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Prosthetics and orthotics — Limb deficiencies —

Part 3: Method of describing upper limb amputation stumps

Prothèses et orthèses — Malformations des membres — Partie 3: Méthode de description des moignons d'amputation des membres supérieurs



Reference number ISO 8548-3:1993(E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 8548-3 was prepared by Technical Committee ISO/TC 168, *Prosthetics and orthotics*.

ISO 8548 consists of the following parts, under the general title *Prosthetics and orthotics — Limb deficiencies*:

- Part 1: Method of describing limb deficiencies present at birth
- Part 2: Method of describing lower limb amputation stumps
- Part 3: Method of describing upper limb amputation stumps
- Part 4: Causal conditions leading to amputation
- Part 5: Patient descriptors

Annex A of this part of ISO 8548 is for information only.

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Introduction

Many different systems have been developed to classify amputation stumps, but none has achieved universal acceptance. The reasons for this are many. The members of the clinic teams in different countries, working with different patients and different technical possibilities, develop their own systems to meet their individual needs. Hence there is a need for an international system to be developed in order to compare one publication with another, one patient against another. The different care groups who will appreciate and use a standardized system of describing stumps include surgeons of different disciplines, other doctors (especially those concerned with rehabilitation), physical and occupational therapists and prosthetists. Such a system is also of value to epidemiologists and government health officials.

The system proposed has to meet the needs of the different members of the clinic team and to enable the description of the stump to be recorded in a way that can be easily incorporated in reports. This part of ISO 8548 deliberately aims at defining the minimum information to be described. It should be feasible for this information to be included in forms designed by the individual institution; the information should also be capable of ready adaptation for computer analysis.

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Prosthetics and orthotics — Limb deficiencies —

Part 3:

Method of describing upper limb amputation stumps

1 Scope

This part of ISO 8548 establishes a method of describing upper limb amputation stumps and for recording the descriptive information.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 8548. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 8548 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 8548-1:1989, Prosthetics and orthotics — Limb deficiencies — Part 1: Method of describing limb deficiencies present at birth.

ISO 8549-1:1989, Prosthetics and orthotics — Vocabulary — Part 1: General terms for external limb prostheses and external orthoses.

ISO 8549-2:1989, Prosthetics and orthotics — Vocabulary — Part 2: Terms relating to external limb prostheses and wearers of these prostheses.

3 Definitions

For the purposes of this part of ISO 8548, the definitions given in ISO 8548-1, ISO 8549-1 and ISO 8549-2 apply.

4 Measurement of upper limb amputation stumps

4.1 Reference levels and reference planes

Identify the reference levels and planes relevant to the particular level of amputation as described in 4.1.1 and 4.1.2, preferably with the patient standing erect and with the stump hanging unconstrained.

4.1.1 Reference levels

4.1.1.1 Axilla level — the most proximal level at which a circumferential measurement, perpendicular to the centreline of the upper arm, can be obtained.

4.1.1.2 Medial epicondyle level — the level of the medial epicondyle of the humerus.

4.1.1.3 Stump end level — the level of the end of the stump.