



BSI Standards Publication

Rolling bearings — Noise testing of rolling bearing greases

Part 1: Basic principles, testing assembly and test machine

National foreword

This British Standard is the UK implementation of ISO 21250-1:2020.

The UK participation in its preparation was entrusted to Technical Committee MCE/7, Rolling bearings.

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

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© The British Standards Institution 2020
Published by BSI Standards Limited 2020

ISBN 978 0 580 99417 3

ICS 21.100.20

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 July 2020.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

Rolling bearings — Noise testing of rolling bearing greases —

Part 1: Basic principles, testing assembly and test machine

Roulement — Essais de bruit de graisse pour roulement —

Partie 1: Règles de base, arrangement d'essais, machine de test



Reference number
ISO 21250-1:2020(E)

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Published in Switzerland

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Foreword

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This document was prepared by Technical Committee ISO/TC 4, *Rolling bearings*.

A list of all parts in the ISO 21250 series can be found on the ISO website.

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

The rolling bearing life theory emphasizes the use of pure and homogeneous lubricants as essential for a long bearing service life. The lubrication of rolling bearings is described in several national standards. The GfT worksheet 3^[1] contains theoretical and practical knowledge of rolling bearing lubrication.

Grease lubrication is the most common type of rolling bearing lubrication. The purity grade of bearing grease is influenced by thickeners, base oils, additives and solid lubricant additives as well as the manufacturing process and is reflected in the running noise. Therefore, noise testing of rolling bearing greases is recommended.

In addition, grease noise testing in accordance with this document allows the grease manufacturers to develop low-noise lubricants with better damping properties. This document can also support the rolling bearing manufacturers and end-users in the selection of low noise grease with better damping properties.

This document covers basic principles, requirements for the testing assembly and the test machine to determine and assess the noise characteristics of bearing grease jointly with ISO 21250-2, ISO 21250-3 and ISO 21250-4.