
**Basic human body measurements for
technological design —**

**Part 2:
Statistical summaries of body
measurements from individual ISO
populations**

*Définitions des mesures de base du corps humain pour la conception
technologique —*

*Partie 2: Résumés statistiques des mesurages du corps de populations
ISO individuelles*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

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.

ISO/TR 7250-2 was prepared by Technical Committee ISO/TC 159, *Ergonomics*, Subcommittee SC 3, *Anthropometry and biomechanics*.

ISO/TR 7250 consists of the following parts, under the general title *Basic human body measurements for technological design*:

- *Part 1: Body measurement definitions and landmarks*
- *Part 2: Statistical summaries of body measurements from individual ISO populations*

Worldwide and regional design values for use in ISO equipment standards is to form the subject of a part 3.

Introduction

Anthropometric data used for technological design have been included in many ISO product standards. However, different review cycles make it impossible for simultaneous revision of these product standards as new anthropometric data become available. This Technical Report is intended to serve as a continually updated repository of the most current national anthropometric data. It is intended to make current and updated anthropometric data available for inclusion by reference in the various ISO product standards requiring anthropometric data.

Body dimensions of people have been increasing in many countries over the last several decades. The rate of increase differs from country to country. In the area where significant secular change is going on, statistical summaries described in this Technical Report will be outdated sooner. Therefore, it is intended that statistical summaries of human body measurements described in this Technical Report be updated as new data become available.

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Basic human body measurements for technological design —

Part 2:

Statistical summaries of body measurements from individual ISO populations

1 Scope

This Technical Report provides statistical summaries of body measurements together with database background information for working age people in the national populations of individual ISO member bodies. The data in this Technical Report are intended for use in conjunction with ISO standards for equipment design and safety, which require ISO 7250-1 body measurement input, wherever national specificity of design parameters is required.

NOTE 1 Users of this Technical Report who know of newly available data are encouraged to contact their ISO member bodies and the ISO TC 159/SC3 secretariat, as described in 6.2.

Body measurement data for technological design need to be reliable in terms of representing the intended population and measurement quality. To ensure the comparability of measurements, body dimensions in this Technical Report are measured according to ISO 7250-1. To ensure the reliability of statistical data, databases from which statistics are calculated adhere to ISO 15535.

This Technical Report provides body measurement data for people of working age. In order to provide practical data, the age range is not defined and the decision is left to each country, because working age differs among countries. However, the data for children under 16 years are not included.

NOTE 2 Secular change means changes in mean body dimensions of a specific group over time. The direction of change can be positive or negative.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7250-1:2008, *Basic human body measurements for technological design — Part 1: Body measurements definitions and landmarks*

ISO 15535:2006, *General requirements for establishing anthropometric databases*

ISO 20685:—¹⁾, *3-D scanning methodologies for internationally compatible anthropometric databases*

1) To be published. (Revision of ISO 20685:2005.)