# INTERNATIONAL STANDARD

ISO 8549-2

Second edition 2020-09

# Prosthetics and orthotics — Vocabulary —

Part 2:

Terms relating to external limb prostheses and wearers of these

iTeh STANDARD PREVIEW

( Prothèses et orthèses — Vocabulaire —

Partie 2: Termes relatifs aux prothèses de membre et aux porteurs de ces prothèses 22000

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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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This document was prepared by Technical Committee ISO/TC 168, *Prosthetics and orthotics*. ISO 8549-2:2020

This second edition cancels and replaces the first edition (ISO 8549-2:1989). Which has been technically revised.

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The main changes compared to the previous edition are as follows:

— the list of terms and definitions of amputation levels (see <u>3.1</u>) has been augmented to include the full range of commonly performed partial foot and partial hand amputations.

A list of all parts in the ISO 8549 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

Prior to the publication of the first edition of this document in 1989, no internationally accepted terminology to describe the categories of external limb prostheses and their users existed. Consequently, the members of the clinic teams in different countries and working in different facilities had developed their own terminology to meet their own needs.

The terms and definitions provided in this document reflect the changes in the field of prosthetics and orthotics since the publication of the first edition of this document.

They will allow practitioners to describe, in a standardized manner, the devices they supply and their users.

This document will also be of value to epidemiologists and national health officials.

Users of this document are also advised of the WHO International Classification of Impairments, Disabilities and Handicaps $^{[2]}$ .

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# Prosthetics and orthotics — Vocabulary —

# Part 2:

# Terms relating to external limb prostheses and wearers of these prostheses

## 1 Scope

This document defines terms used to describe external limb prostheses and the wearers of external limb prostheses.

NOTE 1 The types of component used in the construction of prostheses are classified and described in the ISO 13405 series.

NOTE 2 For the purposes of this document, the abbreviated term 'prosthetics' and its derivatives only apply to external limb prosthetics.

### 2 Normative references

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There are no normative references in this document.

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#### 3 Terms and definitions

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

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

NOTE An alphabetical index of terms is provided in Annex A.

## 3.1 Levels of limb amputations

#### 3.1.1 Lower limb

#### 3.1.1.1

#### partial foot amputation

amputation of the lower limb distal to the ankle joint

Note 1 to entry: The complete description of a partial foot amputation requires the identification of the amputated bones and their levels of amputation.

#### 3.1.1.2

#### toe phalangeal amputation

amputation of one or more toe phalanges

#### 3.1.1.3

#### metatarsophalangeal disarticulation

amputation of one or more toes

#### 3.1.1.4

#### metatarsal amputation

amputation of a part of the foot through one or more metatarsals

#### 3.1.1.5

#### tarsometatarsal disarticulation

amputation of part of the foot at one or more of the tarsometatarsal joints

#### 3.1.1.6

### tarsal amputation

amputation of a part of the foot through any of the tarsal bones and/or joints

#### 3.1.1.7

#### ankle disarticulation

amputation of the lower limb at the ankle joint

#### 3.1.1.8

#### transtibial amputation

### below knee amputation

amputation of the lower limb between the knee joint and the ankle joint

#### 3.1.1.9

#### knee disarticulation

amputation of the lower limb at the knee joint

#### 3.1.1.10

#### transfemoral amputation

#### above knee amputation

amputation of the lower limb between the hip joint and the knee joint

#### 3.1.1.11

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amputation of the lower limb at the hip joint (standards.iteh.ai)

### 3.1.1.12

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transpelvic amputation https://standards.iteh.ai/catalog/standards/sist/11322554-5260-42f5-9608-

#### hindquarter amputation

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**DEPRECATED:** hemipelvectomy

amputation of the whole lower limb together with all or part of the hemipelvis

#### 3.1.2 Upper limb

#### 3.1.2.1

#### partial hand amputation

amputation of the upper limb distal to the wrist joint

Note 1 to entry: The complete description of a partial hand amputation requires the identification of the amputated bones and their levels of amputation.

### 3.1.2.2

#### thumb amputation

amputation of the whole or part of the thumb

#### 3.1.2.3

#### finger phalangeal amputation

amputation of part of one or more fingers

#### 3.1.2.4

#### metacarpophalangeal disarticulation

amputation of one or more fingers

## 3.1.2.5

## metacarpal amputation

amputation of a part of the hand through one or more metacarpals

#### 3.1.2.6

#### carpometacarpal disarticulation

amputation of a part of the hand at one or more of the carpometacarpal joints

#### 3.1.2.7

### carpal amputation

amputation of a part of the hand through any of the carpal bones and/or joints

#### 3.1.2.8

#### wrist disarticulation

amputation of the upper limb at the elbow joint

#### 3.1.2.9

#### transradial amputation

#### below elbow amputation

amputation of the upper limb between the elbow joint and the wrist joint

#### 3.1.2.10

#### elbow disarticulation

amputation of the upper limb at the elbow joint

#### 3.1.2.11

#### transhumeral amputation

#### above elbow amputation

amputation of the upper limb between the shoulder joint and the elbow joint

#### 3.1.2.12

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## shoulder disarticulation

shoulder disarticulation (standards.iteh.ai) amputation of the upper limb at the elbow joint

#### 3.1.2.13

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forequarter amputation and ards. iteh. ai/catalog/standards/sist/11322554-5260-42f5-9608-

amputation of the upper limb at the scapula-thoracic and the sternoclavicular joints

#### 3.2 Limb deficiencies present at birth

#### 3.2.1

#### deficiency

state in which one or more bones of a limb are totally absent, partially absent or *hypoplastic* (3.2.4)

#### transverse deficiency

deficiency (3.2.1) in which all bones distal to a transverse plane of the limb are totally absent

## longitudinal deficiency

aberration of the formation at parts in the long axis of the limb so that some bones can be partially or totally absent, while others situated more distally are present

#### 3.2.4

#### hypoplastic

pertaining to a bone that is present, significantly diminished in size, but not severely changed in shape

Note 1 to entry: The noun form is "hypoplasia".

### 3.2.5

metatarsal bone, or a metacarpal bone, and its corresponding phalanges