - Manufacturing method
optional - Technical specification**

Série aérospatiale - Eléments de fixation, filetés, en alliage
base nickel résistant à chaud NI-PH2601 (Inconel 718) -
Classification : 1 275MPa/650 °C - Mode de fabrication non
imposé - Spécification technique

Luft- und Raumfahrt - Verbindungselemente mit
Außengewinde aus hochwarmfester Nickelbasislegierung
NI-PH2601 (Inconel 718) - Klasse : 1 275 MPa/650 °C -
Herstellverfahren nach Wahl - Technische
Lieferbedingungen

This European Standard was approved by CEN on 5 October 2008.

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Foreword

This document (EN 3388:2009) 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of an identical text or by endorsement, at the latest by October 2009, and conflicting national standards shall be withdrawn at the latest by October 2009.

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.

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1 Scope

This standard specifies the technical and quality assurance requirements for externally threaded fasteners in material NI-PH2601 (Inconel 718) of tensile strength class 1 275 MPa at room temperature, maximum test temperature of material 650 °C.

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

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.

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 3534:1977, *Statistics — Vocabulary and symbols*.

ISO 4288, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Rules and procedures for the assessment of surface texture*.

ISO 6508-1, *Metallic materials — Rockwell hardness test — Part 1: Test method (scales A, B, C, D, E, F, G, H, K, N, T)*.

ISO 7961, *Aerospace — Bolts — Test methods*.

ISO 9000, *Quality management systems — Fundamentals and vocabulary*.

EN 2952, *Aerospace series — Heat resisting alloy NI-PH2601 — Solution treated and cold worked — Bar for forged fasteners — $D \leq 50 \text{ mm}$ — $1\,270 \text{ MPa} \leq R_m \leq 1\,550 \text{ MPa}$. ¹⁾*

EN 2961, *Aerospace series — Heat resisting alloy NI-PH2601 — Solution treated — Bar for machined fasteners — $D \leq 50 \text{ mm}$ — $R_m \geq 1\,270 \text{ MPa}$. ¹⁾*

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 — $3 \leq D \leq 30 \text{ mm}$. ¹⁾*

EN 9100, *Aerospace series — Quality management systems — Requirements (based on ISO 9001:2000) and Quality systems — Model for quality assurance in design, development, production, installation and servicing (based on ISO 9001:1994)*.

¹⁾ Published as ASD Prestandard at the date of publication of this standard.

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