

INTERNATIONAL STANDARD

ISO
14287

Second edition
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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

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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 second edition cancels and replaces the first edition (ISO 14287:2012), which has been technically revised. The main changes compared to the previous edition are as follows:

- The content of the Scope has been changed to a concise expression.
- Descriptions on processing and sheet dimensions have been deleted.
- [Table 1](#), [Figure A.1](#) and [Figure A.2](#) have been reviewed.

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.

Introduction

Tilting pad bearings are divided in circumferential direction and are pivoted at the supporting points on their back surfaces. This configuration allows the pads to tilt freely, enabling an optimum position and oil film to be realized for the applied duty condition (i.e. speed, pressure and oil viscosity), and improves load-carrying capabilities.

Such bearings are normally used as thrust and journal bearings for rotating machineries; tilting pad bearings are classified to the category of static load conditions with lubricating oil applied. They have been used for many years and have a long history. As a result of developments in high-speed, high-performance rotating machineries, many various types of pad materials have been put into practical use.

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