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

**GB/T 17754-2012**

Replacing GB/T 17754-1999

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**Tribology terminology**

摩擦学术语

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### Foreword

This standard rule according to GB/T 1.1-2009 given draft.

This standard replacement GB/T 17754-1999 "Tribology term" this standard and GB/T 17754-1999 compared to the main changes are as follows.

--- Revised Chapter 7 Lubricants characteristics;

--- Revised Chapter 8 Lubricants;

--- Revised Chapter 9 of the solid lubricant content and entries merged into Chapter 8-lubricating materials, partially allocated to Chapter 6 lubrication; increased

Tribology and surface technology content entries;

--- Revised Chapter 10 tribological materials content and entries, read Chapter 7, friction material;

--- Amend Chapter 11 of tribology test content and entries, read Chapter 10, tribology test equipment.

The standard proposed by China Machinery Industry Federation.

This standard layer Standardization Technical Committee (SAC/TC57) administered by the National Metal and non-metal cover.

This standard was drafted. Institute of Metal Research, Wuhan Institute of Material protection.

The main drafters of this standard. Li Shu, Chi Cho, Cho, Dong Xianglin.

This standard replaces the standards previously issued as follows.

## 1 Scope

This standard determines the tribological common definition of terms and their definitions or statements.

This standard applies to the field of tribology and related technical standards, technical papers, teaching materials, books and writing and translation, as well as friction discipline

Research, teaching, academic exchange and engineering applications.

### 2.1 Tribology tribology

Surface interactions relevant for the relative motion of objects, friction type behavior and its mechanism, intermediate medium and the environment posed by the system

Damage and control of science and technology, including friction (2.2), abrasion (2.3), research and application of lubrication (2.4) and related issues.

### 2.2 Friction friction

Between an object under the force of the mutual contact surfaces (3.30) appears to cut the relative motion or tendency to hinder the movement of sports behavior

And along with the phenomena and processes of mechanical energy loss.

### 2.3 Wear wear

Because of friction (2.2) causing surface deformation phenomena or surface material damage and a gradual loss process.

### 2.4 Lubrication lubrication

Relative movement and interaction between the surface of the material cut easily added to reduce friction (2.2), wear control (2.3) or other forms of mitigation

Surface design and measures destruction.

### 2.5 Friction Physics tribophysics

Research on the physical phenomenon of friction [table] surface (4.1) on its interaction on Tribology (2.1) the influence of discipline branch.

### 2.6 Tribochemistry tribochemistry

Chemical reactions and changes Friction [table] surface (4.1) on the tribological (2.1) Effect of disciplinary branch of law.

## **2.7 Nanotribology nanotribology**

On the surface of nano-materials and their behavior or study law at the nanoscale tribology (2.1).

## **2.8 Biotribology biotribology**

Tribology on organisms, biological materials, biomimetic movement of the device (2.1).