



ISO 9241-5

**Ergonomics of human-system
interaction —**

Part 5:
**Workstation layout and postural
requirements**

Ergonomie de l'interaction homme-système —

*Partie 5: Aménagement du poste de travail et exigences relatives
aux postures*

**Second edition
2024-08**

This is a preview of ISO 9241-5:2024. [Click here to purchase the full version from the ANSI store.](#)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2024

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 9241-5:2024. [Click here to purchase the full version from the ANSI store.](#)

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Guiding principles	4
4.1 General considerations.....	4
4.2 Versatility and flexibility.....	4
4.3 Fit.....	5
4.4 Postural change.....	5
4.5 User information.....	5
4.6 Maintainability-adaptability.....	5
5 Design requirements and recommendations	6
5.1 General.....	6
5.2 Postures.....	6
5.2.1 Design reference posture(s).....	6
5.2.2 Sitting postures.....	7
5.2.3 Standing and sit and stand postures.....	7
5.2.4 Intermediate postures between sitting and standing — Semi-standing.....	7
5.3 Ease of adjustment.....	9
5.4 Support surfaces.....	10
5.4.1 General recommendations.....	10
5.4.2 Clearances under worksurfaces.....	10
5.4.3 Viewing distances and angles of view.....	11
5.4.4 Finish of the worksurface.....	12
5.4.5 Safety and stability aspects of workstations.....	13
5.4.6 Energy loss to contact surfaces.....	13
5.5 Work chair.....	13
5.5.1 General considerations.....	13
5.5.2 Parameters related to fit.....	13
5.5.3 Dynamic aspects of seating.....	14
5.5.4 Back support.....	15
5.5.5 Arm support.....	15
5.6 Additional support elements.....	16
5.6.1 Document holders.....	16
5.6.2 Footrest.....	16
5.6.3 Support for the hands, wrists and forearms.....	17
5.6.4 Workstations with monitor arm.....	17
5.7 Layout of workstations within the workspace.....	18
5.7.1 General considerations.....	18
5.7.2 Cable management.....	18
6 Conformity	18
7 Measurement	19
7.1 Support surfaces.....	19
7.2 Safety and stability aspects of workstations.....	19
7.3 Seat height.....	19
7.4 Castors.....	19
7.5 Layout of workstations within the workspace.....	19
Annex A (informative) Anthropometric data needed for workstation design and selection	20
Bibliography	27

This is a preview of ISO 9241-5:2024. [Click here to purchase the full version from the ANSI store.](#)

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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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 4, *Ergonomics of human-system interaction*, 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 9241-5:1998), which has been technically revised.

The main changes are as follows:

- Expansion and correction of [Clause 3](#).
- Additional information added to [Clause 4](#).
- Additional requirements and recommendations given in [Clause 5](#).
- Revision of [Annex A](#).

A list of all parts in the ISO 9241 series can be found on the ISO website.

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 9241-5:2024. [Click here to purchase the full version from the ANSI store.](#)

The purpose of this document is to promote and enhance performance and comfort while minimizing risks to users' safety and health. Users of interactive systems typically adopt a range of postures, such as seated with leaning, upright or reclining torso, standing or a combination of both. Workplaces which accommodate such usage can encourage movement, promote comfort and reduce physical, mental and visual problems.

This document is intended for use by product and workstation designers and implementers.