
Rolling bearings — Balls —
Part 2:
Ceramic balls

Roulements — Billes —

Partie 2: Billes de roulement en céramique



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

This document is a preview generated by EVS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2008

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	1
4 Symbols	4
5 Requirements.....	4
5.1 Ball size.....	4
5.2 Quality of geometry and surface.....	4
5.3 Sorting accuracy and ball gauges	5
6 Material	5
7 Dimensions and tolerances.....	5
Annex A (normative) Method for assessment of deviation from spherical form	8
Annex B (normative) Illustration of ball gauges and sorting principles	9
Annex C (informative) Examples of defect types and methods of inspection.....	11
Bibliography	12

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 3290-2 was prepared by Technical Committee ISO/TC 4, *Rolling bearings*.

ISO 3290 consists of the following parts, under the general title *Rolling bearings — Balls*:

- *Part 1: Steel balls*
- *Part 2: Ceramic balls*

Rolling bearings — Balls —

Part 2: Ceramic balls

1 Scope

This part of ISO 3290 specifies requirements for finished silicon nitride balls for rolling bearings.

2 Normative references

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

ISO 1132-1, *Rolling bearings — Tolerances — Part 1: Terms and definitions*

ISO 4288, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Rules and procedures for the assessment of surface texture*

ISO 5593, *Rolling bearings — Vocabulary*

ISO/TS 12181-1, *Geometrical Product Specifications (GPS) — Roundness — Part 1: Vocabulary and parameters of roundness*

ISO 15241, *Rolling bearings — Symbols for quantities*

ISO 26602:—¹⁾ *Fine ceramics (advanced ceramics, advanced technical ceramics) — Silicon nitride materials for rolling bearing balls*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1132-1, ISO 5593 and the following apply.

3.1

nominal ball diameter

diameter value which is used for the general identification of a ball size

[ISO 5593:1997, 05.04.01]

1) To be published.