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

GA/T 1065-2024

Replacing GA/T 1065-2013

**Calibration specifications for test blocks of micro-dose X-ray
security inspection systems
(English Translation)**

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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 GA/T 1065-2013 "Specification for calibration of test bodies for micro-dose X-ray safety inspection equipment" and is compatible with GA/T 1065-Compared with 2013, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the 2013 edition);
- b) Changed terms and definitions (see Chapter 3, Chapter 3 of the 2013 edition);
- c) Added general provisions (see Chapter 4);
- d) The metrological characteristics of the test body of the transmissive baggage security inspection equipment have been changed (see 5.1, Chapter 4 of the 2013 edition);
- e) Added the metrological characteristics of the test body of the transmission cargo security inspection equipment (see 5.2);
- f) Added the measurement characteristics of human body safety inspection equipment test body (see 5.3);

- g) Added the metrological characteristics of the backscattered article security inspection equipment test volume (see 5.4);
- h) Deleted the general technical requirements (Chapter 5 of the 2013 edition);
- i) The calibration environment conditions have been changed (see 6.1, 7.1 of the 2013 edition);
- j) The calibration standard has been changed (see 6.2, 7.2 of the 2013 edition);
- k) The calibration items table of the test body of the transmissive baggage security inspection equipment has been changed (see 7.1.1, 8.1 of the 2013 edition);
- l) Added the table of calibration items for test bodies of transmission-type cargo security inspection equipment (see 7.1.2);
- m) Added the calibration item table for human safety inspection equipment test bodies (see 7.1.3);
- n) Added the calibration item table for backscattered article safety inspection equipment test bodies (see 7.1.4);
- o) The calibration method of the test body of the transmissive baggage security inspection equipment has been changed (see 7.2, 8.2 of the 2013 edition);
- p) Added the calibration method of the test body of the transmission cargo security inspection equipment (see 7.3);
- q) Added the calibration method for test body of human safety inspection equipment (see 7.4);
- r) Added the calibration method for the test body of the backscattered article security inspection equipment (see 7.5);
- s) The expression of calibration results has been changed (see Chapter 8, Chapter 9 of the 2013 edition);
- t) The recalibration interval has been changed (see Chapter 9, Chapter 10 of the 2013 edition).

Introduction

This document is a revision of GA/T 1065-2013 "Specification for Calibration of Microdose X-ray Safety Inspection Equipment Test Body".

Because it is GB 15208.1-2018 "Microdose X-ray Safety Inspection Equipment Part 1: General Technical Requirements", GB 15208.2-2018 Micro-dose X-ray security inspection equipment Part 2: Transmission baggage security inspection equipment, GB 15208.3-2018 Micro-dose X-ray GB 15208.4-2018 "Micro-dose X-ray Security Inspection Equipment Part

3: Transmission Cargo Security Inspection Equipment" Equipment Part 4: Human body safety inspection equipment", GB 15208.5-2018 "Microdose X-ray safety inspection equipment Part 5: Back the revised version of the document GA/T 1065-2013 "Microdose X-ray Inspection Equipment" was released on December 1, 2019.

The metrological performance requirements of the "Standard for the Calibration of Test Bodies for Online Safety Inspection Equipment" cannot meet the requirements of the current micro-dose X-ray safety inspection equipment test bodies.

Calibration requirements.

This document covers the micro-dose X-ray security inspection equipment, including the transmission type baggage security inspection equipment, transmission type cargo security inspection equipment all test objects in equipment, human body security inspection equipment, and backscatter object security inspection equipment clearly stipulate micro-dose X-ray security inspection the purpose of the calibration requirements for equipment test bodies is to standardize the calibration work of micro-dose X-ray safety inspection equipment test bodies.

This document provides guidance for the processing and quality assessment of micro-dose X-ray safety inspection equipment test bodies and establishes the Operability and traceability of calibration work of line safety inspection equipment test body.

Micro-dose X-ray security inspection equipment Test Body Calibration Specifications

1 Scope

This document specifies the general principles, metrological characteristics, calibration conditions, calibration items and calibration methods for micro-dose X-ray safety inspection equipment test bodies.

method, expression of calibration results and recalibration time interval.

This document applies to the initial calibration, subsequent calibration and in-use inspection of micro-dose X-ray security inspection equipment test bodies.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB 15208.1-2018 Microdose X-ray security inspection equipment Part 1: General technical requirements GB 15208.2-2018 Micro-dose X-ray security inspection equipment Part 2: