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Protective clothing — Vocabulary

**Habillement de protection —
Vocabulaire**

Schutzkleidung — Begriffe

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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.

The committee responsible for this document is ISO/TC 94, *Personal safety - Personal protective equipment*, SC 13, *Protective clothing*, in collaboration with CEN/TC 162, *Protective clothing including hand and arm protection and lifejackets*.

This second edition cancels and replaces the first edition ISO/TR 11610:2004, which has been completely revised.

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 definitions compiled in this document are based on the technical report ISO/TR 11610:2004 and on the standards and draft standards prepared by both ISO/TC 94/SC 13 and CEN/TC 162.

For this reason, the terms and definitions laid down in this document do not only cover protective clothing and related terms but also terms from the areas of protective gloves and lifejackets which come within the scope of CEN/TC 162.

The document is based on the compilation of terms and definitions existing in the area of standardization of ISO/TC 94/SC 13 and CEN/TC 162 with the objective to establish a consistent terminology. Within this purpose, the subject matter of the definitions taken from standards and draft standards have been modified, in order to solve some inconsistencies in the existing wording of definitions, to simplify or alter some wordings and to harmonise the definitions concerned.

The present document aims to facilitate the use of terms to serve as a reference for further definitions when new standards are being developed or existing standards are being to be revised in the field of protective clothing, protective equipment, protective gloves and lifejackets.

This document should be taken into account when terms need to be defined in the Working Groups of ISO/TC 94/SC 13 and CEN/TC 162 and. Except in exceptional circumstances, terms included in clause of this document shall not be re-defined with a different meaning in a standard prepared by ISO/TC 94/SC 13 or CEN/TC 162. If the particular use of a term requires a further definition to limit its meaning within the definition in this document, this document shall be referred to and the term number given.

This document is structured with clauses and subclauses related to the different (technical) facets of protective clothing and protective equipment worn on the body, including hand and arm protection and lifejackets.

Terms and definitions are listed according to the hierarchy of the concepts.

Therefore, the vocabulary takes into consideration the more general ones to the particular ones, such as

- a) Vocabulary of textile and clothing ([Clause 4](#));
- b) Vocabulary of protective clothing ([Clause 5](#));
- c) Vocabulary of protection against heat and flame hazards ([Clause 6](#));
- d) Vocabulary of protection against chemical hazards ([Clause 7](#));
- e) Vocabulary of protection against foul weather, wind and cold hazards ([Clause 8](#));
- f) Vocabulary of protection against mechanical hazards ([Clause 9](#));
- g) Vocabulary of protection against infective agent hazards ([Clause 10](#));
- h) Vocabulary of diving protective clothing ([Clause 11](#));
- i) Vocabulary of protection against hazards due to lack of visibility ([Clause 12](#));
- j) Vocabulary of protection against electrostatic hazards ([Clause 13](#));
- k) Vocabulary of protection against electrical hazards ([Clause 14](#));
- l) Vocabulary of Selection, Use, Care and Maintenance - SUCAM ([Clause 15](#));
- m) Vocabulary of electronics ([Clause 16](#)).

Each clause (except [Clause 4](#), [Clause 15](#) and [Clause 16](#)) is structured with the following sub-clauses:

For Clause X:

X.1 General terms and definitions of ... (*domain related to Clause X*);

X.2 Terms and definitions of product types;

X.3 Terms and definitions of components and materials

X.4 Terms and definitions of risks and hazards;

X.5 Terms and definitions of test methods

This sub-clause structure is applied to each clause (except [Clause 3](#) and [Clause 14](#)) even if there is no term and definition in a sub-clause. In such case, the following sentence is introduced:

"This sub-clause is empty of terms and definition but is kept for the structure consistency of this document."

[Annex A](#) lists the English vocabulary in alphabetical order.

Annex B lists the French vocabulary in alphabetical order.

Annex C lists the German vocabulary in alphabetical order.

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Protective clothing — Vocabulary

1 Scope

This document contains a list of terms which are frequently used in the standardization of protective clothing (5.1.4) and protective equipment worn on the body, including hand and arm protection and lifejackets, and definitions of these terms.

