

---

---

**Walking aids manipulated by both  
arms — Requirements and test  
methods —**

**Part 3:  
Walking tables**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

*Aides à la marche manipulées avec les deux bras — Exigences et  
méthodes d'essai —*

*Partie 3: Tables de marche*

ISO 11199-3:2005

<https://standards.iteh.ai/catalog/standards/sist/c2cb1ab8-cd45-4499-8bc5-608994d61032/iso-11199-3-2005>



**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

ISO 11199-3:2005

<https://standards.iteh.ai/catalog/standards/sist/c2cb1ab8-cd45-4499-8bc5-608994d61032/iso-11199-3-2005>

© ISO 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

Page

Foreword.....	iv
1 Scope.....	1
2 Normative references .....	1
3 Terms and definitions .....	1
4 Requirements .....	9
4.1 Stability .....	9
4.2 Brakes .....	9
4.3 Mechanical durability.....	10
4.4 Manoeuvrability .....	10
4.5 Handgrip.....	10
4.6 Leg section and tip .....	10
4.7 Adjusting devices .....	11
4.8 Resting seat.....	11
4.9 Materials and finish.....	11
4.10 Marking and labelling .....	11
5 Test methods.....	11
5.1 General .....	11
5.2 Sampling, sequence of tests and inspection.....	12
5.3 Determination of dimensions and mass.....	12
5.4 Forward stability test.....	12
5.5 Backward stability test.....	13
5.6 Sideways stability test.....	14
5.7 Accessory equipment.....	15
5.8 Brake test.....	15
5.9 Resting seat test .....	17
5.10 Static strength test.....	17
5.11 Fatigue test.....	18
5.12 Final inspection.....	19
6 Information supplied by the manufacturer.....	19
6.1 General .....	19
6.2 Information marked on the product and/or accessories .....	20
6.3 Documentation .....	20
7 Test report.....	21
Annex A (informative) Supplementary information.....	22
Bibliography .....	24

## 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.

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 11199-3 was prepared by Technical Committee ISO/TC 173, *Assistive products for persons with disability*.

ISO 11199 consists of the following parts, under the general title *Walking aids manipulated by both arms — Requirements and test methods*:

- *Part 1: Walking frames*
- *Part 2: Rollators*
- *Part 3: Walking tables*

ITeH STANDARD PREVIEW  
(standards.iteh.ai)  
<https://standards.iteh.ai/catalog/standards/sist/c2cb1ab8-cd45-4499-8bc5-608994d61032/iso-11199-3-2005>

# Walking aids manipulated by both arms — Requirements and test methods —

## Part 3: Walking tables

### 1 Scope

This part of ISO 11199 specifies requirements and methods of testing the static stability, braking capabilities, static strength and fatigue of walking tables without accessory equipment, unless specified in the particular test procedure. This part of ISO 11199 also gives requirements relating to safety, ergonomics and performance, marking, labelling and information supplied by the manufacturer.

This part of ISO 11199 includes all walking tables with three or more wheels or tips against the walking surface and having arm supports in the shape of a horizontal supporting table or two horizontal forearm supports.

The requirements and tests are based on everyday usage of walking tables as walking aids, for a maximum user mass as specified by the manufacturer. This part of ISO 11199 includes walking tables specified for a user mass of not less than 35 kg.

NOTE Recommendations further to the requirements given in this part of ISO 11199 are given in Annex A.

### 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 9999:1998, *Technical aids for disabled persons — Classification*

ISO 10993-1, *Biological evaluation of medical devices — Part 1: Evaluation and testing*

EN 1041, *Information supplied by the manufacturer with medical devices*

EN 12182:1999, *Technical aids for disabled persons — General requirements and test methods*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

##### **user**

person for which the walking table is designed to aid mobility

### 3.2

#### **user mass**

body mass of the user

### 3.3

#### **walking table**

walking aid with three or more legs with wheels and/or tips and supporting table or horizontal forearm supports, pushed forward by the upper arms, possibly in combination with the upper body

NOTE Classification No.: 12 06 12 in accordance with ISO 9999:2002 (see Figures 1 and 2).

