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

GB/T 41734.3-2022

**Radiofrequency identification of animals - Part 3: Evaluation of
performance of RFID transponders conforming with GB/T 20563
and GB/T 22334**

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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 is part 3 of GB/T 41734 "Radio Frequency Identification of Animals". GB/T 41734 has issued the following parts.

--- Part 1. Consistency assessment of radio frequency identification labels and GB/T 20563 and GB/T 22334 (including the issue of manufacturer codes

put and use);

--- Part 2. Consistency assessment of RFID readers and GB/T 20563 and GB/T 22334;

--- Part 3. Performance evaluation of radio frequency identification tags in accordance with GB/T 20563 and GB/T 22334.

This document is modified to adopt ISO 24631-3:2017 "Radio Frequency Identification of Animals Part 3. Radio Frequency Identification Compliant with ISO 11784 and ISO 11785

Performance Evaluation of Frequency Identification Tags.

Compared with ISO 24631-3:2017, this document has made the following structural adjustments.

--- Chapter 4 corresponds to Chapter 5 of ISO 24631-3:2017;

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The technical differences between this document and ISO 24631-3:2017 and their reasons are as follows.

--- Changed the scope of application of the standard to adapt to the development of the industry in my country (see Chapter 1);

--- Replaced ISO 11784 (see Chapter 5, 6.12) with the normatively quoted GB/T 20563 to adapt to my country's technical conditions, adding

Increase operability;

--- Replaced ISO 11785:1996 with the normative reference GB/T 22334 (see Chapter 5, 6.12, 7.6.1, 7.6.4, 7.6.5,

7.6.6, 7.6.7), in order to adapt to the technical conditions of our country and increase operability;

--- Replaced ISO 24631-1:2017 (see 6.2) with the normatively quoted GB/T 41734.1-2022 to adapt to my country's technology

conditions to increase operability.

The following editorial changes have been made to this document.

--- In order to coordinate with existing standards, change the name of the standard to "Radio Frequency Identification of Animals Part 3.Compliant with GB/T 20563 and

GB/T 22334 Radio Frequency Identification Tag Performance Evaluation";

--- Deleted the ISO and IEC standardized terminology database address (see Chapter 3);

--- Deleted the terms "authentication", "activation field (trigger field)", "country code", "identification code", "laboratory reference radio frequency identification reader" and "manufacturing

Manufacturer", "Manufacturer Code", "Product Code", "RA Approved Test Center", "RA Registered RFID Tag" "RA Registered

Manufacturer" "Registration Authority" "Tag Reset" "Tag Reset Counter" "RFID Reader" "RFID Tag" "User

"Information field" to meet the requirements for writing Chinese standards (see Chapter 3);

---Deleted the abbreviations CRC, FDX-B, HDX, MFC, RA, RFID, to meet the requirements for writing Chinese standards (see Chapter 4);

--- Replaced ISO /IEC 17025 with the informative referenced GB/T 27025 (see 6.3);

--- Replaced ISO /IEC 17000.2004 with the informative referenced GB/T 27000-2006.

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

Introduction

GB/T 41734 mainly involves the consistency of radio frequency identification tags and radio frequency identification readers. Currently, radio frequency identification tags used for animal identification

The main type of tag is injection type RFID tag, mainly including electronic ear tag RFID tag, electronic rumen pill RFID tag, leg ring

RFID tags. GB/T 20563 specifies the code structure for animal radio frequency identification, and GB/T 22334 specifies the technical code for animal radio frequency identification.

Technical guidelines, GB/T 41734 mainly solves the problems of radio frequency identification tags, radio frequency identification readers and GB/T 20563 and GB/T 22334

Consistency assessment, performance assessment and other issues.

GB/T 41734 is proposed to consist of 7 parts.

--- Part 1.Consistency assessment of radio frequency identification labels and GB/T 20563 and GB/T 22334 (including the issue of manufacturer codes

put and use). The purpose is to give the consistency assessment of radio frequency identification tags and GB/T 20563 and GB/T 22334

method.

--- Part 2.Consistency assessment of RFID readers and GB/T 20563 and GB/T 22334.The purpose is to give the shot

Consistency assessment method for frequency identification readers and GB/T 20563 and GB/T 22334.

--- Part 3.Performance evaluation of radio frequency identification tags in accordance with GB/T 20563 and GB/T 22334.The purpose is to give

Performance evaluation methods for GB/T 20563 and GB/T 22334 radio frequency identification tags.

--- Part 4.Performance evaluation of radio frequency identification readers in accordance with GB/T 20563 and GB/T 22334.The purpose is to give

Compatible with GB/T 20563 and GB/T 22334 RFID reader performance evaluation method.

--- Part 5. Test procedures for the ability of radio frequency identification readers to read GB/T 20563 and GB/T 22334 radio frequency identification tags.

The purpose is to give the ability test of the radio frequency identification reader to read the radio frequency identification tags of GB/T 20563 and GB/T 22334 program.

--- Part 6. Animal identification information format (visual display/data transmission). The purpose is to regulate the display/transmission of animal identification information input data format.

--- Part 7. Synchronization between GB/T 22334 identification systems. The purpose is to give synchronization with the GB/T 22334 identification system method.

Radio Frequency Identification of Animals Part 3.

Compliant with GB/T 20563 and GB/T 22334

RFID Tag Performance Evaluation

1 Scope

This document describes the performance evaluation method for RFID tags for animal identification in accordance with GB/T 20563 and GB/T 22334.

The test procedures specified in this document apply to RFID tags used in animal farming.

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 20563 Animal RFID code structure (GB/T 20563-2006, ISO 11784.1996, MOD)

GB/T 22334 Animal Radio Frequency Identification Technical Guidelines (GB/T 22334-2008, ISO 11785.1996, MOD)

GB/T 41734.1 Radio Frequency Identification of Animals Part 1. Radio Frequency Identification Labels Consistent with GB/T 20563 and GB/T 22334

Performance assessment (including the issuance and use of manufacturer codes) (GB/T