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

GB 12899-2026

Replacing GB 12899-2018

**General technical specification for hand-held metal detector
(English Translation)**

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Foreword ...

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This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1. Structure and Drafting Rules of Standardization Documents".

Drafting.

This document replaces GB 12899-2018 "General Technical Specifications for Handheld Metal Detectors". Compared with GB 12899-2018, except for the following.

Aside from structural adjustments and editorial changes, the main technical changes are as follows.

- Scope has been changed (see Chapter 1, Chapter 1 of the.2018 edition);
- Chapter 3 (Chapter 3 of the.2018 edition);
- The term "detection method" and its definition have been removed (see 3.10 in the.2018 edition).
- The requirements for the power supply (see 4.4,.2018 version) and testing (see 5.6,.2018 version) have been changed.
- Basic detection functionality has been changed (see 4.5, version 4.5 from.2018).
- The detection sensitivity range has been changed (see 4.6.1,.2018 version of 4.6.1).
- The headphone jack content has been removed (see version 4.7.3 in.2018).
- Added alarm vibration (see 4.7.3);
- The requirements for electrostatic discharge immunity (ESD immunity) have been changed (see 4.12.1,.2018 version) and the testing (see 5.14.1,.2018 version).
- 5.14.1).
- The requirements for radio frequency electromagnetic field radiation immunity (see 4.12.2,.2018 version) and testing (see 5.14.2,.2018 version) have been changed.
- Version 5.14.2);
- The casing strength test has been modified (see 5.4.1,.2018 version of 5.4.1).
- The mechanical stress test has been modified (see 5.13.2, 5.13.3 in the.2018 version).

--The inspection rules have been changed (see Chapter 6, Chapter 6 in the.2018 edition);

--The identifier has been changed (see 7.1,.2018 version of 7.1).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed and is under the jurisdiction of the Ministry of Public Security of the People's Republic of China.

The release history of this document and the document it replaces is as follows.

--First published as GB 12899-1991 in.1991, revised for the first time in.2003, and revised for the second time in.2018;

General Technical Specifications for Handheld Metal Detectors

1 Scope

This document specifies the technical requirements, markings, signage, labeling, and packaging of handheld metal detectors (hereinafter referred to as "detectors").

The machine's technical documents and inspection rules require and describe the corresponding test methods.

This document applies to the design, manufacture, and inspection of handheld metal detectors.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are listed below.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 2423.1 Environmental testing of electrical and electronic products - Part 2.Test methods - Test A. Low temperature

GB/T 2423.2 Environmental testing of electrical and electronic products - Part 2.Test methods - Test B. High temperature

GB/T 2423.3 Environmental testing - Part 2.Test methods - Test Cab. Constant damp heat test

GB/T 2423.5 Environmental testing - Part 2.Test methods - Test Ea and guidelines. Impact

GB/T 2423.7 Environmental Testing Part 2.Test Methods Test Ec. Shocks caused by rough

handling (mainly for equipment type)

sample)

GB/T 2423.10 Environmental testing - Part 2. Test methods - Test Fc and guidelines.
Vibration (sine wave)

GB/T 2828.1 Sampling Procedures for Inspection by Attributes - Part 1. Sampling Schemes
Retrieved by Acceptable Quality Limit (AQL) for Lot-by-Lot Inspection

GB/T 2829 Periodic inspection sampling procedures and tables (applicable to the
inspection of process stability)

GB/T 4208 Degrees of protection provided by enclosures (IP codes)

GB/T 8897 (All Parts) Primary Batteries

GB/T 17626.2-2018 Electromagnetic compatibility testing and measurement techniques -
Electrostatic discharge immunity test

GB/T 17626.3-2023 Electromagnetic compatibility testing and measurement techniques -
Part 3. Radio frequency electromagnetic field radiated immunity testing

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1

Handheld metal detector

A handheld metal detector that can detect metal items that meet or exceed a certain limit.

3.2

positive alarm

When the detector detects a metal object that reaches or exceeds a certain limit, it will
issue an alarm signal with a specified sound, display, or vibration.

3.3

Missed alarm failure

The detector did not alarm when the quantity of metal objects reached or exceeded the
limit.

END: Draft Version (GB 12899-2026)