The definitions are intended to support an unambiguous use of the terms listed.

This document is intended to serve as a reference document for the Working Groups of CEN/TC 162 and ISO/TC 94/SC 13 to ascertain what definitions already exist and may be used for setting up new standards and to provide guidance in the elaboration of new definitions.

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 terminological 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/a-d08b-4c20-b38a-a9571cceb66d/iso-fdis-11610>

4 Terms and vocabulary of clothing

4.1 General terms and definitions of textile and clothing

4.1.1 clothing

general provisions from design to distribution intended for covering the body with everything except the footwear

Note 1 to entry: The term "clothing" is intended for referring to the concept of clothing in opposition to the clothing product.

Note 2 to entry: In English, the terms "clothing" and "garment" were used as synonym in the standards. The term "clothing" may refer to either "*clothing*" (4.1.1) or "*garment*" (4.1.2). Only the context, in which the term is used, will determine which one of the two is intended. Henceforth, definitions have been introduced in this document to clearly distinguish their meaning.

4.1.2 garment

single article of *clothing* (4.1.1)

Note 1 to entry: The term "garment" is intended for referring to the product.

Note 2 to entry: The garment may consist of single or multiple layers.

EXAMPLE Trousers, jacket, coats, *gloves* (4.5.5), *gaiters* (4.5.11), socks, etc.

4.1.3

textile fibre

unit of matter characterized by its flexibility, fineness and high ratio of length to maximum transverse dimension, which render it suitable for textile applications

[SOURCE: Regulation EU 1007/2011, Article 3, 1. (b), (i)]

4.1.4

textile product

any raw, semi-worked, worked, semi-manufactured, manufactured, semi-made-up or made-up product which is exclusively composed of *textile fibres* (4.1.3), regardless of the mixing or assembly process employed

[SOURCE: Regulation EU 1007/2011, Article 3, 1. (a)]

4.1.5

textile material

material made of *textile fibres* (4.1.3) and intended to be used, as such or in conjunction with other textile or non-textile items, for the production of *textile products* (4.1.4)

Note 1 to entry: Textile material refers to linear textile materials (for example, fibres, yarns, threads) as well as surface textile material (for example, knitted, woven and non-woven fabrics).

4.1.6

non-textile element

product which is not composed of *textile fibres* (4.1.3)

Note 1 to entry: Non-textile elements may contain, for example, active medical devices, radio and electrically operated components, slide fastener, (press) buttons, membranes, non-textile patches.

4.1.7

advanced garment

garment (4.1.2) which shows enhanced functionality(ies)

Note 1 to entry: "protection" is one of the functions that a garment can provide.

4.1.8

functional textile material

textile material (4.1.5) to which a specific function is added by means of material, composition, construction and/or finishing (applying additives, etc.)

[SOURCE: ISO/TR 23383:2020, 3.3, modified — "textile product" was replaced by "textile material".]

4.1.9

smart textile material

intelligent textile material

interactive textile material

functional textile material (4.1.8), which interacts reversibly with its environment, i.e. it responds or adapts to changes in the environment

Note 1 to entry: The term "smart textile" may refer to either a "*smart textile material*" (4.1.9) or a "*smart textile system*" (4.1.11). Only the context, in which the term is used, will determine which one of the two is intended.

[SOURCE: ISO/TR 23383:2020, 3.4, modified — "textile product" was replaced by "textile material".]

4.1.10

textile system

assemblage of *textile product(s)* (4.1.4) and *non-textile element(s)* (4.1.6)

[SOURCE: ISO/TR 23383:2020, 3.7]

4.1.11**smart (intelligent, interactive) textile system**

textile based system which exhibits an intended and exploitable response either to changes in its surroundings/environment or to an external signal/input

[SOURCE: ISO/TR 23383:2020, 3.8, modified — "(intelligent, interactive)" was added in the term.]

