INTERNATIONAL STANDARD

**ISO 18825-1**

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# Clothing — Digital fittings —

## Part 1: Vocabulary and terminology used for the virtual human body

*Habillement — Essayage virtuel —*

*Partie 1: Vocabulaire et terminologie utilisés pour le corps humain virtuel*



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# Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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The committee responsible for this document is ISO/TC 133, *Clothing sizing systems — size designation, size measurement methods and digital fittings*.

ISO 18825 consists of the following parts, under the general title *Clothing — Digital fittings*:

— *Part 1: Vocabulary and terminology used for the virtual human body*

— *Part 2: Vocabulary and terminology used for attributes of the virtual human body*



 

# Introduction

The virtual human model exists in various formats in the virtual world and is applied in many different industrial sectors. The virtual human body used in the fashion field reflects the attributes of different areas of the human body based on physical measurements and shape characteristics.

Various types of virtual human body-based IT-fashion convergence technology are being attempted today, according to rapid development of the vast online fashion market, including the internet, mobile market, smart TVs, and virtual fittings at shops and stores. Meanwhile, the increased demand of mass customized and made-to-measure garments these days encourages efforts to innovate the traditional process of planning, production and sales. The use of digital technology in this new ubiquitous environment of the international apparel industry is leading to use of three-dimensional information on consumers and digital human bodies that reflect somatotype characteristics, and consumers can now go online anytime, anywhere, to try on clothes, evaluate the style and fit, and place orders. Despite such advances, there is a lack of an International Standard related to the virtual human body.

Therefore, this part of ISO 18825 is the first in a series of International Standards that deal with the virtual human body, a necessary component of the 3D virtual garment system used in the apparel industry. The main goals of this International Standard are to define a virtual human body to be used to improve online communication and reliability of fashion products sold online and in-store through visual confirmation of size, shape, fit and design. This International Standard will establish a single index and reference for all virtual garment programs that are currenlty using various, confusing terminology.

This part of ISO 18825 specifies vocabulary, terminology and definitions related to digital fitting, such as virtual human body shapes, composition and attributes, and thus supports online and in-store consumers, fashion designers, product developers, technologists, manufacturers and retailers who have an interest in the style and fit of clothes. Developers will be able to use unified vocabulary and terminology when they devise virtual garment systems. Online consumers, fashion designers, manufacturers and sellers using virtual garment systems will be able to make use of the vocabulary and terminology regarding virtual body dimensions. It is therefore expected to improve convenience for consumers, improve efficiency in clothing manufacturing and contribute to a decrease in the return rate of clothes purchased online.

# Clothing — Digital fittings —

# Part 1: Vocabulary and terminology used for the virtual human body



## 1 Scope

This part of ISO 18825 covers vocabulary and terminology used for the virtual human body in the virtual garment system used as a main tool in various fields of clothing application. This part of ISO 18825 is applicable to all stages of online clothing communication and business, including design, manufacture, order, sales, distribution and customer management.

## 2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 2.1 General terms

**2.1.1**
**virtual human model**
three-dimensional model in digital format

**2.1.1.1**
**parametric human body**
virtual human model with changeable parameters such as size and shape, etc.

Note 1 to entry: Parametric human body is created by modifying the parameters of the exemplar model imported from the 3D model library. The exemplar models differ with countries as they are based on a database. Therefore, a parametric human body can be made on the basis of height variations, BMI (body mass index) and so on (see Figure A.1).

Note 2 to entry: The parameters of the parametric human body are presented in the parametric human body software. The parameters of the parametric human body can be added depending on the purpose of users.

Note 3 to entry: See Figure 1.