# Põhilised inimkeha mõõtmed, millest juhinduda tehnoloogilises konstrueerimises

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## **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 7250;1999 sisaldab Euroopa standardi EN ISO 7250:1997 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 7250:1999 consists of the English text of the European standard EN ISO 7250:1997.

Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 23.11.1999 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:

Standard annab antropomeetriliste mõõtmete kirjelduse, mida võib kasutada rahvastikurühmade võrdlemise alusena. Standardis esitatud põhinimekiri on kavandatud juhiseks ergonoomiaspetsialistidele, kelle ülesandeks on määratleda rahvastikurühmi ning rakendada oma teadmisi inimeste töö- ja elukohtade geomeetrilisel kavandamisel.

Scope:

**ICS** 13.180

**Võtmesõnad:** antropomeetrilised omadused, ergonoomia, inimkeha, mõõde, mõõtmisviisid, uurimused

## **EUROPEAN STANDARD** NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 7250

July 1997

Descriptors: Ergonomics, human body, anthropometric measurements.

English version.

Basic human body measurements for technological design

Mesurages de base du corps humain pour la conception technologique

(ISO 7250 : 1996)

Wesentliche Maße des menschlichen Körpers für die technische Gestaltung (ISO 7250: 1996)

This European Standard was approved by CEN on 1997-06-12.

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.

The European Standards exist 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 versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, 31/ 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

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#### Foreword

International Standard

ISO 7250: 1996 Basic human body measurements for technological design,

which was prepared by ISO/TC 159 'Ergonomics' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 122 'Ergonomics', the Secretariat of which is held by DIN, as a European Standard.

This standard supersedes prEN 979.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports essential requirements of the relevant EU Directives.

For relationship with EU Directives, see Annex ZA.

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 January 1998 at the latest.

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

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

#### **Endorsement notice**

The text of the International Standard ISO 7250: 1996 was approved by CEN as a European Standard without any modification.

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### Introduction

The well-being of people is greatly dependent on their geometrical relationship with various factors such as clothing, places of work, transportation, homes and recreational activities. To ensure harmony between people and their environments, it is necessary to quantify the size and shape of people for optimization of the technological design of the work-place and the home environment.



#### 1 Scope

This International Standard provides a description of anthropometric measurements which can be used as a basis for comparison of population groups.

The basic list specified in this International Standard is intended to serve as a guide for ergonomists who are required to define population groups and apply their knowledge to the geometric design of the places where people work and live.

This list is not intended to serve as a guide for how to take anthropometric measurements, but it gives information to the ergonomist and designer on the anatomical and anthropometrical bases and principles of measurement which are applied in the solution of design tasks.

This International Standard may be used in conjunction with national or international regulations or agreements to assure harmony in defining population groups. In its various applications, it is anticipated that the basic list will be supplemented by specific additional measurements.

#### 2 Definitions

For the purposes of this International Standard, the following definitions apply.

**2.1 population group:** Group of people having some common environment or activity.

NOTE 1 These groups may be as diverse as geographically defined populations or specified age groups.

#### 2.2 Anthropometric terms<sup>1)</sup>

**2.2.1 acromion:** Most lateral point of the lateral edge of the spine of the scapula.

NOTE 2 The height of the acromion is usually equated with shoulder height.

- **2.2.2 anterior; ventral:** Towards the front of the body.
- **2.2.3 bi:** Prefix denoting connection with or relation to each of two symmetrical paired parts.
- NOTE 3 For example, biacromial, bitragion.
- **2.2.4 biceps femoris:** One of the large posterior muscles in the thigh of the leg.
- **2.2.5 cervicale:** Prominent bone at the base of the back of the neck (spinous process of the seventh cervical vertebra).
- **2.2.6 deltoid muscle:** Large muscle on the lateral border of the upper arm in the shoulder region.
  - 2.2.7 distal: Away from the main mass of the body.
- 2.2.8 Frankfurt plane: Standard horizontal plane at the level of the upper edge of the opening of the external auditory meatus (external ear opening) and the lower border of the orbital margin (lower edge of the eye socket), when the median plane of the head is held vertically.
- **2.2.9 glabella:** Most anterior point of the forehead between the brow ridges in the midsagittal plane.
- **2.2.10 gluteal fold:** Skin furrow between the buttock and the thigh.
- **2.2.11 grip axis:** Axis of the fist corresponding with the longitudinal axis of a rod held in the hand.
- **2.2.12 inferior; caudal:** Away from the head, towards the bottom.
- **2.2.13 inion:** Lowest point in the midsagittal plane of the occiput that can be palpated amid the nuchal muscles.
- 2.2.14 lateral: Towards the side of the body.

<sup>1)</sup> A detailed glossary of terms is found in the publications listed in annex A.