4.2 Terms and definitions of body dimensions and ergonomics**4.2.1****torso**

trunk

part of the body to which the head and limbs are attached

4.2.2**finger**

one of the five digits of the *hand* (4.2.24)

Note 1 to entry: The digits of the hand are anatomically numbered 1 to 5, starting with the thumb.

4.2.3**back of the hand**

posterior surface of the *hand* (4.2.24) between the wrist and the *fingers* (4.2.2)

4.2.4**wrist**

region of the joint between the *hand* (4.2.24) and the forearm

4.2.5**wrist point**

most prominent point of the bulge of the head of ulna

Note 1 to entry: See [Figure 1](http://standards.iteh.ai/catalog/standards/sist/4581afda-d08b-4c20-b38a-a9571ceeb66d/iso-fdis-11610).

Note 2 to entry: prominent bone at the little finger side of the *wrist* (4.2.4).

[SOURCE: ISO 8559-1:2017, 3.1.19, modified — "Figure 19" was replaced by "[Figure 1](#)" and the second definition moved to Note 2 to entry.]

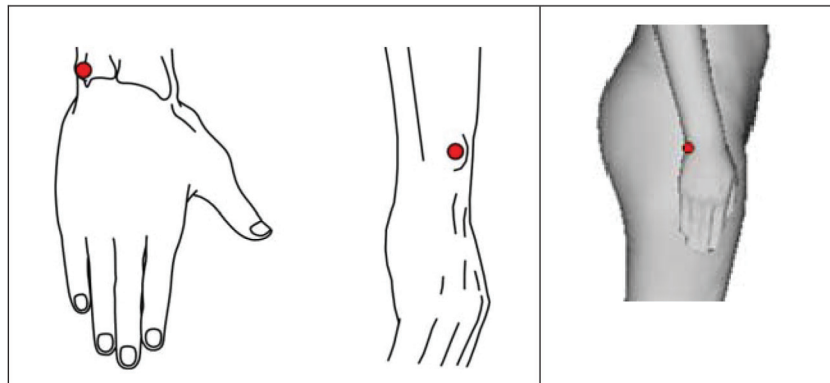


Figure 1 — Wrist point

4.2.6**wrist girth**

girth of the *wrist* (4.2.4) at the level of *wrist point* (4.2.5)

Note 1 to entry: See [Figure 2](#).

[SOURCE: ISO 8559-1:2017, 5.3.19, modified — "Figure 75" was replaced by "Figure 2".]

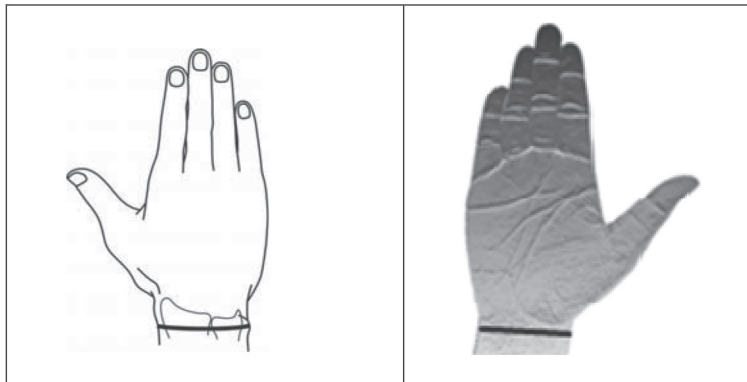


Figure 2 — Wrist girth

4.2.7

waist level

midway between the lowest rib point and the highest point of the hip bone at the side of the body

Note 1 to entry: See [Figure 3](#).

[SOURCE: ISO 8559-1:2017, 3.1.22, modified — "Figure 22" was replaced by "Figure 3".]

