

Implementation of
ISO 10792-3:1995

Aerospace — Airframe spherical plain bearings in corrosion-resisting steel with self-lubricating liner —

Part 3: Technical specification

ICS 21.100.10

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee MCE/7, Rolling bearings, upon which the following bodies were represented:

- Ball and Roller Bearing Manufacturers' Association
- Institution of Mechanical Engineers
- Society of British Aerospace Companies Ltd.

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National foreword

This British Standard reproduces verbatim ISO 10792-3:1995 and implements it as the UK national standard.

This British Standard is published under the direction of the Engineering Sector Board whose Technical Committee MCE/7 has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international committee any enquiries on interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the ISO title page, pages ii to iv, pages 1 to 20 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

INTERNATIONAL STANDARD

ISO
10792-3

First edition
1995-07-15

Aerospace — Airframe spherical plain bearings in corrosion-resisting steel with self-lubricating liner —

Part 3: Technical specification

*Aéronautique — Rotules en acier résistant à la corrosion, à garniture
autolubrifiante, utilisées dans la structure des aéronefs —*

Partie 3: Spécifications techniques



Reference number
ISO 10792-3:1995(E)

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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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 10792-3 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 15, *Airframe bearings*.

ISO 10792 consists of the following parts, under the general title *Aerospace — Airframe spherical plain bearings in corrosion-resisting steel with self-lubricating liner*:

- *Part 1: Metric series*;
- *Part 2: Inch series*;
- *Part 3: Technical specification*.

Annex A to Annex D form an integral part of this part of ISO 10792.

1 Scope

This part of ISO 10792 gives a technical specification (required characteristics, the methods for checks and tests, the quality assurance, and the qualification, reception and delivery conditions) for spherical plain bearings in corrosion-resisting steel, with self-lubricating liner, designed to be subjected under load to slow rotations and low-strain oscillatory motion only.

It is applicable to spherical plain bearings consisting of two concentric rings between which is interposed a self-lubricating liner which is bonded to the spherical surface of the outer ring, when reference is made to it in the relevant product standards or in a defining document.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 10792. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 10792 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6811:1983, *Spherical plain bearings — Vocabulary*.

ISO 9002:1994, *Quality systems — Model for quality assurance in production, installation and servicing*.

ISO 10792-1:1995, *Aerospace — Airframe spherical plain bearings in corrosion-resisting steel with self-lubricating liner — Part 1: Metric series*.

ISO 10792-2:1995, *Aerospace — Airframe spherical plain bearings in corrosion-resisting steel with self-lubricating liner — Part 2: Inch series*.

ISO 11078:1994, *Aerospace — Aircraft de-icing/anti-icing non-Newtonian fluids, ISO type II*.

3 Definitions

For the purposes of this part of ISO 10792, the definitions given in ISO 6811 and ISO 10792-1 and the following definitions apply.

3.1

crack

break in the material which may extend in all directions and be intercrystalline or transcrystalline in character

3.2

score, scratch

open surface defect resulting from a tearing of the metal

3.3

lap

surface defect where particles of metal or sharp edges are folded over and then rolled or forged into the surface

3.4

seam

unwelded fold which appears as an open defect in the material

3.5

void

area where the adhesive bond is broken or non-existent leaving a smooth, clean space at the interface between the metallic surface and the liner material

3.6

delivery lot

lot of spherical plain bearings packaged for delivery having the same identity block although they may originate from different production lots

4 Required characteristics, inspection and test methods

The required characteristics and the inspection and test methods for qualification and acceptance tests shall be as defined in 4.1 to 4.18.