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

GB/T 45066-2024

**Digital fittings - Attributes of the virtual human body -
Vocabulary and terminology**

数字化试衣 虚拟人体属性 术语和定义

(English Translation)

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References

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 is required.

This document is modified to adopt ISO 18825-2:2016 "Digital fitting of apparel - Part 2: Terms and definitions of virtual human attributes" righteous".

Compared with ISO 18825-2:2016, this document has the following structural adjustments.

Added a chapter on "Normative References". -the technical differences between this document and ISO 18825-2:2016 and their reasons are as follows.

Changed the scope of the document (see Chapter 1) to make it more clear who it applies to; a) Added normative reference document GB/T 41419 to ensure the consistency of terminology (see Chapter 3); b) Added the definitions of the terms "virtual human feature points and surfaces" and "virtual human dimensions" (see 3.1 and 3.2) to make the definitions more specific.

Be clear and avoid ambiguity;

Added the definition of the term "virtual chest height (male)" (see 3.2.2) to make the definition clearer and avoid ambiguity; d) Changed the corresponding word of the term "virtual leg inner height" (see 3.2.6) to ensure consistency of terminology; e) the corresponding word of the term "virtual back waist length" (see 3.2.10) was changed to ensure the consistency of terminology; f) Changes to the virtual human body area, virtual bone structure, virtual human body size adjustment, virtual skin color adjustment, and

virtual human Adjustment requirements for posture and movement to make descriptions concise and clear (see 4.1.1, 4.1.2, 4.2.2, 4.2.3);

Added the description of the title "Mandible" to make the title complete and accurate (see Chapter 5, 5.1, 5.1.1, 5.1.2 and 5.1.3); h) Changed the requirements for "Virtual head pose and motion" to make the description more concise and clear (see 5.1.5). i) the following editorial changes were made to this document.

The name of the standard is changed to "Terms and Definitions of Virtual Human Attributes for Digital Fitting";

Adjusted references. -

1 Scope

This document defines the terms and definitions related to the virtual human body in the digital fitting system, including the virtual head, face, torso, Virtual feature points and human dimensions such as trunk, arms, hands, legs, bones and joints.

This document is applicable to all stages of design, development, application, communication and business of digital fitting systems.

2 Normative references

The contents of the following documents constitute the 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.

in this document.

GB/T 41419 Terms and definitions for digital fitting virtual human bodies (GB/T 41419-2022, ISO 18825-1:2016, MOD)

3 Terms and definitions

The terms and definitions defined in GB/T 41419 and the following apply to this document.

Virtual body landmarks and levels the points or planes that define the shape features of the virtual human body when the virtual human body is in a virtual standing posture.

Example. See Figure 2.

Note 1: Bone protrusions, the highest points on convex or concave surfaces, nipple points and other similar points are used as feature points of the virtual human body.

Note 2: For a virtual fitting mannequin or a real fitting mannequin, feature points and surfaces are defined in the same way.

NOTE 3 Some feature points are evaluated in this document according to their plane.

Note 4: When a real human body or a real fitting mannequin is 3D scanned, feature points are marked to extract their positions.

[Source. GB/T 41419-2022, 3.2.4, modified] 3.1.1 virtual top head point the highest point of the virtual human head in the midsagittal plane.

3.1.2

virtual neck point

The midpoint between the virtual upper neck point and the virtual neck fossa point (3.1.3) of the virtual human anterior neck on the midsagittal plane.

3.1.3

virtual front neck-base point the most concave point of the virtual human anterior neck on the midsagittal plane.

3.1.4

virtual side neck-base point the intersection of the virtual human shoulder spine and the concave contour line of the neck root.