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

GB/T 13963-2025

Replacing GB/T 13963-2012

Copying (including multifunction) devices - Terminology

复印（包括多功能）设备 术语

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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 13963-2012 "Terms of Electrostatic Copying (including Multi-function) Equipment" and is consistent with GB/T 13963-2012. In addition to structural adjustments and editorial changes, the main technical changes are as follows:

- a) The relevant contents in the scope of Chapter 1 have been changed (see Chapter 1, Chapter 1 of the 2012 edition);
- b) Deleted the terms and definitions such as "office equipment", "copying multifunction machine" and "printing multifunction machine" (see the 2012 edition of Chapter 3);
- c) Added electronics-related terms and definitions such as "surface potential uniformity" and "dark decay potential difference" (see 3.1);
- d) Added optical related terms and definitions such as "photosensitivity" and "photodischarge curve" (see 3.2);
- e) Added colorimetry related terms and definitions such as "color appearance", "white

balance" and "composite black" (see 3.3);

f) Added "inkjet printer", "color inkjet printer", "serial impact dot matrix printer", "thermal printer", "thermal printer", etc. Terms and definitions related to the whole machine (see 4.1);

g) Added "hard copy", "soft copy", "gamma correction", "print resolution", "low toner", "toner exhausted" and other functions related to the process Terms and definitions (see 4.2);

h) Added machine (other) related terms and definitions such as "printing area", "maximum printing width" and "first set printing time" (see 4.3);

i) Added terms and definitions related to key components such as "fixing film" (see Chapter 5);

j) Added terms and definitions related to consumable materials such as "integrated toner cartridge", "inkjet cartridge", "new inkjet cartridge" and "remanufactured ink cartridge" (see Chapter 6);

k) Added terms and definitions related to image quality such as "standard format", "line width" and "light color" (see Chapter 7);

l) Added terms and definitions related to "energy conservation and environmental protection" (see Chapter 8). Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document was proposed by the China Machinery Industry Federation. This document is under the jurisdiction of the National Technical Committee for Standardization of Copying Machinery (SAC/TC147). This document was drafted by: Tianjin Tianfu Testing Technology Co., Ltd., Xiamen Zhicheng Blue Ocean Technology Co., Ltd., Anxin Testing and Certification (Xiong Co., Ltd., Beijing Chenguang Rongxin Technology Co., Ltd., Konica Minolta (China) Investment Co., Ltd., Ningbo Huagao Information Technology Co., Ltd. Company, China Shipbuilding Industry Corporation Hanguang Technology Co., Ltd., Dawn Information Industry (Beijing) Co., Ltd., and Tianjin Photocopying Technology Research Institute Co., Ltd. The main drafters of this document are. Zhang Yu, Zheng Cheng, Su Yuanman, Yan Zhixin, Chen Ting, Luo Ying, Fang Yong, Pu Jiapeng, Song Qian, and Chen Congcong. The previous versions of the standards replaced by this document are as follows:

1 Scope

China's national terminology standard for copying and multifunction devices - the copiers, printers and the combined machines that have replaced them in every office, together with their parts and their consumables. It is a large document for a vocabulary, and the reason is in the scope: it defines the basic terms of copying and multifunction equipment, the terms for the complete machine, for the key parts, for the consumable materials, for image quality and for energy saving and environmental protection, and it applies to the drafting of

standards and technical documents for copying and multifunction equipment, printers and their related parts and consumables. The consumables and the image quality terms are the ones that carry commercial weight. This is an industry in which the machine is often sold at little margin and the money is made on the toner, the drum and the maintenance kit, and in which a very large third-party consumables market exists alongside the original manufacturers. Whether a replacement cartridge may be described in the same terms as an original one, what a page yield means and under what test image it was measured, and how image quality attributes - the resolution, the density, the uniformity, the registration, the background, the ghosting - are named and defined, are the questions on which those markets argue. A vocabulary that fixes them is what allows a specification, an advertisement and a test report to be compared. The energy saving and environmental terms are the other consequential group, because they are the vocabulary in which the efficiency standards for this equipment are written and in which its energy label is expressed. Issued on 24 January 2025 and in force since 1 August 2025, it replaces GB/T 13963-2012.

This document defines the basic terms of copying (including multi-function) equipment, complete machine terms, key parts terms, consumable material terms, image Quality terms and energy-saving and environmental protection terms. This document applies to the formulation of standards and technical documents for copying (including multi-function) equipment, printers, etc. and related parts and consumable materials. Compilation, writing of teaching materials and books, and translation of literature, etc.

2 Normative references

This document has no normative references.

3.1 Electronics

3.1.1 Electrostatics The science of forces and fields relating to static electric charges.

3.1.2 Electrostatic force The force between stationary charges.

Note. The force between two stationary point charges is proportional to the product of their charges and inversely proportional to the square of the distance between them. On their connection line.

3.1.3 Electrostatic image The state in which electrostatic charge is distributed in the shape of an image on a photoconductor or dielectric layer. It is a charge image that is invisible to the naked eye before being developed with toner, etc.

3.1.4 In electrostatic imaging technology, there is an electrostatic potential difference between the image area and the non-image area in the electrostatic latent image.

Note. This potential difference can be used for development.

3.1.5 The electrostatic latent image formed by the electrostatic imaging process can be repeatedly developed and transferred to obtain multiple copies through a single latent image formation. Printing system.

3.1.6 When light is irradiated on a photoconductive insulating material, an electric field is applied, and the polarized charges generated inside the material are captured and removed by the light irradiation and electric field. The phenomenon that after removal, the polarization state can still be retained for a limited time.