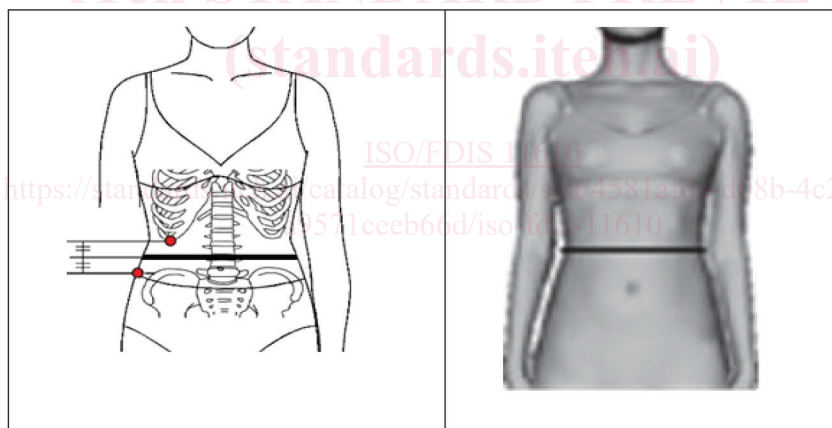


Figure 3 — Waist level

4.2.8

bust point

most anterior point of the bust when wearing a bra

Note 1 to entry: See [Figure 4](#).

[SOURCE: ISO 8559-1:2017, 3.1.11, modified — "Figure 11" was replaced by "Figure 4" and Note 2 to entry was deleted.]

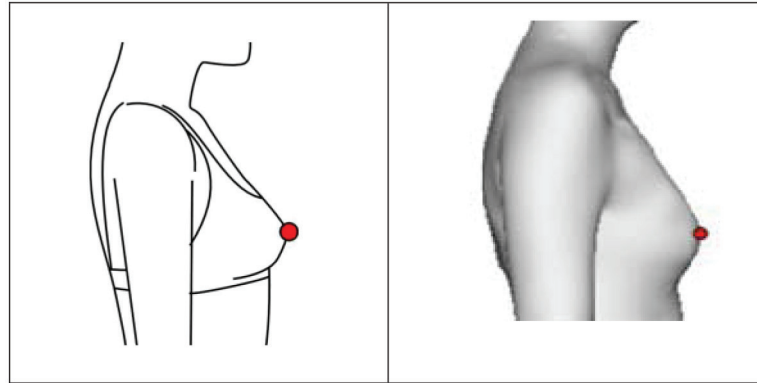


Figure 4 — Bust point

4.2.9

bust girth

horizontal girth measured at bust point level

Note 1 to entry: See [Figure 5](#).

[SOURCE: ISO 8559-1:2017, 5.3.4, modified — "Figure 60" was replaced by "[Figure 5](#)".]

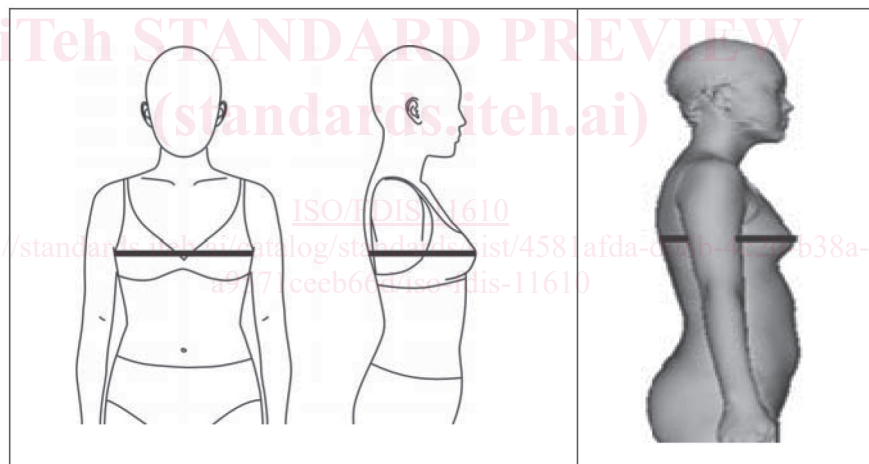


Figure 5 — Bust girth

4.2.10

chest girth

horizontal girth of *torso* ([4.2.1](#)) measured at axilla

Note 1 to entry: See [Figure 6](#).

[SOURCE: ISO 8559-1:2017, 5.3, modified — "Figure 62" was replaced by "[Figure 6](#)".]