INTERNATIONAL STANDARD

ISO 22438

First edition
2018-03

Aerospace series — Pipe coupling 8°30′ in titanium alloy — Thrust wires

Série aérospatiale - Système de raccordement 8°30' en alliage de titane - Joncs

Reference number
ISO 22438:2018(E)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 10, *Aerospace fluid systems and components.*

This document was prepared by the Aerospace and Defence Industries Association of Europe – Standardization (ASD-STAN) as EN 4032:2001 and was adopted by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 10, *Aerospace fluid systems and components*.

Aerospace series — Pipe coupling 8°30′ in titanium alloy — Thrust wires

1 Scope

This document specifies the characteristics of thrust wires for attaching thrust wire nuts onto tees and elbows for pipe couplings 8°30′, for aerospace applications.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 2369, *Wires — Heat resisting alloys — Diameter 0,2 mm ≤ D ≤ 8 mm — Dimensions*[1)]

EN 2424, *Aerospace series — Marking of aerospace products*

EN 2516, *Aerospace series — Passivation of corrosion resistant steels and decontamination of nickel base alloys*

EN 2573, *Aerospace series — Steel FE-PA13 — Softened and lightly drawn — Wire — 0,25 ≤ De ≤ 5 mm*[1)]

EN 3264, *Aerospace series — Pipe coupling 8°30′ in titanium alloy — Thrust wire nuts*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at https://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

4 Required characteristics

4.1 Configuration — Dimensions — Mass

According to Figure 1 and Table 1. Dimensions are in millimetres.

4.2 Surface roughness

According to Figure 1.

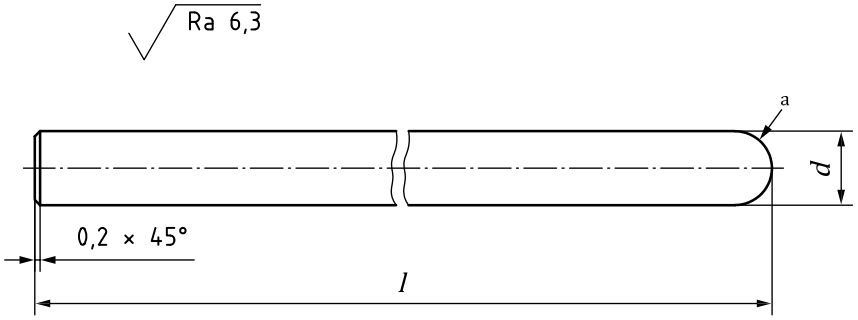
4.3 Material

According to EN 2573.

1) Published as ASD-STAN Prestandard at the date of publication of this standard. https://www.asd-stan.org

4.4 Surface treatment

According to EN 2516.



Key

a Spherical.

Figure 1

Table 1

Wire diameter code	Code[a]	*d*[b]	*l*[c] ±0,3	Mass g/piece max.
20	05	2,0 ± 0,03	24,5	0,60
	06		30,0	0,74
	08		35,5	0,88
	10		41,5	1,02
25	12	2,5 ± 0,04	47,5	1,83
	14		53,5	2,06
	16		60,0	2,31
28	18	2,8 ± 0,04	65,5	3,17
	20		75,0	3,63
	22		84,0	4,06
	25		93,5	4,52
	28		103,0	4,98
	32		112,5	5,44

a) Corresponds to the pipe nominal outside diameter.

b) Diameter series according to EN 2369.

c) Thrust wire length for nut according to EN 3264.