

This is a preview of "ISO 15537:2022". [Click here to purchase the full version from the ANSI store.](#)

Second edition
2022-05

Principles for selecting and using test persons for testing anthropometric aspects of industrial products and designs

Principes de choix et d'utilisation de sujets d'essai pour l'essai des aspects anthropométriques des produits industriels et leur conception



Reference number
ISO 15537:2022(E)

© ISO 2022



COPYRIGHT PROTECTED DOCUMENT

© ISO 2022

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

This is a preview of "ISO 15537:2022". [Click here to purchase the full version from the ANSI store.](#)

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Types of tests	2
4.1 General.....	2
4.2 Screening test.....	3
4.3 Detailed test.....	3
5 Test with test persons or manikins	3
5.1 General requirements and recommendations	3
5.2 Procedure for testing.....	3
5.3 Selection of test persons within the intended user population for screening test.....	4
5.4 Selection of test persons within the intended user population for detailed test.....	4
5.5 Experienced or inexperienced persons	5
5.6 Criteria for acceptance of a product with regard to anthropometric aspects	5
5.7 Documentation of the test procedure and the results	5
Annex A (informative) Example of a test procedure for testing of anthropometric aspects of an elevator	6
Bibliography	9

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 159, *Ergonomics*, Subcommittee SC 3, *Anthropometry and biomechanics*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 122, *Ergonomics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 15537:2004), which has been technically revised.

The main changes are as follows:

- the context has been broadened to include testing by computer-aided design (CAD);
- European values in tables have been replaced by global values.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This is a preview of "ISO 15537:2022". [Click here to purchase the full version from the ANSI store.](#)

Introduction

An investigation into how far ergonomic requirements are taken into consideration with regard to industrial products and designs is often performed using test equipment that permits only one or a few parameters (e.g. body height) to be registered. With regard to the concurrent multifunctional testing and/or determination of product characteristics for which no technical testing procedures have been established, one or more people are often designated as test persons and are observed and/or questioned during or after product testing.

The reliability of any findings established in this way is very much dependent on the extent to which the test persons represent the intended user group in different aspects. How well a product or design is adjusted to the anthropometrics of the intended user population is dealt with in this document.

According to ISO 14738, workstations at machinery has to be designed with proper regard to the body dimensions of the intended user population. One means to verify that a product or a design fulfils this requirement is to set up a panel of test persons and let them test the product in different ways.

An example of the use of this document is given in [Annex A](#).