



**SLOVENSKI STANDARD
SIST EN 4554:2004**

01-maj-2004

Aerospace series - Pipe coupling 37°, spherical, in heat resisting steel - Straight unions, threaded - Inch series

Aerospace series - Pipe coupling 37°, spherical, in heat resisting steel - Straight unions, threaded - Inch series

Luft- und Raumfahrt - Rohrverschraubung 37° mit Kugelbuchse, aus hochwarmfestem Stahl - Gerade Einschraubverschraubungen - Inch-Reihe

Série aérospatiale - Systeme de raccordement sphérique 37°, en acier résistant a chaud - Mamelons droits a implanter - Série inch

<https://standards.iteh.ai/catalog/standards/sist/7e996de1-20c6-4e17-beb3-de5f6126f4c1/sist-en-4554-2004>

Ta slovenski standard je istoveten z: EN 4554:2003

ICS:

49.080

Številni sistemi za povezavo cevi, sferični, v toplotno odporne jeklo, neposredni spoji, navlečni, v inčih

Aerospace fluid systems and components

SIST EN 4554:2004

en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 4554

February 2003

ICS 49.080

English version

Aerospace series - Pipe coupling 37°, spherical, in heat resisting steel - Straight unions, threaded - Inch series

Série aérospatiale - Système de raccordement sphérique
37°, en acier résistant à chaud - Mamelons droits à
implanter - Série inch

This European Standard was approved by CEN on 14 September 2002.

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 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 Management Centre has the same status as the official versions.

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

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document EN 4554:2003 has been prepared by the European Association of Aerospace Manufacturers (AECMA).

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 August 2003, and conflicting national standards shall be withdrawn at the latest by August 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovak Republic, Spain, Sweden, Switzerland and United Kingdom.

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1 Scope

This standard specifies the characteristics of straight unions for inch series pipe couplings, 37°, spherical, in heat resisting steel, for aerospace applications. [SIST EN 4554:2004](https://standards.iteh.ai/catalog/standards/sist/7e996de1-20c6-4e17-beb3-dc9161264c1/sist-en-4554-2004)

Connect with fluid system component with port connection in accordance with EN 4550-3.

Nominal pressure : Class D in accordance with ISO 6771

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

- | | |
|----------|---|
| ISO 3161 | <i>Aerospace - UNJ threads - General requirements and limit dimensions.</i> |
| ISO 6771 | <i>Aerospace – Fluid systems and components – Pressure and temperature classifications.</i> |
| EN 2424 | <i>Aerospace series - Marking of aerospace products.</i> |
| EN 3468 | <i>Aerospace series - Steel FE-PA13 - Softened - $500 \leq R_m \leq 700$ MPa - Forgings – $D_e \leq 100$ mm ¹.</i> |
| EN 3487 | <i>Aerospace series - Steel FE-PA13 - Softened - $500 \leq R_m \leq 700$ MPa - Bars for machining - $D_e \leq 100$ mm ¹.</i> |

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

EN 4554:2003 (E)

- EN 4550-1 *Aerospace series - Pipe couplings, 37°, spherical - Design configuration - Inch series - Part 1: Male sealing ends.*
- EN 4550-2 *Aerospace series - Pipe couplings, 37° - Design configuration - Inch series - Part 2 : Port ends.*
- EN 4550-3 *Aerospace series - Pipe couplings, 37° - Design configuration - Inch series - Part 3 : Port connections.*
- EN 4560 *Aerospace series - Pipe couplings, 37°, spherical, up to 21 000 kPa - Inch series - Technical specification.*

3 Required characteristics**3.1 Configuration – Dimensions – Tolerances – Masses**

See Figure 1 and Tables 1 to 3. Dimensions and tolerances are in millimetres.

Table 1

Code	Locking wire hole option
N	without locking wire hole
Y	with 2 locking wire holes

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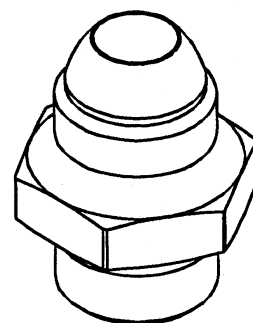
3.2 Materials

[SIST EN 4554:2004](https://standards.iteh.ai/catalog/standards/sist/7e996de1-20c6-4e17-beb3-1c1142711150)

