BS ISO 7148-1:2025

BSI Standards Publication

Plain bearings — Testing of the tribological behaviour of bearing materials

Part 1: Testing of bearing metals

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National foreword

This British Standard is the UK implementation of ISO 7148-1:2025. It supersedes BS ISO 7148-1:2012, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MCE/12, Plain bearings.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Part 1: Testing of bearing metals

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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 document 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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This document was prepared by Technical Committee ISO/TC 123, *Plain bearings*, Subcommittee SC 2, *Materials and lubricants, their properties, characteristics, test methods and testing conditions*.

This fourth edition cancels and replaces the third edition (ISO 7148-1:2012), which has been technically revised.

The main changes are as follows:

— Clause 2 "Normative references" has been updated;

— Clause 3 "Terms and definitions" has been added and subsequent clauses have been renumbered;

— Table 1 and Table A.1 have been updated;

— Clause 6 has been updated:

  — a new Table 2 has been added to give a comparison of test methods;

  — key tables of figures have been updated;

  — Test method A2 (pin-up and disc-down) in Figure 1;

— Clause 7, Test specimens, has been updated;

— Clause 8, Test methods and test equipment, has been updated;

— Clause 11, Test conditions, has been updated;

— a new Clause 13, Test report, has been added.

A list of all parts in the ISO 7148 series can be found on the ISO website.

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Introduction

The test procedures described in this document enable the friction and wear behaviour of bearing material/mating/lubricant combinations to be compared with that of other combinations, thus facilitating the selection of a bearing material for running repeatedly or for long periods under conditions of boundary lubrication, low speed and continuous sliding. Owing to differences in test conditions, measured friction and wear values can be expected to vary from one test facility to another.

The test results give useful information for practical application only if all parameters of influence are identical. The more the test conditions deviate from the actual application, the greater the uncertainty of the applicability of the results.

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