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

GB/T 41734.2-2022

**Radiofrequency identification of animals - Part 2: Evaluation of
conformance of RFID transceivers with GB/T 20563 and GB/T
22334**

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Table of Contents

Preface	
Introduction	
1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Abbreviations	2
5 Consistency	2
6 Application	2
7 Test procedure	3
Appendix A (Normative) Test Application Form	9
Appendix B (Normative) Conditions of Use for Registration of Radio Frequency Identification Readers	10
Reference	11

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 2 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 24631-2:2017 "Radio Frequency Identification of Animals Part 2. Radio Frequency Identification Readers and ISO 11784 and

Conformity Assessment to ISO 11785".

Compared with ISO 24631-2:2017, this document has made the following structural

adjustments.

--- Chapter 4 corresponds to Chapter 5 of ISO 24631-2:2017;

---Chapter 5 corresponds to Chapter 4 of ISO 24631-2:2017.

The technical differences between this document and ISO 24631-2:2017 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);

--- GB/T 41734.1 with normative references has been added to meet the requirements for writing standards in my country (see Chapter 3 and Chapter 4);

--- Replaced ISO 11784:1996 (see Chapter 5, 6.1, 6.12, Appendix B) with the normative referenced GB/T 20563 to adapt to I

The country's technical conditions to increase operability;

--- Replaced ISO 11785:1996 with the normative reference GB/T 22334 (see Chapter 5, 6.1, 6.12, 7.2, 7.4.1, 7.5, appendix

Record B) to adapt to the technical conditions of our country and increase operability.

The following editorial changes have been made to this document.

--- In order to coordinate with existing standards, the name of the standard was changed to "Radio Frequency Identification of Animals Part 2: Radio Frequency Identification Readers and Readers

Consistency Assessment of GB/T 20563 and GB/T 22334";

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

--- Removed the terms "Certification", "Country Code", "Manufacturer", "Manufacturer Code", "RA Approved Test Center", "RA Registered Radio Frequency

Identification label", "registration agency", "radio frequency identification reader" and "radio frequency identification label" to meet the requirements for writing Chinese standards (see Section 3

chapter);

--- Added the terms "enhanced radio frequency identification tag" and "RUDI bit" to facilitate standard understanding (see 3.4, 3.5);

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

--- The acronym RUDI has been added to facilitate standard understanding (see Chapter 4).

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

---The contents of Table 1 in ISO 11784.1996 and Table 1 in ISO 11784.1996/Amd2.2010 will be quoted directly as this

Table 1 of the document (see 7.3).

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 2.

Radio frequency identification reader and GB/T 20563 and

Consistency Assessment of GB/T 22334

1 Scope

This document describes the consistency assessment method for radio frequency identification readers in animal individual identification and GB/T 20563 and GB/T 22334

Law. This document specifies the procedures for applying for RFID reader test registration and related rights and obligations.

This document covers over-the-air synchronization tests applicable to mobile RFID interrogators; but does not cover useful

line sync.

The test procedures specified in this document apply to RFID readers 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