

BS EN 4550-4:2014



BSI Standards Publication

**Aerospace series — Pipe
coupling, 37° — Design
configuration — Inch series**
Part 4: Female sealing ends

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National foreword

This British Standard is the UK implementation of EN 4550-4:2014. It supersedes BS EN 4550-4:2003 which is withdrawn.

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The UK participation in its preparation was entrusted to Technical Committee ACE/69, Aerospace hydraulic systems, fluids and components.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Amendments/corrigenda issued since publication

Date	Text affected
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English Version

Aerospace series - Pipe coupling, 37° - Design configuration - Inch series - Part 4: Female sealing ends

Série aérospatiale - Système de raccordement 37° -
Configuration géométrique - Série inch - Partie 4:
Extrémités d'étanchéité femelles

Luft- und Raumfahrt - Rohrverschraubung 37° -
Konstruktionsblatt - Inch-Reihe - Teil 4: Dichtgeometrie

This European Standard was approved by CEN on 11 October 2014.

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

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Foreword

This document (EN 4550-4:2014) 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 document supersedes 4550-4:2003

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of an identical text or by endorsement, at the latest by June 2015, and conflicting national standards shall be withdrawn at the latest by June 2015.

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 defines the dimensions and tolerances for the female sealing end of inch series pipe couplings, 37°, for aerospace applications.

Matched fluid system component shall have a male sealing end in accordance with EN 4550-1.

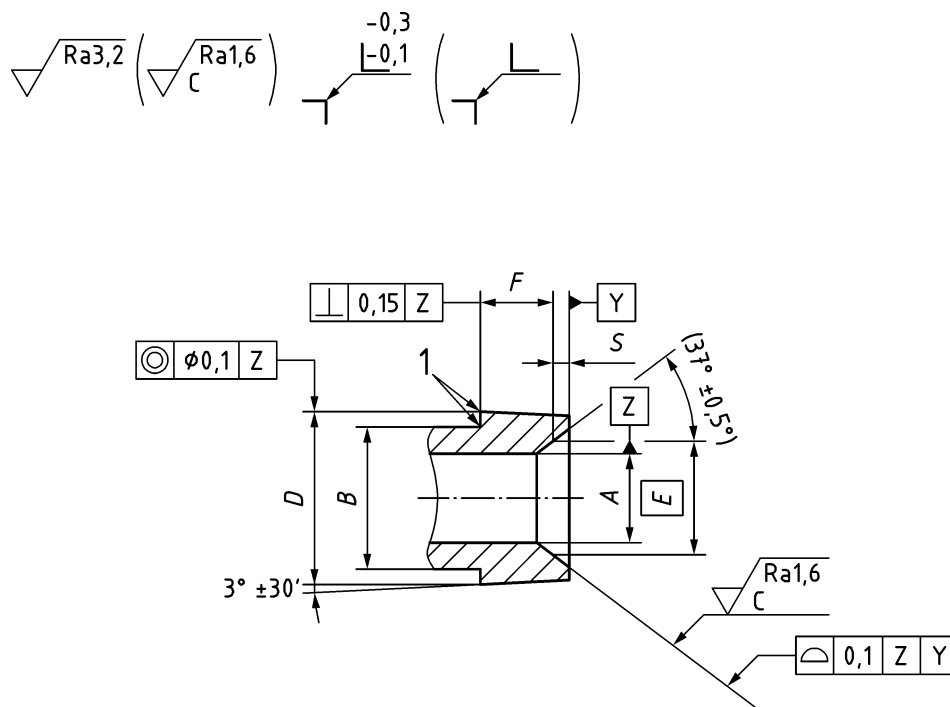
2 Normative references

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.

EN 4550-1, *Aerospace series — Pipe coupling, 37° — Design configuration — Inch series — Part 1: Male sealing ends, spherical*

3 Dimensions – Tolerances

See Figure 1 and Table 1. Dimensions and tolerances are in millimetres.



Key

1 R 0,10 to R 0,25

Figure 1

Table 1

Dimensional code ^a	Nominal diameter	Thread	<i>A</i> ± 0,10	<i>B</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>S</i> ± 0,10
03	4,763	.375 0-24UNJF-3A	2,80	05,87 05,94	08,28 08,35	04,53	4,70	1,16
04	6,350	.437 5-20UNJF-3A	4,40	07,47 07,54	09,66 09,72	06,25	5,00	0,87
05	7,924	.500 0-20UNJF-3A	6,00	09,22 09,29	11,23 11,30	07,77		
06	9,525	.562 5-18UNJF-3A	7,60	10,90 10,97	12,68 12,75	09,61	5,35	1,00
08	12,700	.750 0-16UNJF-3A	09,95	14,20 14,27	17,25 17,32	12,66	6,35	1,25
10	15,875	.875 0-14UNJF-3A	12,70	17,45 17,52	20,17 20,24	15,50	6,65	1,22
12	19,050	1.062 5-12UNJ-3A	15,90	20,91 20,98	24,62 24,68	19,34	6,85	1,54
16	25,400	1.312 5-12UNJ-3A	22,25	27,39 27,45	30,97 31,03	25,64	7,30	1,58

^a This two digit quantitative code corresponds to the tube nominal diameter as the number of 1/16 inch increments it contains i.e. divided by 1/16 (.0625) inch.

4 Designation

EXAMPLE

Identity block

EN4550-4-08

Number of this standard _____

Dimensional code (see Table 1) _____

Annex A (informative) **Standard evolution form**

MODIFICATION	REASON AND VALIDATION								
<p>German title</p> <p><u>Before:</u> "Rohrverschraubungen 37° — Konstruktionsblatt — Inch-Reihe — Teil 4: Einfahrdichtungen".</p> <p><u>After:</u> "Rohrverschraubung 37° — Konstruktionsblatt — Inch-Reihe — Teil 4: Dichtgeometrie".</p>	<p>Translation into German was not correct</p>								
<p>Figure 1</p> <p><u>Before:</u> Dimension S was indicated as an absolute dimension (boxed dimension).</p> <p><u>After:</u> Dimension S is indicated as a dimension with tolerance and tolerance $\pm 0,10$ is added in Table 1.</p>	<p>Incompatibility with another absolute dimension.</p>								
<p>Figure 1</p> <p><u>Before:</u> Dimension 37° was indicated as an absolute dimension (boxed dimension).</p> <p><u>After:</u> Dimension 37° is indicated as a dimension with tolerance $\pm 0,5^\circ$.</p>	<p>Incompatibility with another absolute dimension.</p>								
<p>Table 1</p> <p><u>Before:</u> Dimension A (hole) was</p> <table style="margin-left: 20px;"> <tr> <td>2,75 for -03</td> <td>4,35 for -04</td> </tr> <tr> <td>5,90 for -05</td> <td>7,55 for -06</td> </tr> </table> <p><u>After:</u> Dimension A is</p> <table style="margin-left: 20px;"> <tr> <td>2,80 for -03</td> <td>4,40 for -04</td> </tr> <tr> <td>6,00 for -05</td> <td>7,60 for -06</td> </tr> </table>	2,75 for -03	4,35 for -04	5,90 for -05	7,55 for -06	2,80 for -03	4,40 for -04	6,00 for -05	7,60 for -06	<p>New values allow the possibility to machine a straight hole into ferrules with welded end from -03 to -06 (as it is the case for straight nipples with welded end).</p>
2,75 for -03	4,35 for -04								
5,90 for -05	7,55 for -06								
2,80 for -03	4,40 for -04								
6,00 for -05	7,60 for -06								

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