

~~ISO/DIS~~ 16710-2:2025(en)

ISO/TC 159/SC 1

Secretariat: DIN

Date: 2025-04-0108-11

Ergonomics methods — Part 2: A methodology for work analysis to support design

*Ergonomie — Partie 2: Méthodologie d'analyse du travail à l'appui de la conception*

**Style Definition:** List Continue 3: Indent: Left: 40.25 pt, Hanging: 19.85 pt

**Formatted:** Font: 11.5 pt, English (United Kingdom)

**Formatted:** Font: 11.5 pt, English (United Kingdom)

# iTeh Standards (<https://standards.iteh.ai>) Document Preview

ISO/PRF 16710-2

<https://standards.iteh.ai/catalog/standards/iso/c698b527-26bd-4bc3-9e97-b0efd3bc00c3/iso-prf-16710-2>

Edited DIS - MUST BE USED FOR FINAL DRAFT

**Formatted:** Font: 11.5 pt

**Formatted:** Font: 11.5 pt

© ISO 2025

**Commented [eXtles1]:** The reference "ISO 2025" is to a withdrawn standard

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](mailto:copyright@iso.org)

Website: [www.iso.org](http://www.iso.org) [www.iso.org](http://www.iso.org)

**Formatted:** English (United Kingdom)

Published in Switzerland

**Formatted:** English (United Kingdom)

# iTeh Standards (<https://standards.iteh.ai>) Document Preview

ISO/PRF 16710-2

<https://standards.iteh.ai/catalog/standards/iso/c698b527-26bd-4bc3-9e97-b0efd3bc00c3/iso-prf-16710-2>

## Contents

Foreword.....	vi
Introduction .....	vii
1 Scope.....	1
2 Normative references .....	1
3 Terms and definitions.....	1
4 General requirements in specifying the human components .....	2
4.1 User experience and resultant activity.....	2
4.2 Limitations of the scientific and technical knowledge provided by existing ergonomics standards .....	3
5 Fundamentals.....	3
5.1 Participatory approach .....	3
5.2 Work analysis .....	4
6 Elements of methodology .....	5
6.1 Analysis of overall work situation components .....	5
6.2 The “activity-focused work system” .....	6
6.3 Principles of work activity analysis.....	7
6.3.1 General.....	7
6.3.2 Observation .....	8
6.3.3 Description .....	8
6.3.4 Interpretation.....	8
6.4 Knowledge validation process .....	9
7 The work activity in the design process.....	10
8 Recording the process and reporting the outcomes .....	11
8.1 Traceability .....	11
8.2 Assessment outcome and validation.....	11
8.3 Assessment report .....	11
9 Coherence with other standards .....	12
Annex A (informative) Example of requirements specification to be integrated into tender submission for ergonomics design for work equipment.....	13
A.1 General.....	13
A.2 Example specifications .....	13
A.2.1 EC marking.....	13
A.2.2 Expected performance in terms of: .....	13
A.2.3 Technological options.....	14
A.2.4 Resources .....	15
A.2.5 Means .....	15
A.2.6 Operating instructions.....	17
A.2.7 Transport, delivery.....	18

A.2.8	Unloading .....	18
A.2.9	Location and installation .....	18
A.2.10	Installation, acceptance and commissioning.....	18
A.2.11	General conditions .....	19
Annex B	(informative) Some techniques used for work analysis in an ergonomic approach .....	20
B.1	General.....	20
B.2	Analysis techniques (tools) based on objective data .....	21
B.2.1	Review of documents .....	21
B.2.1.1	General.....	21
B.2.1.2	The organization chart .....	21
B.2.1.3	The flow chart.....	21
B.2.1.4	Plans and Drawings .....	21
B.2.1.5	Statistical Indicators.....	22
B.2.2	Metrology .....	22
B.2.2.1	General.....	22
B.2.2.2	Measurement and evaluation of the physical environment .....	23
B.2.2.3	Measurement and evaluation of the effects of physical demands .....	23
B.2.3	Observe a work situation .....	24
B.2.3.1	General and conditions.....	24
B.2.3.2	When to observe? The right choice of moment .....	25
B.2.3.2.1	General.....	25
B.2.3.2.2	What and how to observe? .....	25
B.2.3.3	Different observation modes.....	25
B.2.3.3.1	Preliminary overall observation .....	25
B.2.3.3.2	Systematic detailed observation (direct and indirect) .....	26
B.2.3.4	Observation of simulated conditions .....	26
B.3	Technical analysis using subjective data .....	26
B.3.1	Analysis by Questionnaire (survey) .....	26
B.3.2	Question by interview .....	27
B.3.2.1	Why conduct an interview? .....	27
B.3.2.2	What question/interview? .....	27
B.3.2.3	The timing of the interview .....	27
B.3.3	The interview techniques .....	28
B.3.3.1	Confrontation.....	28
B.3.3.2	The structured interview .....	28
B.3.3.3	The semi-structured interview .....	28
B.3.3.4	The non-directive (open) interview .....	28

<b>Annex C (informative) The approach and ergonomic analysis applied to design: Stages and processes.....</b>	<b>30</b>
<b>Bibliography .....</b>	<b>33</b>

iTeh Standards  
(<https://standards.iteh.ai>)  
Document Preview

ISO/PRF 16710-2

<https://standards.iteh.ai/catalog/standards/iso/c698b527-26bd-4bc3-9e97-b0efd3bc00c3/iso-prf-16710-2>

Formatted: Font: 11.5 pt

Formatted: Font: 11.5 pt

## 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.

Formatted: Don't adjust space between Latin and Asian text, Don't adjust space between Asian text and numbers

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](http://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](http://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](http://www.iso.org/iso/foreword.html).

Formatted: English (United Kingdom)

This document was prepared by the European Committee for Standardization (CEN) (as [EN 16710-2:2016](#)) and was adopted without modification other than those given below. It was assigned to Technical Committee ISO/TC 159, *Ergonomics*, Subcommittee SC 1, *General ergonomics principles*, and adopted under the "fast-track procedure".

Formatted: Pattern: Clear (Custom Color(RGB(198;217;241)))

Formatted: Pattern: Clear (Custom Color(RGB(242;219;219)))

Formatted: Pattern: Clear (Custom Color(RGB(234;241;221)))

Formatted: Pattern: Clear (Custom Color(RGB(218;238;243)))

Formatted: Pattern: Clear (Custom Color(RGB(255;204;204)))

Commented [eXtyles2]: Invalid reference: "ISO 16710 series"

Formatted: Pattern: Clear (Custom Color(RGB(198;217;241)))

Formatted: Pattern: Clear (Custom Color(RGB(242;219;219)))

Formatted: Pattern: Clear (Custom Color(RGB(234;241;221)))

— Source documents for 3.2, 3.4, 3.6 have been updated to [ISO 6385:2016](#).

A list of all parts in the [ISO 16710 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](http://www.iso.org/members.html).

Commented [eXtyles3]: The URL <https://www.iso.org/members.html> has been redirected to <http://www.iso.org/about/members>. Please verify the URL.