SLOVENSKI STANDARD
SIST EN 3672:2017

01-marec-2017

Nadomešča:
SIST EN 3672:2008

Aeronavtika - Zakovičene matice, samovarovalne, iz toplotnoodporne zlitine na nikljevi osnovi NI-P101HT (Waspaloy), posrebrene, za odprtine 30° - Klasifikacija: 1210 MPa (pri sobni temperaturi)/730 °C

Aerospace series - Shank nuts, self-locking, in heat resisting nickel base alloy NI-P101HT (Waspaloy), silver plated, for 30°C swage - Classification: 1 210 MPa (at ambient temperature) / 730°C

Luft- und Raumfahrt - Einnietmuttern, selbstsichernd, aus hochwarmfester Nickelbasislegierung NI-P101HT (Waspaloy), versilbert, für 30°C Aufweitung - Klasse: 1 210 MPa (bei Raumtemperatur) / 730°C

Série aérospatiale - Écrous à sertir, à freinage interne, en alliage résistant à chaud à base de nickel NI-P101HT (Waspaloy), argentés, pour sertissage 30°C - Classification: 1 210 MPa (à température ambiante) / 730°C

Ta slovenski standard je istoveten z: **EN 3672:2016**

ICS:

49.030.30	Matice	Nuts

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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 3672

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English Version

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This European Standard was approved by CEN on 4 March 2016.

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 COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 3672:2016) 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 June 2017, and conflicting national standards shall be withdrawn at the latest by June 2017.

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.

This document supersedes EN 3672:2008.

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

1 Scope

This European Standard specifies the characteristics of self-locking shank nuts in NI-P101HT, silver plated, for use in 30° cone holes, for aerospace applications.

Classification: 1 210 MPa [1]/730 °C [2].

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 2786, *Aerospace series — Electrolytic silver plating of fasteners*

EN 2959, *Aerospace series — Heat resisting alloy NI-PH1302 (NiCr20Co13Mo4Ti3Al) — Solution treated and cold worked — Bar for forged fasteners — 3 mm ≤ D ≤ 30 mm* [3]

EN 3005, *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*

EN 3220, *Aerospace series — Heat resisting nickel base alloy (Ni-P101HT) — Cold worked and softened — Bar and wire for continuous forging or extrusion for fasteners — 3 ≤ D ≤ 30 mm* [3]

ISO 5855-2, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts*

3 Required characteristics

3.1 Configuration, dimensions, tolerances, masses

See Figure 1 and Table 1 and Table 2. Dimensions and tolerances are in millimetres. They apply after silver plating.

3.2 Material

EN 2959 or EN 3220.

3.3 Surface treatment

EN 2786 on thread, counterbore and chamfers.

Thickness:

— External surfaces: 5 μm to 15 μm;

— Thread ≥ MJ6: 5 μm min. on thread flanks;

— Thread MJ5: shall show complete coverage, without thickness requirement.

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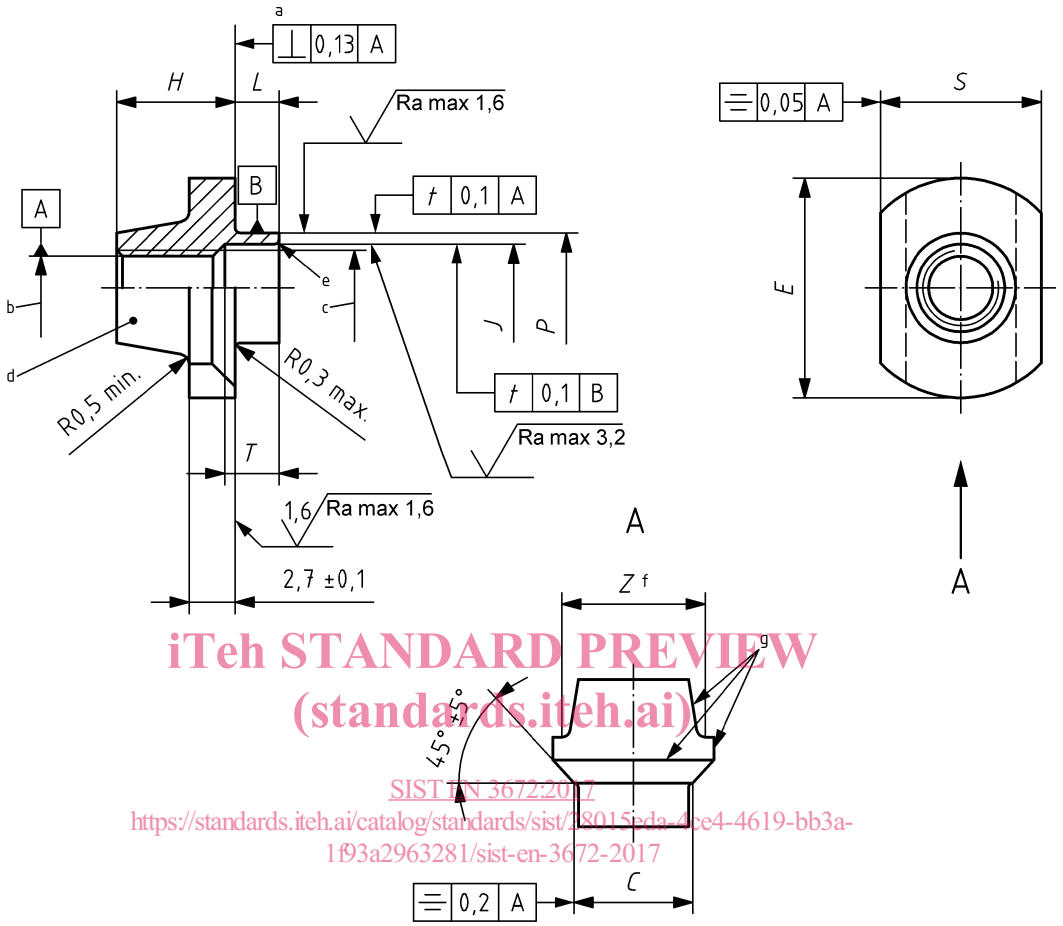
1) The strength class of the bolt concerned which can withstand the load at ambient temperature when tested at 100 % load without cracking or breaking of the nut.