### 3.4

#### **supporting table**

horizontal part of the walking table, shaped around the upper body, where the arms rest when the walking table is in use

NOTE The supporting table may be in one piece or divided to give the possibility of individual adjustment to suit the user's needs (see Figure 1).

### 3.5

#### **forearm support**

horizontal, gutter-shaped part of the walking table (one for each arm) where the forearms rest when the walking table is in use

NOTE The forearm supports may be combined with a handle with handgrip to keep the arm in position and may be individually adjustable to suit the user's needs (see Figures 2 and 3).

### 3.6

#### **folded dimensions**

height, width and length of the walking table measured with the walking table folded into its minimum size without the use of tools

[ISO 11199-3:2005](https://standards.iteh.ai/catalog/standards/sist/c2cb1ab8-cd45-4499-8bc5-608994d61032/iso-11199-3-2005)

<https://standards.iteh.ai/catalog/standards/sist/c2cb1ab8-cd45-4499-8bc5-608994d61032/iso-11199-3-2005>

### 3.7

#### **handgrip**

part of the walking table that is intended by the manufacturer to be held by the hand when the walking table is in use

See Figures 1, 2, 3 and 5.

### 3.8

#### **handgrip length**

dimension of the handgrip measured along its longitudinal axis where the hand grips

See Figure 5.

### 3.9

#### **handgrip width**

outside dimension of the handgrip measured perpendicularly to its longitudinal axis, at the thickest point where the hand grips

See Figure 5.

### 3.10

#### **handle**

part of the walking table to which the handgrip is attached

See Figures 1, 2 and 3.

**3.11****maximum length**

maximum outside dimension of a walking table when the adjustments are at their maximum, measured horizontally and parallel to the direction of movement when the walking table is in use

See Figure 7.

**3.12****maximum width**

maximum outside dimension of a walking table when the adjustments are at their maximum measured horizontally at right angles to the direction of movement when the walking table is in use

See Figure 7.

**3.13****supporting height**

vertical distance from the point where the arm rests on the supporting table or forearm support to the ground

See Figure 7.

**3.14****maximum height**

dimension of a walking table when the adjustments are at their maximum, measured vertically from the highest point down to the walking surface

See Figure 7.

**3.15****turning width**

minimum distance between two parallel limiting walls in between which a walking table can be turned through 180°

NOTE The adjustments shall be set so that the walking table occupies the most space.

**3.16****datum line**

horizontal line on the top surface of the supporting table, positioned at 90° to the direction of travel and situated as follows:

- for supporting tables with handles, 300 mm behind the rear face of the lower part of the handgrips with the handles in the foremost position if adjustable;
- for supporting tables without handles, 300 mm behind the front edge of the supporting table;
- for forearm supports, through the midpoint of the gutter-shaped part even if the distance to the rear face of the lower part of the handgrips is not 300 mm.

See Figure 7.

**3.17****datum point**

midpoint of the datum line

See Figure 7.

**3.18****wheel width**

maximum outside dimension of the tyre of the wheel measured 5 mm up from the walking surface when the walking table is unloaded

See Figure 6.

### 3.19

#### running brakes

system that may be operated by the user during walking and where the braking depends on the operating force applied

### 3.20

#### parking brakes

system that keeps the brake engaged after being activated

### 3.21

#### pressure brakes

running brake that engages when a load is applied on the supporting table or on the forearm supports

See Figure 4.

