

ICS 13.180
CCS A 25



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

GB/T 22187-2026

Replacing GB/T 22187-2008

**General requirements for establishing anthropometric
databases**

建立人体测量数据库的一般要求

(English Translation)

Issued on: April 30, 2026

Implemented on: November 1, 2026

Issued by: State Administration for Market Regulation

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document replaces GB/T 22187-2008 "General Requirements for Establishing Anthropometry Databases". Compared with GB/T 22187-2008, Apart from structural adjustments and editorial changes, the main technical changes are as follows.

---The phrase "such as nationality, ethnicity, and occupation" has been removed (see section 4.3.1 of the 2008 edition);

---The phrase "race and/or ethnicity, geographic location, and place of residence (rural or urban)" has been removed (see section 5.1 of the 2008 edition).

---The categories "race and/or ethnicity" and "mixture of rural and urban populations" have been removed (see 5.5 in the 2008 edition), and "educational level" has been added.

"Occupation" and "Other demographic variables that affect the distribution of anthropometry data" (see 5.5);

---The suggestion for tabulating gender combination statistics has been removed (see 9.4 in the 2008 edition);

---The following sections have been removed. "Organization (Adults), School Name, Grade, Class (Children)," "Race and Ethnicity," "Place of Birth," "Clothing Type," and "Occupation." (See B.1.4, B.1.7, B.1.8, B.1.9, and B.1.10 in the 2008 edition);

---The term "subject" has been changed to "participant" (see 4.2, 4.3, 5.1, 5.6, 6.6, 8, 9.2, 9.3, 9.4, Appendix A, Appendix B, Appendix C).

Appendix D, Appendix E, Appendix F, Appendix G, and sections 4.2, 5.1, 5.6, 6.3.3, 7.1, 7.2.3, 8, 9.2, 9.3, and 9.4 of the 2008 edition.

Appendix B, Appendix C, Appendix E, Appendix F);

---Another method for estimating the required sample size has been added (see Appendix A).

This document is modified to adopt ISO 15535:2023 "General requirements for establishing anthropometry databases".

The technical differences between this document and ISO 15535:2023, and the reasons therefor, are as follows.

---The normative reference ISO/IEC 8859-1 has been removed to adapt to my country's technical conditions and increase operability;

---The data encoding format requirements have been changed to support the encoding of Chinese characters (see 6.1);

---The input character requirements for anthropometric data and background information have been changed to support the input of Chinese characters into the database (see 6.4);

---The requirements for data item names have been changed; adding Chinese characters to the first line of the database name is more in line with usage habits (see 6.5);

---ISO 3166-1 (see 7.2) has been replaced with the normatively referenced GB/T 2659.1 to adapt to my country's technical conditions and increase operability.

Nature.

---ISO 8601-1 (see 7.2) has been replaced with the normatively referenced GB/T 7408.1 to adapt to my country's technical conditions and increase operability.

Actual nature;

---The requirements for measurement item names and related information in normative Appendix F have been changed to conform to Chinese usage habits (see F.2.3).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed and is under the jurisdiction of the National Technical Committee on Ergonomics Standardization (SAC/TC7).

Introduction

Human well-being is highly dependent on the proportional coordination and spatial geometrical relationship between itself and numerous factors, encompassing a wide range of aspects.

Such as growth and development patterns, design considerations for clothing, transportation, workplaces, and home environments, as well as the suitability for sports and leisure activities.

In multiple aspects, establishing a group anthropometric database can support basic health and safety needs, as well as mechanical safety and personal protective equipment.

It plays an important role in the development of international standards in the field and in computer human body modeling.

The main challenge in establishing an internationally recognized anthropometric database is that existing research data often lacks rigorous comparability.

Differences in research methodologies, or insufficiently detailed methodological descriptions, make effective comparisons of data from different studies difficult.

The anthropometric standards used in data collection form the fundamental basis for establishing an internationally recognized anthropometric database.

This document is used in conjunction with GB/T 5703-2023, and its ultimate goal is to ensure that databases developed by different researchers can be easily accessed.

Quick and reusable. The database presentation method needs to be accessible to relevant standard setters [e.g., those responsible for developing GB/T 18717 (all parts) and...].

[Standards supporting good design and health and safety requirements, such as ISO 14738, are readily available to personnel.] To achieve this goal, it is necessary to...

Corresponding international standards should be developed to ensure the international compatibility of anthropometric databases and related reports.

General requirements for establishing anthropometry databases

1 Scope

This document specifies the general requirements for establishing an anthropometric database and related reports. The database contains data based on GB/T 5703-Data obtained from measurements conducted in 2023.

This document outlines the necessary anthropometry database, including user group characteristics, sampling methods, measurement items, and statistical data.

Information is provided to support international comparisons between different population groups. The population groups defined in this document refer to those that maintain the information specified in GB/T 5703-2023.

People whose postures are being measured.

Note: Some countries use 3D scanning methods for anthropometry. The traditional anthropometry method defined in GB/T 5703-2023 is considered to be 3D.

A necessary supplement to 3D scanning methods. 3D scanning data needs to be verified according to the definitions in GB/T 5703-2023. Currently, the most advanced software can perform...

Integration of traditional anthropometric data with 3D imaging measurement results (see GB/T 23698).