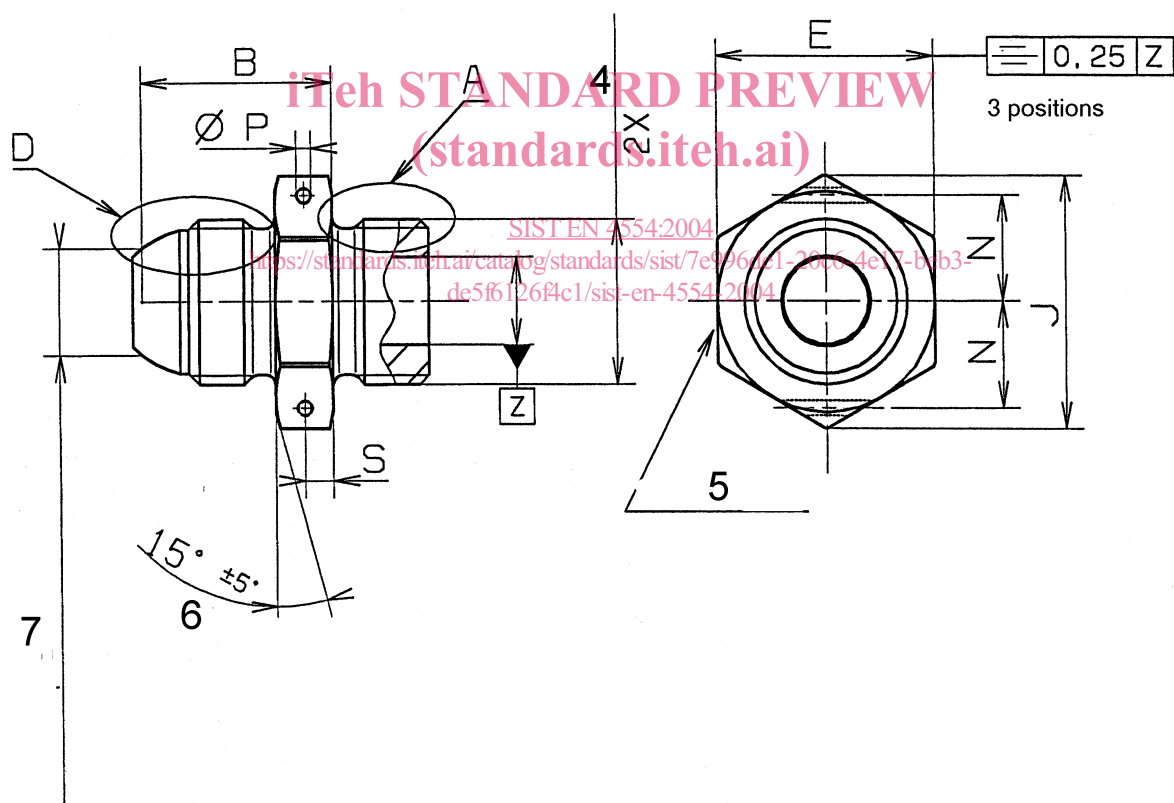
[https://standards.iteh.ai/catalog/standards/sist/7e996de1-20c6-4e17-beb3-](https://standards.iteh.ai/catalog/standards/sist/7e996de1-20c6-4e17-beb3-1c1142711150)

EN 3468 with minimum hardness HB > 140 or EN 3487 with minimum hardness HB > 140

$R_a 3,2$ (✓ 1) (✓ 2) $\begin{matrix} -0,3 \\ -0,1 \end{matrix}$ (✓)



3



Key

- 1 See EN 4550-1
- 2 Thread's surface will be achieved by normal methods of manufacture
- 3 3 D view
- 4 Thread
- 5 Marking
- 6 ($\varnothing E$ per EN 4550-1)

Figure 1

EN 4554:2003 (E)

Table 2

Dimensional code ^a	Nominal diameter	Thread ^b	A	B ± 0,25	D	E +0,05 -0,25	J min.	Mass ≈ quoted in kg/ 1000 parts
A03	4,763	.375 0-24UNJF-3A	EN4550-2-03	15,00	EN4550-1-03	15,90	17,63	14,30
B03								
A04	6,350	.437 5-20UNJF-3A	EN4550-2-04	16,70	EN4550-1-04	17,50	19,46	18,00
B04								
A05	7,924	.500 0-20UNJF-3A	EN4550-2-05	16,75	EN4550-1-05	19,05	21,26	23,00
B05								
A06	9,525	.562 5-18UNJF-3A	EN4550-2-06	18,20	EN4550-1-06	20,65	22,88	29,70
B06								
A08	12,700	.750 0-16UNJF-3A	EN4550-2-08	22,00	EN4550-1-08	25,40	28,48	60,33
B08								
A10	15,875	.875 0-14UNJF-3A	EN4550-2-10	24,60	EN4550-1-10	28,60	32,06	80,70
B10								
A12	19,050	1.062 5-12UNJ-3A	EN4550-2-12	27,00	EN4550-1-12	35,00	39,30	126,00
B12								
A16	25,400	1.312 5-12UNJ-3A	EN4550-2-16	28,00	EN4550-1-16	41,40	46,56	167,00
B16								

^a This code corresponds to the nominal diameter given in 16th of inches within two digits.

^b Quoted in inches in accordance with ISO 3161

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Table 3

(When locking wire hole option code is "Y")

Dimensional code ^a	Nominal diameter	N ± 0,25	P	S ± 0,25
03	4,763	6,85	1,10 1,30	1,75
04	6,350	7,75	1,10 1,30	
05	7,924	8,65	1,30 1,50	
06	9,525	9,40	1,30 1,50	2,55
08	12,700	11,95	1,45 1,70	3,30
10	15,875	13,75	1,45 1,70	
12	19,050	16,75	1,65 1,90	
16	25,400	20,05	1,65 1,90	

^a This code corresponds to the nominal diameter given in 16th of inches within two digits.