### 3.22

#### brake grip distance

distance measured, with the brake handle in the neutral position, at the midpoint of the handgrip length and normal to the centreline of the handle tubing, from the rear surface of the handgrip to the front surface of the brake handle

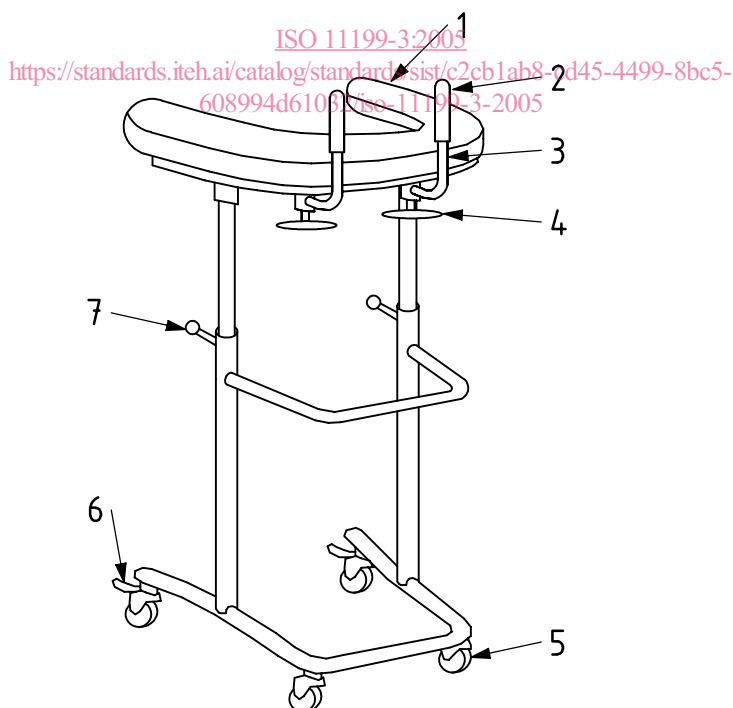
See Figure 8.

### 3.23

#### tips

non-wheeled load-bearing parts of a walking table, which are in contact with the ground during use

NOTE Tips are also used as pressure brakes on some four-wheeled walking tables in addition to the wheels.

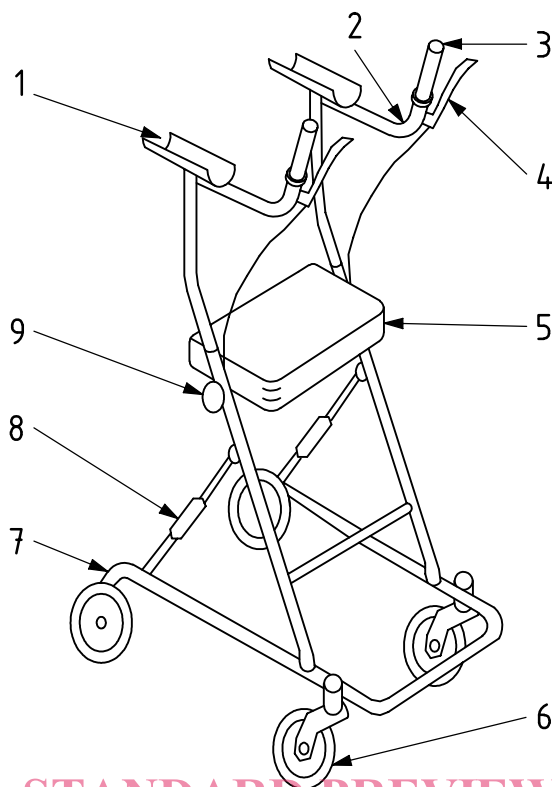


#### Key

- |                     |                     |
|---------------------|---------------------|
| 1 supporting table  | 5 wheel             |
| 2 handgrip          | 6 parking brake     |
| 3 handle            | 7 height adjustment |
| 4 handle adjustment |                     |

Figure 1 — Example of a walking table with supporting table and wheels





iTeh STANDARD PREVIEW  
(standards.iteh.ai)

