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**NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC
OF CHINA**

中华人民共和国国家标准

GB/T 308.1-2013

Replace GB/T 308-2002

Rolling bearings—Balls—Part 1: Steel balls

滚动轴承 球

第 1 部分：钢球

(ISO 3290-1: 2008, NEQ)

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China**

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Foreword

GB/T 308 "*Rolling bearings balls*" includes two parts:

--Part 1: steel balls.

--Part 2: ceramic balls.

This part is the first part of GB/T 308.

This part is drafted according to specification of GB/T 1.1 - 2009.

This part will replace GB/T 308-2002 "*rolling bearings steel balls*". Compared with GB/T 308 - 2002, the main technical changes are as follows:

--The standard title is amended (see cover and the first page in this edition as well as that in 2002 edition);

--The scope is amended (see chapter 1 in this edition and that in 2002 edition);

--Parts of informative references are amended (see chapter 2 in this edition and that in 2002 edition);

--Parts of terms and definitions are added and amended (see chapter 3 in this edition and that in 2002 edition);

--"Symbols" is edited as a separate chapter (see chapter 4 in this edition and chapter 3 in 2002 edition)

-- Decimal places of nominal ball diameter is amended (see table 1 in this edition and that in 2002 edition);

--Parts of content concerning material and heat treatment, harness as well as crush load are added (see sub-clause 6.1 and 6.2);

--Appearance and surface defect is amended (see sub-clause 6.4 in this edition and sub-clause in 2002 edition);

--Measurements method of surface roughness is amended (see sub-clause 7.3 in this edition and that in 2002 edition);

--Inspection regulations of finished balls are amended (see chapter 8 in this edition and that in 2002 edition);

--Marking content and examples are amended (see sub-clause 9.1, 9.3 in this edition and sub-clause 6.1, 6.3 in 2002 edition);

--Deviation from spherical form assessment method is moved from annex B to annex C

(see annex C in this edition and annex B in 2002 edition)

--Comparison between nominal ball diameter and rounded nominal ball diameter is added

(see annex D);

This part is drafted afresh with ISO 3290-1:2008" *Rolling bearings balls part 1: steel balls*" as reference. It is not equivalent to ISO 3290-1:2008.

This standard is proposed by China Machinery Industry Federation.

This national standard is under the jurisdiction of National Rolling Bearings Standardization Committee (SAC/TC 98) .

Drafting units of this standard: Luoyang Bearing Research Institute Co., Ltd, Luoyang Bearing Science& Technology Co.,Ltd, Shandong Donge Steel Ball Group Co.,Ltd and Jiangsu LiXing General Steel Ball Co.,Ltd.

Main drafters of this standard: Ma Suqing, Zhang Yongqian, Yang Yong, Sha Xiaojian and Ma Lin.

Previous versions that this standard replaces are as follows:

-- GB 308 - 1964,GB 308 - 1977, GB 308 - 1984,GB/T 308 - 1989.GB/T 308 - 2002.

Rolling bearings-Balls

Part 1: Steel balls

1 Scope

This part of GB/T 308 specifies the size, technical requirements, marking, measurements and inspection method, inspection regulation as well as packaging and storing.

This part is applicable to rolling bearings accessory and commercial balls.

2 Normative references

The articles contained in the following documents have become this document when they are quoted herein. For the dated documents so quoted, all the modifications (Including all corrections) or revisions made thereafter shall be applicable to this document.

GB/T 3086-2008 High carbon chromium stainless bearing steels

GB/T 4199-2003 Rolling bearings—Tolerances—Definitions (ISO 1132-1: 2000, Rolling bearings—Tolerances—Part 1: Terms and definitions, MOD)

GB/T 6930-2002 Rolling bearings-Vocabulary (ISO 5593: 1997, IDT)

GB/T 7234-2004 Geometrical Product Specifications (GPS)-- Measurement of roundness --Terms, definitions and parameters of roundness

GB/T 7235-2004 Geometrical Product Specifications(GPS)--Methods for the assessment of departure from roundness--Measurement of variations in radius

GB/T 7811-2007 Rolling bearings—Symbols for quantities (ISO 15241: 2001, IDT)

GB/T 8597-2013 Rolling bearings—Rust proof packaging

GB/T 18254-2002 High-carbon chromium bearing steel

GB/T 18579-2001 High-carbon chromium bearing steel wires

GB/T 24606-2009 Rolling bearings—Non-destructive testing—Magnetic particle testing

GB/T 24608-2009 Inspection rules for rolling bearings and commercial parts

JB/T 1255 Specification for heat-treatment of rolling bearing parts made from high carbon chromium steel

JB/T 1460-2011 Rolling bearings — Bearing parts made from high-carbon chromium stainless steel — Specifications for heat-treatment



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