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

GB/T 39742-2021

Plain bearings - Aluminum alloys for solid bearings

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Foreword

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

The translation method used in this standard is equivalent to ISO 6279.2017

"Aluminum-based casting alloys for single-layer sliding bearings of sliding bearings".

This standard was proposed by the China Machinery Industry Federation.

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

Drafting organizations of this standard. China Machinery Productivity Promotion Center, Changzhou Hengye Bearing Material Co., Ltd., Hefei Bolin New Material Co., Ltd.

Division, Shanghai Hwei Industrial Co., Ltd., Jinhua Chengkai Alloy Material Co., Ltd., Zhejiang Zhongda Precision Components Co., Ltd., Hunan Chongde

Industrial Technology Co., Ltd., Lin'an Dongfang Sliding Bearing Co., Ltd., Hunan UFO New Material Co., Ltd.

This standard is interpreted by the National Standardization Technical Committee for Sliding Bearings.

Aluminum-based casting alloys for single-layer sliding bearings

1 Scope

This standard specifies the chemical composition and mechanical properties of aluminum-based casting alloys that are preferred for single-layer sliding bearings. The manufacturer and user agreement

Quotient, other alloys can also be used.

2 Normative references

The following documents are indispensable for the use 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.

ISO 4384-2 Plainbearings-Hardnesstes-Hardnesstest of bearing alloys Part 2.Single-layer materials (Plainbearings-Hardnesstes-tingofbearingmetals-Part 2.Solidmaterials)

3.1 Chemical composition

The recommended chemical composition is shown in Table 1.

The chemical composition analysis method is negotiated between the manufacturer and the user.

3.2 Mechanical properties

The mechanical properties are shown in Table 1.

Tensile strength and elongation are mandatory items, and quality control inspections are carried out by the material manufacturer.

Hardness is also a required inspection item and can be tested on a single bearing.

The values of other properties are for reference only during design.

4 Detection method

The tensile test shall be carried out in consultation between the manufacturer and the user.

The inspection method and the indicators of the required inspection items shall be negotiated by the manufacturer and the user.

Hardness testing should be carried out in accordance with ISO 4384-2.

Table 1 Aluminum-based alloys