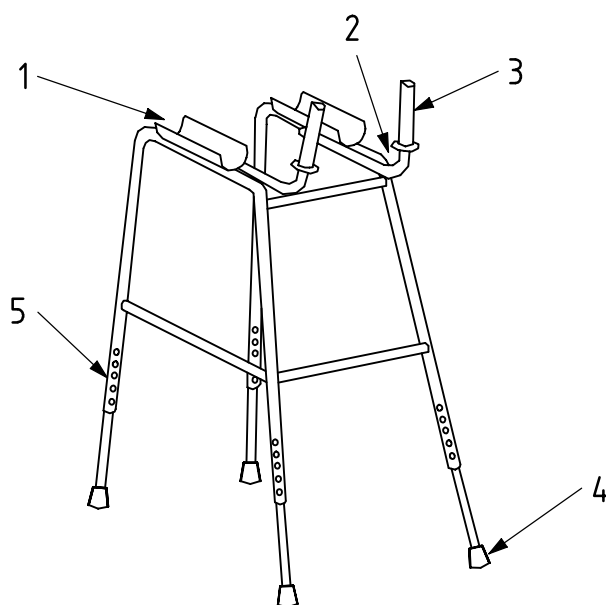
**Key**

- 1 forearm support
- 2 handle
- 3 handgrip
- 4 brake handle
- 5 resting seat

- 6 wheel
- 7 brake
- 8 folding mechanism
- 9 height adjustment

ISO 11199-3:2005  
<https://standards.iteh.ai/catalog/standards/sist/c2cb1ab8-cd45-4499-8bc5-606994d01052/iso-11199-3-2005>

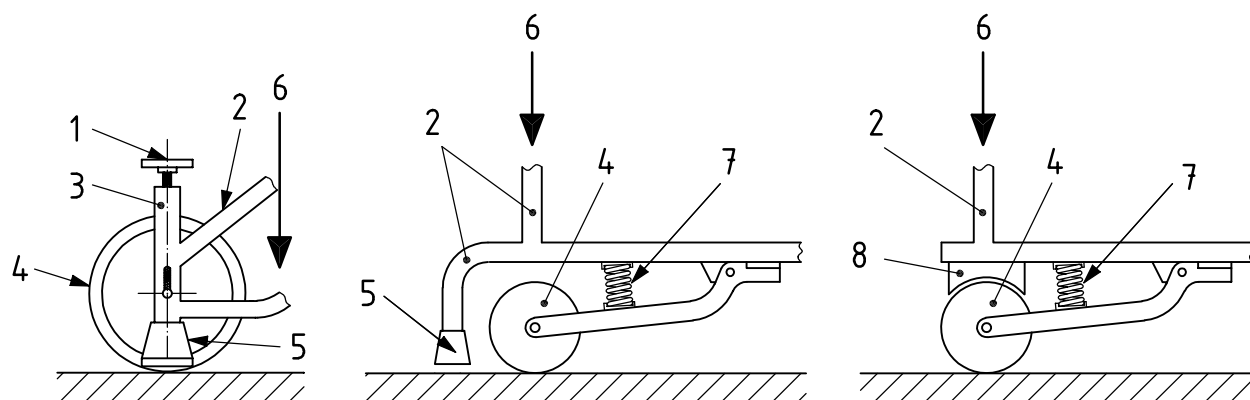
**Figure 2 — Example of a walking table with forearm supports and wheels**



