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

**GB/T 39431-2020**

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**Plain bearings - Bearings containing dispersed solid lubricants**

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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.20054.2016 "Sliding Bearings Containing Dispersed Solid Lubricants".

The Chinese documents that have a consistent correspondence with the international documents cited in this standard are as follows.

---GB/T 12613.1-2011 Rolled sleeves of sliding bearings Part 1.Dimensions (ISO 3547-1.2006, IDT)

This standard was proposed by 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 National Machinery Productivity Promotion Center, Zhejiang Shuangfei Oilless Bearing Co., Ltd., Zhejiang Changsheng Sliding Bearing Co., Ltd.

Co., Ltd., Zhejiang Zhongda Precision Components Co., Ltd., Jiaxing Meiteer Baoxin Machinery Industry Co., Ltd., Jinhua Chengkai Alloy Materials

Co., Ltd., Jiashan Sanfu Sliding Bearing Co., Ltd., Shandong Fuma Bearing Co., Ltd., Hefei Bolin New Materials Co., Ltd., Chang

Shabode Metallurgical Materials Co., Ltd., Chuzhou Langyashan Powder Metallurgy Co., Ltd.

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

Plain bearings contain dispersed solid lubricant bearings

## 1 Scope

This standard specifies the structural type, basic dimensions and technical requirements of bearings containing dispersed solid lubricants.

Note. There are four types of solid lubricant self-lubricating bearings. integral type, surface coating type, inlaid type and dispersed type.

This standard applies to decentralized type.

## 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 document.

For undated references, the latest version (including all amendments) applies to this document.

ISO 3547-1 Rolled sleeves of plain bearings-Part 1.Dimensions

## 3 Terms and definitions

This document does not give relevant terms and definitions.

ISO and IEC maintain a terminology database for standardization at the following website.

## 4 Symbols and units

Symbols and units are shown in Table 1.

### 5.1 Structure

Figure 1 is a single-layer bearing containing dispersed solid lubricants made of composite materials through powder metallurgy technology. The solid lubricants are evenly distributed in the metal matrix.

Figure 2 is a multi-layer bearing containing dispersed solid lubricants, including a steel back layer and a sintered layer. The products are divided into rolled sleeves and integral sleeves.