INTERNATIONAL STANDARD

ISO 19259

First edition
2015-10-01

Plain bearings — Bearings with embedded solid lubricants

Paliers lisses — Paliers avec lubrifiants solide incorporé

Reference number
ISO 19259:2015(E)

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

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 meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information.

The committee responsible for this document is ISO/TC 123, *Plain bearings*, Subcommittee SC 7, *Special types of plain bearings*.

Plain bearings — Bearings with embedded solid lubricants

1 Scope

This International Standard specifies a bearing with embedded solid lubricants which has been widely used as a solid lubricant bearing.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 185, *Grey cast irons — Classification*

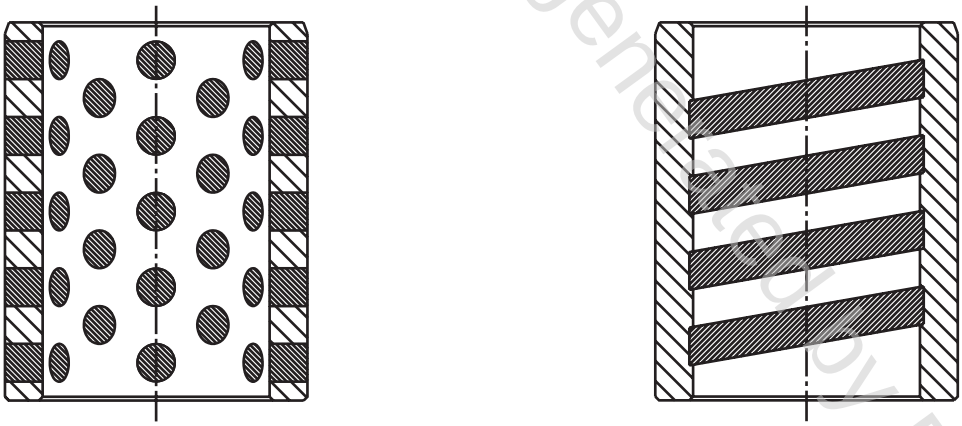
3 Characteristics

3.1 Structure

A bearing with embedded solid lubricants is composed of a metallic base body supporting a load and a solid lubricant embedded in holes or hollows formed on the surface of the metallic base body giving lubricity. As to the embedded state of a solid lubricant, there is a plug type and a spiral type (refer to Figure 1).

As for hole type, there are “through” or perforated ones and “bottomed” ones (refer to Figure 2).

This International Standard specifies a type which is most common and has been widely used where a solid lubricant of a plug type is embedded in through holes. The International Standard also specifies a cylindrical bush and a flanged bush (refer to Figure 3).



a) Plug type **b) Spiral type**

Figure 1 — Embedded state of solid lubricants on cylindrical bush

