

**Aerospace series - Nuts, self-locking,  
MJ threads, in heat resisting nickel  
base alloy NI-PH1302 (Waspaloy), silver  
plated - Classification: 1 210 MPa (at  
ambient temperature) / 730 °C -  
Technical specification**

Aerospace series - Nuts, self-locking, MJ threads, in  
heat resisting nickel base alloy NI-PH1302  
(Waspaloy), silver plated - Classification: 1 210 MPa  
(at ambient temperature) / 730 °C - Technical  
specification

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 3005:2005 sisaldab Euroopa standardi EN 3005:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 25.01.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 3005:2005 consists of the English text of the European standard EN 3005:2004.</p> <p>This document is endorsed on 25.01.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This standard specifies the characteristics; qualification and acceptance requirements for self locking-nuts with MJ threads in NI-PH13O2, silver plated. Classification: 1 210 MPa 1) / 730 °C 2) It is applicable whenever referenced</p>	<p><b>Scope:</b> This standard specifies the characteristics; qualification and acceptance requirements for self locking-nuts with MJ threads in NI-PH13O2, silver plated. Classification: 1 210 MPa 1) / 730 °C 2) It is applicable whenever referenced</p>
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ICS 49.030.30

Võtmesõnad:

English version

**Aerospace series - Nuts, self-locking, MJ threads, in heat  
resisting nickel base alloy NI-PH1302 (Waspaloy), silver plated  
or uncoated - Classification: 1 210 MPa (at ambient  
temperature) / 730° C - Technical specification**

Série aéronautique - Écrous, à freinage interne, à filetage  
MJ, en alliage résistant à chaud à base de nickel NI-  
PH1302 (Waspaloy), argentés ou non revêtus -  
Classification : 1 210 MPa (à température ambiante) / 730°  
C - Spécification technique

Luft- und Raumfahrt - Muttern, selbstsichernd, MJ-  
Gewinde, aus hochwarmfester Nickelbasislegierung NI-  
PH1302 (Waspaloy), versilbert oder unbeschichtet -  
Klasse: 1 210 MPa (bei Raumtemperatur) / 730° C -  
Technische Lieferbedingungen

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

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 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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## Foreword

This document (EN 3005:2004) 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 3005:2003.

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 United Kingdom.

## 1 Scope

This standard specifies the characteristics, qualification and acceptance requirements for self-locking nuts with MJ threads in NI-PH1302, silver plated or uncoated for aerospace applications.

Classification: 1 210 MPa <sup>1)</sup> / 730 °C <sup>2)</sup>

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 acceptance 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 8642, *Aerospace – Self-locking nuts with maximum operating temperature greater than 425 °C – Test methods*

EN 2786, *Aerospace series – Electrolytic silver plating of fasteners* <sup>3)</sup>

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

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

## 3 Terms and definitions

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

### 3.1

#### **batch**

quantity of finished nuts, 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 nuts from a single production batch with the same part number which completely defines the nut

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1) Correspond to the minimum tensile stress which the nut is able to withstand at ambient temperature without breaking or cracking when tested with a bolt of a higher strength class.

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, USA