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

GB/T 17894-2023

Replacing GB/T 17894-1999

Freight containers - Automatic identification

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foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules for Standardization Documents"

drafting:

This document replaces GB/T 17894-1999 "Automatic Identification of Containers":

Compared with GB/T 17894-1999, except for structural adjustment and compilation

In addition to editorial changes, the main technical changes are as follows:

a) Changed the scope of the standard (see Chapter 1, Chapter 1 of the:1999 edition);

b) Deleted the terms "container", "required and optional", "physical and electronic

Accuracy" (see 3:1, 3:2, 3:3, 3:9, 3:10 of the:1999 edition);

c) The definitions of the terms "object protection", "electronic protection", "range", "passing speed" and "box dynamics" have been changed (see 3:1, 3:2, 3:3, 3:4,

3:5, 3:4, 3:5, 3:6, 3:7, 3:8 of the:1999 edition);

d) Change "code plate" and "code reader" to "electronic label" and "reader" (see Chapter 4, Chapter 5, Chapter 6, Chapter 7, :1999 edition

Chapter 4, Chapter 5, Chapter 6, Chapter 7);

- e) Added requirements for electronic label data storage location (see Table 3);
- f) Change the informative appendix "Technical Conditions of AEI Power Reflector System" to a normative appendix (see Appendix B, appendix of the:1999 edition record B):

This document is modified to adopt ISO 10374:1991 "Automatic Container Identification":

The technical differences between this document and ISO 10374:1991 and their reasons are as follows:

--- Replaced ISO 6346:1984 (see 4:3) with the normatively quoted GB/T 1836-2017 to meet the technical requirements of our country;

---Increase the storage location of the electronic tag data (see Table 3), in order to improve the practicality of the electronic tag operation and facilitate the electronic tag operation:

The following editorial changes have been made to this document:

---Incorporated the amendment content of ISO 10374:1991/Amd:1:1995, the outer margin position of the terms involved is vertical

Double lines (||) are marked;

--- Replaced ISO 668:1988 with the informative referenced GB/T 1413-2023;

--- Unified container size and mass metric units;

--- Deleted some notes of ISO 10374;

--- Added references:

Please note that some contents of this document may refer to patents: The issuing agency of this document assumes no responsibility for identifying patents:

1 Scope

This document specifies the operation requirements for container automatic identification, electronic label data content and format, electronic label operation frequency and sensitivity:

Degree, interface requirements, and tests and requirements of the AEI system:

This document applies to containers defined in GB/T 1413-2023:

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text: Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document:

GB/T 1836-2017 Container code, identification and marking (ISO 6346:1995, IDT)

3 Terms and Definitions

The following terms and definitions apply to this document:

3:1

physical protection physicallytamper-proof

Designed to be visually inspectable to prevent deliberate disassembly and reassembly using conventional tools:

3:2

Electronic protection electronicallytamper-proof

Security measures designed to prevent the deliberate use of electromagnetic effects to alter information stored in electronic devices:

3:3

range range

The effective reading and writing distance between the electronic tag and the reader:

3:4

passing speed

The speed at which the electronic tag can be effectively read and written when it passes through the reader:

3:5

Information about the relative position, speed and direction of movement of the container and the reader: