<u>\*E</u> Ühe käega käsitsetavad käimise abivahendid. Nõuded ja katsemeetodid.Osa 1: Küünarnukitoega kargud

Walking aids manipulated by one arm -Socration of the second Requirements and test methods - Part 1: Elbow crutches



# **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 11334-1:1999 sisaldab Euroopa standardi EN ISO 11334-1:1997 ingliskeelset teksti. This Estonian standard EVS-EN ISO 11334-1:1999 consists of the English text of the European standard EN ISO 11334-1:1997.

Käesolev dokument on jõustatud 12.12.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 12.12.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

# Käsitlusala:

Standardi käesolev osa esitab nõuded ja testimismeetodid käehaardepideme ja haakeotsaga täielikult varustatud küünarnukitoega karkudele. Meetodid määravad kindlaks väsimuse, lahtitulemise, staatilise kandevõime ja madala temperatuuri hapraks muutvale toimele vastupidavuse testimise. Standardi käesolev osa annab ka nõuded, mis on seotud ohutusega, ergonoomikaga, talitlusega, märgistusega ja sildiga märgistamisega. Testid põhinevad küünarnukitoega karkude igapäevasel kasutamisel, kui kõndimist sooritatakse läbi hooglemise.

Scope:

**ICS** 11.180

**Võtmesõnad:** funktsionaalsus, kargud, meditsiiniaparatuur, märgistus, puuetega inimesed, sildiga märgistamine, tehnilised andmed, testimine

# **EUROPEAN STANDARD** NORME EUROPÉENNE EUROPÄISCHE NORM

FN ISO 11334-1

January 1997

ICS 11.180

Descriptors: Walking aid, elbow crutches, requirements, testing.

## **English version**

# Walking aids manipulated by one arm

Requirements and test methods Part 1: Elbow crutches (ISO 11334-1:1994)

Aides à la marche manipulées avec un bras - Prescriptions et méthodes d'essai – Partie 1: Cannes à appui antibrachial (ISO 11334-1:1994)

Gehhilfen für einarmige Handhabung -Anforderungen und Prüfverfahren - Teil 1: Unterarmgehstützen (ISO 11334-1:1994)

This European Standard was approved by CEN on 1996-05-01 and is identical to the ISO Standard as referred to.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**European Committee for Standardization** Comité Européen de Normalisation Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

#### **Foreword**

International Standard

ISO 11334-1:1994 Walking aids manipulated by one arm – Requirements and test methods – Part 1: Elbow crutches, which was prepared by ISO/TC 173 'Technical systems and aids for disabled or handicapped persons' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 293 'Technical aids for disabled persons' as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by July 1997 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

NOTE 1: This European Standard is valid as a level 3-Standard within the 3-level system used in the European standardization for medical devices concerning technical aids for disabled persons.

NOTE 2: For clarification: last paragraph of 5.3.1: Apply the load via a swivelling joint (e.g. a ball-joint).

#### **Endorsement notice**

The text of the International Standard ISO 11334-1:1994 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

# 1 Scope

This part of ISO 11334 specifies requirements and test methods for elbow crutches fully equipped with handgrip and tip. The methods specify testing of fatigue, separation, static load capacity and resistance to low temperature embrittlement. This part of ISO 11334 also gives the requirements relating to safety, ergonomics, performance, marking and labelling. The tests are based on everyday usage of elbow crutches when performing the through-swing gait.

#### 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 11334. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 11334 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 9999:1992, Technical aids for disabled persons — Classification.

## 3 Definitions

For the purposes of this International Standard, the following definitions apply, with reference to figures 1, 2 and 3.

- **3.1 elbow crutch:** Crutch with one leg, a handle and forearm support. Classification No.: 12 03 06 according to ISO 9999.
- **3.2 crutch size:** Size of crutch in accordance with table 1.
- **3.3 handle; handgrip:** That part of the crutch which is normally held in the hand when the crutch is in use.
  - **3.4 handgrip support line:** Line drawn through the lowest points, if any, at each end of that part of the handle on which the hand rests.
- **3.5** handgrip length: Distance, h, measured between the two lowest points on the handgrip support line. (See figure 2.)
- **3.6** handgrip width. Width of the handle measured horizontally at the thickest point where the hand rests. (See figure 2.)
- **3.7 datum:** That point on the upper surface of the handle one-third of the length from the rear end of the handgrip length. (See figure 2.)
- **3.8 arm section:** That part of the crutch which is above the inner end of the handgrip length.
- **3.9 leg section:** That part of the crutch which is below the inner end of the handgrip length.
- **3.10 cuff:** Forearm support as used on an elbow crutch to hold the forearm in the correct position and prevent sideways movement.