



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

GB/T 7308.2-2021

**Plain bearings - Thin-walled half bearings with or without flange
- Part 2: Measurement of wall thickness and flange thickness**

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Foreword

GB/T 7308 "Sliding bearings with flanges or thin-walled bearings without flanges" is divided into the following three parts.

---Part 1. Tolerances, structural elements and inspection methods;

---Part 2. Measurement of bearing wall thickness and flange thickness;

---Part 3. Circumference measurement.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

This part is Part 2 of GB/T 7308.

This part uses the redrafting method to amend and adopt ISO 3548-2:2009 "Sliding bearings with flanges or thin-walled bearings without flanges, Part 2

Minutes. Measurement of bearing bush wall thickness and flange thickness.

The technical differences between this part and ISO 3548-2:2009 and the reasons are as follows.

--- Change the scope of application in Chapter 1 to. "Outer diameter D_o to 250mm with flanged thin-walled bearing or outer diameter D_o to 500mm without flange

"Thin-walled bearing" is consistent with the scope of application of GB/T 7308.1.

---According to the scope of application, the method of measuring the wall thickness of the bearing shell with the outer diameter of the bearing shell $D_o > 150\text{mm}$ has been added.

---Regarding normative reference documents, this section has made adjustments with technical differences to adapt to my country's technical conditions and adjustments.

The situation is collectively reflected in Chapter 2 "Normative Reference Documents", and the specific adjustments are as follows.

* Replace ISO 3548 with GB/T 7308.1 modified to adopt international standards;

* Replace ISO 12301 with GB/T 27939 which is equivalent to adopting international

standards.

---Because the structure of the flanged bearing is different from that of the non-flanged bearing, the method of measuring the wall thickness of the bearing (circumferential line measurement, point measurement) is divided into

There are two parts of flanged bearing and flangeless bearing. Table 1, Table 2 and Table 3 have been revised.

---The definition of flange thickness, related symbols, measurement principles and measurement methods have been added.

---Add related schematic diagrams according to content needs.

---Increase the limit requirements and determination of the measurement uncertainty of the measuring equipment, making the regulations more comprehensive and clear.

---The normative appendix A "marking of measurement methods on drawings" has been added to increase operability.

Compared with ISO 3548-2.2009, this part has made the following editorial changes.

---Modified and added some symbols to facilitate practical application;

---Modified the logical error of $6H \leq 8$ in ISO 3548-2.2009 Table 3 (Table 4 of this part);

---Informative Appendix B "Determination of Measurement Uncertainty" has been added.

This part was proposed by China Machinery Industry Federation.

This part is under the jurisdiction of the National Sliding Bearing Standardization Technical Committee (SAC/TC236).

Drafting organizations of this section. China National Machinery Productivity Promotion Center, Yantai Dafeng Bearing Co., Ltd., Wuhu Meida Electromechanical Industry Co., Ltd., Hangzhou Bearing Shijiazhuang Co., Ltd., Chengdu Shengsanqiang Railway Fittings Co., Ltd., Lin'an Dongfang Sliding Bearing Co., Ltd.

This part is explained by the National Standardization Technical Committee of Sliding Bearings.

Sliding bearings have flanges or thin-walled bushes without flanges

Part 2.Measurement of Bearing Wall Thickness and Flange Thickness

1 Scope

According to GB/T 27939, this part of GB/T 7308 specifies the wall thickness and flange thickness of thin-walled bearings with flanges or without flanges.

Measure, and explain the required measuring methods and measuring equipment.

This section applies to thin-walled bearings with flanges with an outer diameter of D_o to 250mm or thin-walled bearings without flanges from an outer diameter of D_o to 500mm.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 7308.1 Thin-walled bearings with flanges or without flanges for sliding bearings-Part 1.Tolerances, structural elements and inspection methods

(GB/T 7308.1-2021, ISO 3548-1:2014, MOD)

GB/T 27939 Quality control technology and inspection of sliding bearing geometry and material quality characteristics (GB/T 27939-2011,

ISO 12301:2007, IDT)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Wall thickness

s_3

The radial distance between the corresponding measuring points on the inner and outer surfaces of the bearing shell at 90° from the opposite surface (top) (see Figure 1).

Figure 1 Bearing wall thickness s_3

3.2

Flange thickness

The axial distance between the inner and outer end faces of the flange (see Figure 2).