2) Maximum test temperature of the parts.

3) Published as ASD-STAN Prestandard at the date of publication of this standard by AeroSpace and Defence industries Association of Europe - Standardization (ASD-STAN) (www.asd-stan.org)

Ra max 6,3 [Ra max 1,6 Ra max 3,2] Values apply before silver plating. Thread surface will be as achieved by normal methods of manufacture.



Remove sharp edges 0,1 mm to 0,4 mm

Details of form not stated are left to the manufacturer's discretion

a Not convex
b Pitch diameter
c Thread
d Form-out-round in this area to achieve the self-locking requirement (tooling marks permissible)
e Chamfer or radius max. 0,08
f Limit of the blend radius
g Marking in these areas but not in locking area

Figure 1 — Shank nuts

Table 1 — Dimensions and masses, (not for new design)

Thread [a]		*C*	*ØE*	*H*	*ØJ*	*L*	*ØP*	*S*	*T*	*ØZ*	**Mass** 1 000 pieces kg
Code	**Designation**	± 0,1	± 0,25	h14	+ 0,1 0	+ 0,1 0	0 − 0,1	± 0,1	± 0,25	max.	≈
050	MJ5 × 0,8-4H6H	7	13	7	5,2	2,6	6,5	9,5	3,2	8,5	2,77
060	MJ6 × 1-4H5H	8	14	8	6,2	2,9	7,5	10,5	3,5	9,5	3,47
070	MJ7 × 1-4H5H	9	16	9	7,2	3,1	8,5	11,5	3,7	10,5	4,2
080	MJ8 × 1-4H5H	10	17	10	8,2	3,3	9,5	12,5	4	11,5	5,41

[a] In accordance with ISO 5855-2. In the self-locking zone, the tolerances apply before forming out-of-round.

Table 2 — Dimensions and masses

Thread [a]		*C*	*ØE*	*H*	*ØJ*	*L*		*ØP*	*S*	*T*	*ØZ*	**Mass** 1 000 pieces kg
Code	**Designation**	± 0,1	± 0,25	h14	+ 0,1 0	nom.	Tol.	0 + 0,3	± 0,1	± 0,25	max.	≈
051	MJ5 × 0,8-4H6H	7	13	7	5,2	1,8	± 0,1	6,5	9,5	2,4	8,5	2,78
061	MJ6 × 1-4H5H	8	14	8	6,2			7,5	10,5		9,5	3,45
071	MJ7 × 1-4H5H	9	16	9	7,2	2,8		8,5	11,5	3,4	10,5	4,28
081	MJ8 × 1-4H5H	10	17	10	8,2	3,2	± 0,15	9,5	12,5	3,9	11,5	5,56

[a] In accordance with ISO 5855-2. In the self-locking zone, the tolerances apply before forming out-of-round.

4 Designation

EXAMPLE

Description block	**Identity block**
NUT	**EN3672-051**

Number of this standard

Thread code (see Table 1 and Table 2)

NOTE If necessary the originator code I9005 shall be placed between the description block and the identity block.

5 Marking

EN 2424, Style A, as indicated in Figure 1.

6 Technical specification

According to EN 3005.