



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 3833:2005

ICS 49.030.20

**AEROSPACE SERIES - BOLTS, MJ THREADS,
IN HEAT RESISTING NICKEL BASE ALLOY
NI-PH2601 (INCONEL 718), PASSIVATED -
CLASSIFICATION: 1 550 MPA (AT AMBIENT
TEMPERATURE) / 650° C - TECHNICAL
SPECIFICATION**

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EUROPEAN STANDARD

EN 3833

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN 3833:2003

English version

Aerospace series - Bolts, MJ threads, in heat resisting nickel base alloy NI-PH2601 (Inconel 718), passivated - Classification: 1 550 MPa (at ambient temperature) / 650° C - Technical specification

Série aérospatiale - Vis à filetage MJ, en alliage résistant à chaud à base de nickel NI-PH2601 (Inconel 718), passivées - Classification : 1 550 MPa (à température ambiante) / 650° C - Spécification technique

Luft- und Raumfahrt - Schrauben, MJ-Gewinde, aus hochwärmfester Nickelbasislegierung NI-PH2601 (Inconel 718), passiviert - Klasse: 1 550 MPa (bei Raumtemperatur) / 650° C - Technische Lieferbedingungen

This European Standard was approved by CEN on 11 September 2003.

CEN members are bound to comply with the CEN/GENELEC 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Contents		Page
Foreword.....		3
1	Scope	4
2	Normative references	4
3	Terms and definitions	4
4	Quality assurance	6
5	Requirements	6
Annex A (normative) Passivation treatment for bolts		26
Annex B (informative) Tensile, stress rupture and tension fatigue – Areas and loads formulae		27

Foreword

This document (EN 3833:2004) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-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 AECMA, 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 May 2005, and conflicting national standards shall be withdrawn at the latest by May 2005.

This document supersedes EN 3833:2003.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

EN 3833:2004 (E)

1 Scope

This standard specifies the characteristics, qualification and acceptance requirements for bolts with MJ threads in NI-PH2601, passivated, for aerospace applications.

Classification: 1 550 MPa ¹⁾ /650 °C ²⁾

It is applicable whenever referenced.

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 acceptable quality limit (AQL) for lot-by-lot inspection*

ISO 3452, *Non-destructive testing – Penetrant inspection – General principles*

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 6892, *Metallic materials – Tensile testing at ambient temperature*

ISO 7961, *Aerospace – Bolts – Test methods*

ISO 9227, *Corrosion tests in artificial atmospheres – Salt spray tests*

EN 9133, *Aerospace series – Quality management systems – Qualification procedure for aerospace standard parts* ³⁾

ASTM E 112-96, *Standard Test Methods for Determining Average Grain Size* ⁴⁾

3 Terms and definitions

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

3.1

batch

quantity of finished parts, of the same type and same diameter, produced from the same 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.

3.2

inspection lot

quantity of parts from a single production batch with the same part number which completely defines the part

1) Minimum tensile strength of the material at ambient temperature

2) Maximum test temperature of the parts

3) Published as AECMA Prestandard at the date of publication of this standard

4) Published by: American Society for Testing and Materials (ASTM), 1916 Race street, Philadelphia, PA 19103-1187, USA

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