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Plain bearings — Pad materials for tilting pad bearings

Paliers lisses — Matériaux des patins pour paliers à patins oscillants

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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.

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).

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For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 123, *Plain bearings*, Subcommittee SC 7, *Special types of plain bearings*.

This third edition cancels and replaces the second edition (ISO 14287:2018), which has been technically and editorially revised. The main changes compared to the previous edition are as follows:

— The scope has been changed to allow the use of other materials if they have been proven to be suitable for the operating requirements.

— The document has been rewritten so that the format is consistent with other standards related to materials for multilayer plain bearings.

— The composition of SnSb8Cu4 referenced in Table 1 has been corrected and alternative lining materials have been added to Tables 1, 2, 3 and 4.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Plain bearings — Pad materials for tilting pad bearings

1 Scope

This document specifies requirements for some commonly used pad lining materials utilized on tilting pad bearings. The requirements in this document are expressed by specifying the chemical composition of the lining materials. Other lining materials can be used if they have been proven to be equally suitable at the required operating conditions. Descriptive characteristics of the lining materials are given along with the appropriate selection of pad backing and pivot materials.

2 Normative references

There are no normative references in this document.

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:

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

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

4 Requirements

4.1 Lining materials

4.1.1 Chemical composition

The chemical composition of alloy elements and compounds of the materials covered by this document shall be within the limits specified in Tables 1, 2, 3 and 4.

If the purchaser's requirements necessitate limits for any element not specified, or limits different from those already specified, these should be agreed upon between manufacturer and purchaser.

WARNING — Lead's (Pb) toxicity was recognized, and its use has since been phased out of many applications. However, many countries still allow the sale of products that expose humans to lead. Lead is a neurotoxin.



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