National Standards Authority of Ireland

IRISH STANDARD

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AEROSPACE SERIES - PIPE COUPLING 37°, SPHERICAL, UP TO 21000 KPA - INCH SERIES - TECHNICAL SPECIFICATION

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English version

Aerospace series - Pipe coupling 37°, spherical, up to 21000 kPa - Inch series - Technical specification

Série aérospatiale - Système de raccordement sphérique 37°, jusqu'à 21000 kPa - Série inch - Spécification technique

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

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

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Foreword

This document EN 4560:2003 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of an identical text or by endorsement, at the latest by August 2003, and conflicting national standards shall be withdrawn at the latest by August 2003.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.

1 Scope

This standard specifies the required characteristics, inspection and test methods, quality assurance and procurement requirements for inch series, pipe couplings, 37°, spherical, for temperature ranges from type II to type V according to ISO 6771 and nominal pressure up to 21 000 kPa.

In addition to the requirements of this technical specification, the coupling assemblies shall be qualified in accordance with equipment or component specification requirements.

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 1302 *Geometrical Product Specifications (GPS) - Indication of surface texture in technical product documentation.*

ISO 2685 *Aircraft - Environmental test procedure for airborne equipment - Resistance to fire in designated fire zones.*

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 6771 *Aerospace - Fluid systems and components - Pressure and temperature classifications.*

ISO 6772 *Aerospace - Fluid systems - Impulse testing of hydraulic hose, tubing and fitting assemblies.*

ISO 7137 *Aircraft - Environmental conditions and test procedures for airborne equipment.*

ISO 8625-1 *Aerospace - Fluid systems - Vocabulary - Part 1 : General terms and definitions related to pressure.*

EN 2951 *Aerospace series - Metallic materials - Test method - Micrographic determination of content of non-metallic inclusions* [1].

EN 9133 *Aerospace series – Quality management systems – Qualification procedure for aerospace standard parts.*

EN 10204 *Metallic products - Types of inspection documents.*

TR 2674 *Aerospace series - Design and construction of pipelines for fluids in liquid or gaseous condition - Rigid lines, installation* [2].

MIL-L-23699 *Lubricating Oil, Aircraft Turbine Engine, Synthetic Base, NATO Code Number 0-156* [3].

3 Terms and definitions

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

3.1
pressure
nominal pressure, proof pressure, impulse pressure, burst pressure according to ISO 8625-1

3.2 Coupling and assembling

3.2.1
coupling assembly
assembled nut, ferrule and pipe mating with e.g. nipple, union, elbow, see Figure 1

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

2) Published as AECMA Technical Report at the date of publication of this standard

3) Published by : Department of Defense (DoD), the Pentagon, Washington, D.C. 20301, USA