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General requirements for establishing anthropometric databases

*Exigences générales pour la création de bases de données
anthropométriques*



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Contents

| | Page |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Foreword | iv |
| Introduction | v |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 1 |
| 4 Data collection design | 2 |
| 4.1 General..... | 2 |
| 4.2 Definitions, techniques and conditions of measurement..... | 2 |
| 4.3 Sampling techniques..... | 3 |
| 5 Data collection requirements | 3 |
| 5.1 Basic demographic description of subjects..... | 3 |
| 5.2 Detection and treatment of measurement errors..... | 3 |
| 5.3 Instrument accuracy..... | 3 |
| 5.4 Sample composition..... | 3 |
| 5.5 Sample size..... | 3 |
| 5.6 Data-storage system..... | 4 |
| 5.7 Type of clothing..... | 4 |
| 5.8 Measurer training and quality control..... | 4 |
| 6 Database format | 4 |
| 7 Database contents | 5 |
| 7.1 Required background data..... | 5 |
| 7.2 Recommended background data..... | 5 |
| 7.3 Anthropometric data..... | 5 |
| 7.4 Complementary data..... | 5 |
| 8 Anthropometric data sheets | 5 |
| 9 Statistical processing | 5 |
| Annex A (normative) Method for estimating the number of subjects needed on a sample | 7 |
| Annex B (normative) Anthropometric data sheet | 10 |
| Annex C (informative) Example of anthropometric data sheet | 11 |
| Annex D (informative) Method of calculating decimal-notation date and age | 13 |
| Annex E (normative) Age stratification at specified growth period | 16 |
| Annex F (normative) Procedure for preparing data and statistics | 17 |
| Annex G (informative) Recommended scientific and technical objectives for setting up internationally compatible databases | 19 |
| Annex H (informative) Application of measurements | 20 |
| Annex I (informative) Sample database format | 21 |
| Bibliography | 22 |

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.

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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.

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 15535 was prepared by Technical Committee ISO/TC 159, *Ergonomics*, Subcommittee SC 3, *Anthropometry and biomechanics*.

This third edition cancels and replaces the second edition (ISO 15535:2006), of which it constitutes a minor revision. Among other modifications, Annex I has been added to improve clarity.

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Introduction

The well-being of people is very much dependent on their proportional and geometric relationship with several factors, such as growth, design principles for clothing, transportation, workplace and homes, as well as sporting and recreational activities. Implementation of databases on body dimensions of a population supports essential health and safety requirements, as well as International Standards in the field of machinery safety and personal protective equipment, and has acquired importance in the devising of computer-generated manikins of the human body.

One of the major difficulties in formulating international databases on anthropometry is that the numerous existing studies are rarely comparable in the strictest sense. Difficulties arise in comparing one study with another because either the methods used differ or they are not sufficiently well described. The anthropometric standards used for the data collection are fundamental to setting up any anthropometric databases.

This International Standard is intended to be used in close conjunction with ISO 7250-1. The ultimate goal is that a database developed by one researcher could be easily used by other researchers. This would be in a form that is readily accessible by those responsible for developing standards in support of good design and health and safety requirements (e.g. ISO 15534 and ISO 14738). To achieve this goal, it has been necessary to develop an appropriate International Standard to ensure that anthropometric databases and their associated reports are internationally compatible.