
Digital fitting — Service process —
Part 2:
Customized clothing online and offline

Habillage virtuel — Processus de service —

Partie 2: Habillement personnalisé en ligne et hors ligne



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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 of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 133, *Clothing sizing systems - size designation, size measurement methods and digital fittings*.

A list of all parts in the ISO/TS 3736 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The common practice of mass production and uniform consumption is changing and consumers' need for personalized goods and services such as customized clothing is growing and becoming a trend. New online technologies that use three-dimensional software, devices and automated production systems that support customization has played a major role in the expansion of the customized fashion market.

In the ubiquitous ready-to-wear fashion market, digital fitting technology can reduce exchanges and returns because the technology helps consumers choose a size among the existing sizes and provide recommendations that best fits their bodies.

In the ubiquitous customization fashion market, digital fitting technology is used in the process of pattern design, fit simulation, ordering and production, therefore it is more complicated than its application in the ready-to-wear market. Customization can be divided into two large categories, design-customization and size-customization (see [3.1](#)), which requires more information from the customers.

In the ready-to-wear market a product already exists but in the customization market, there is no actual product, thus, digital fitting technologies, which enable visualization of the apparel, are essential before the production.

The customer provides the size and shape information using the virtual human body including information for the design and style required. The service provider takes this information and designs a pattern and virtual garment. The customer then tries on the virtual garment on their virtual human body and if satisfied, orders the product, which leads to production.

This document explains the details of this process.

Digital fitting — Service process —

Part 2: Customized clothing online and offline

1 Scope

This document describes a service process applicable to the distribution of customized clothing using a virtual human body, virtual garment and fitting.

This document provides guidance to service providers, including online and offline retailers and 3D shopping platform developers to set up a service process for the distribution of customized clothing using a virtual human body, virtual garment and fitting.

This document does not specify software functions, algorithms and commercialization related to the simulation.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1 General terms

3.1.1

virtual human body

virtual human model for digital fitting of clothing sizing systems in the apparel industry, including information such as size, shape, cross section, body texture and skeletal structure

Note 1 to entry: Also called “fashion avatar”. In computing, an avatar is the graphical representation of the user or the user’s alter ego or character.

Note 2 to entry: The virtual human body is classified into two key types: virtual clone (or virtual shape, see ISO 18825-1:2016, 2.1.1.2.1) and virtual twin (or virtual size, see ISO 18825-1:2016, 2.1.1.2.2).

[SOURCE: ISO 18825-1:2016, 2.1.1.2, modified — “of clothing sizing systems” added to the definition.]

3.1.2

virtual garment

three-dimensional clothing in digital form that exists in virtual space

[SOURCE: ISO 18163:2016, 2.1.3, modified — Note to entry deleted.]