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Clothing — Digital fittings —

Part 2:

Vocabulary and terminology used for attributes of the virtual human body

Habillement — Bien-être virtuel —

Partie 2: Vocabulaire et terminologie utilisés pour les caractéristiques du corps humain virtuel



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

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*

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Introduction

The virtual human body in the virtual garment system is intended to reproduce the actual shape and size of the human body with known reliability. It is also intended to have attributes applicable to making and wearing clothes. Among these attributes it is essential that the definitions of virtual body landmarks and virtual body dimensions are consistent with those defined for actual humans.

The virtual human body is not defined based on human anatomy. However, since the virtual human body needs to have body dimensions very close to those of the actual human body, virtual body landmarks are closely associated with anatomical landmarks defined on the human body.

Definitions and the procedure of body measurement were prescribed in ISO 8559. In addition to this, virtual body dimensions of the virtual human body need to be defined in the three-dimensional virtual space because the surface of the virtual human body cannot be touched in reality. And virtual body landmarks of the virtual human body are detected from x, y, z axes using a visual detective method on the screen. Therefore, virtual body dimensions and virtual body landmarks of the virtual human body need to be modified and defined for use in three-dimensional virtual space while maintaining similarity to existing anthropometric body dimensions.

When a virtual human body of the same size is made with each different virtual garment system, the results of the virtual human body size and shape, etc. are different., not only because the current virtual garment systems have different size changing algorithms, but also because they use different definitions of body dimensions of the virtual human body. This confuses users on the terms related to the body dimensions of the virtual human body, and online sales using unstandardized virtual garment systems could lead to more errors in clothing size. This can be solved by standardizing terms and definitions of body dimensions of the virtual human body and suggesting essential body dimensions of the virtual human body.

This part of ISO 18825 is the second in a series of standards that deal with the virtual human body. The purpose of this series of International Standards is to improve online communication and reliability of fashion products sold online and in-store through visual confirmation of size, shape, fit, and design by standardizing the terms related to the virtual garment system.

Following ISO 18825-1 which deals with composition and attributes of the virtual human body, this part of ISO 18825 defines terms necessary to describe virtual human body, 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 of the virtual garment system should use the same terms described in this part of ISO 18825.