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

GB/T 12613.4-2011

Replacing GB/T 12613.4-2002

Plain bearings -- Wrapped bushes -- Part 4: Materials

滑动轴承 卷制轴套 第4部分：材料

(English Translation)

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Foreword

GB/T 12613 "Plain bearings - hub" consists of the following seven parts.

- Part 1. Dimensions;
- Part 2. outside and inside diameter of the test data;
- Part 3. Lubrication holes, grooves and pockets;
- Part 4. Materials;
- Part 5. diameter test;
- Part 6. inner diameter of the test;
- Part 7. Measurement of wall thickness of thin-walled sleeve.

This section is GB/T Part of 412,613.

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

This Part replaces GB/T 12613.4-2002 "Plain bearings - Wrapped bushes - Part 4. Materials." And GB/T 12613.4-2002 Compared main changes are as follows.

- Chapter 2 increases references ISO 4378-1;
- Increase in Chapter 3, "Terms and Definitions";
- Table 1 increase applies wall thicknesses series;
- Table 2 delete material grades PbSb15SnAs, increased material grades AlSn12SiCu, AlZn5 and code B1, B2, D1, D2, D3, D4.
- Table 2 increase the variety of material grades applicable to wall thicknesses series;
- Table 2 Table Note increase Brinell hardness test different methods of steel backing

material applies.

This section uses the translation method identical with the international standard ISO 3547-4:2006 "Plain bearings - Wrapped bushes - Part 4. Materials." Consistency correspondence between this part of international documents and normative references of our files are as follows.

--- GB/T 2889.1-2008 Plain bearings - Terms, definitions and classification - Part 1. Design, bearing materials and their properties (ISO 4378-1:1997, IDT)

--- GB/T 12613.2-2011 Plain bearings - Wrapped bushes - Part 2. outside and inside diameter of the test data (ISO 3547-2.

2006, IDT)

--- GB/T 12613.3-2011 Plain bearings - Wrapped bushes - Part 3. Lubrication holes, grooves and indentations (ISO 3547-3.

2006, IDT)

--- GB/T 18326-2001 Plain bearings thin wall bearing metal multilayer material (eqv ISO 4383:2000) and ISO 3547-4:2006 as compared to this section made the following editorial changes.

--- Equivalents adoption of international standards in place of the standard corresponding to international standards.

This part is proposed by China Machinery Industry Federation.

Bearing this in part by the National Standardization Technical Committee (SAC/TC236) centralized.

This section is responsible for drafting unit. Productivity Promotion Center in the machine.

Participated in the drafting of this section. Zhejiang Changsheng Sliding Bearings Co., Ltd., Zhejiang SF Oilless Bearing Co., Ltd., Zhejiang Bearing Co., Ltd., Bearing Co., Ltd. Jiashan Feng into three complex.

This part of the standard replaces the previous editions are.

--- GB/T 12613-1990;

--- GB/T 12613.4-2002.

Plain bearings - Wrapped bushes - Part 4. Materials

1 Scope

GB/T 12613 provisions of this section in line with GB/T 12613 other parts of the provisions, for the manufacture of roll sleeve single and multilayer Sliding bearing material.

2 Normative references

The following documents for the use of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 12613.1-2011 Plain bearings - Wrapped bushes - Part 1. Dimensions (ISO 3547-1:2006, IDT) ISO 3547-2 Plain bearings - Wrapped bushes - Part 2. outside and inside diameter of the test data (Plainbearings-Wrapped bushes-Part 2. Testdataforoutsideandinsidediameters) ISO 3547-3 Plain bearings - Wrapped bushes - Part 3. Lubrication holes, grooves and pockets (Plainbearings-Wrapped bushes-Part 3. Lubricationholes, groovesandindentations) ISO 4378-1 Plain bearings - Terms, definitions, classification and symbols - Part 1. Design, bearing materials and their properties (Plain bearings-Terms, definitions, classificationandsymbols-Part 1. Design, bearingmaterialsandtheir properties) ISO 4382-2 bearing copper alloys - Part 2. Single bearing forged copper alloy (Plainbearings-Copper alloys-part2. wroughtcopperalloysforsolidplainbearings) ISO 4383 Plain bearings thin wall bearing metal multilayer material (Plainbearings-Multilayermaterialsfor thin-waledplainbearings) ISO 4384-1 Plain bearings bearing alloy hardness test - Part 1. multi-layer material (Plainbearings-Hardness testingofbearingmetals-Part 1. Compoundmaterials) ISO 4384-2 Plain bearings bearing alloy hardness test - Part 2. single layer of material (Plainbearings-Hardness testingofbearingmetals-Part 2. Solidmaterials)

3 Terms and Definitions

Terms and definitions, as defined in ISO 4378-1 apply to this document.

4.1 Chemical Analysis

Chemical analysis is a sliding bearing alloys final acceptance procedures. Arbitration inspection or random sample testing should be used to identify the manufacturer and user consultation Available methods.

4.2 Hardness

Table 1 and Table 2 gives the average hardness value related to each material. Practical application, change the alloy composition and material processing technology

The hardness of the material has a great influence. Hardness value requires the manufacturer shall, in consultation with users.