**Key**

- 1 forearm support
- 2 handle
- 3 handgrip
- 4 rubber tip
- 5 height adjustment

**Figure 3 — Example of a walking table with forearm supports and rubber tips**

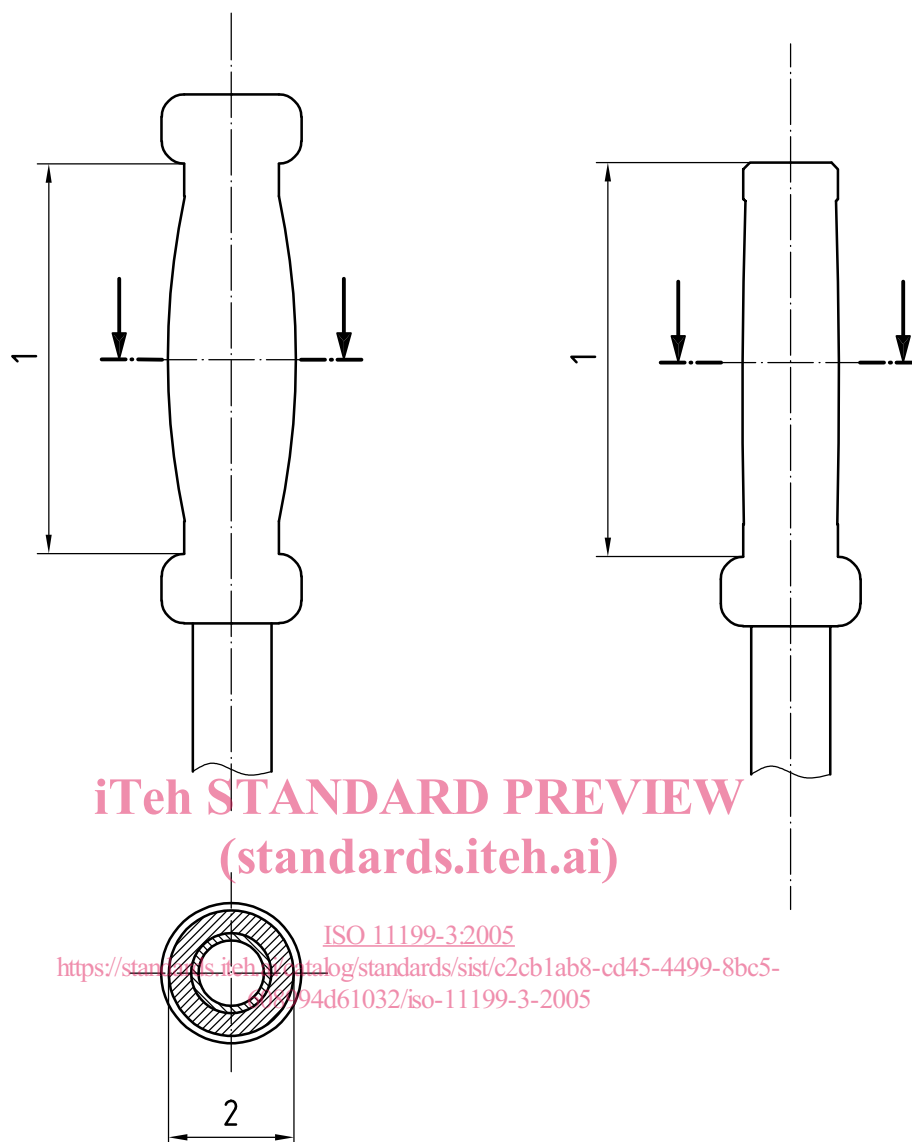


**Key**

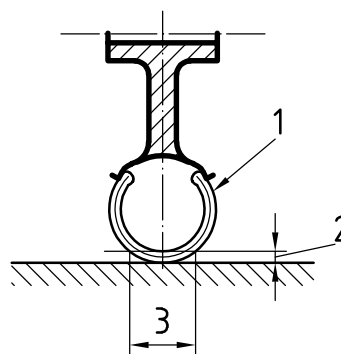
- 1 spring adjustment handwheel
- 2 walking table frame
- 3 spring and wheel axle housing
- 4 rear wheel
- 5 rubber tip (brake)
- 6 force by user applied via supporting points
- 7 spring
- 8 brake pad

**Figure 4 — Examples of alternative types of pressure brakes with technical details**  
(standards.iteh.ai)

ISO 11199-3:2005  
<https://standards.iteh.ai/catalog/standards/sist/c2cb1ab8-cd45-4499-8bc5-608994d61032/iso-11199-3-2005>

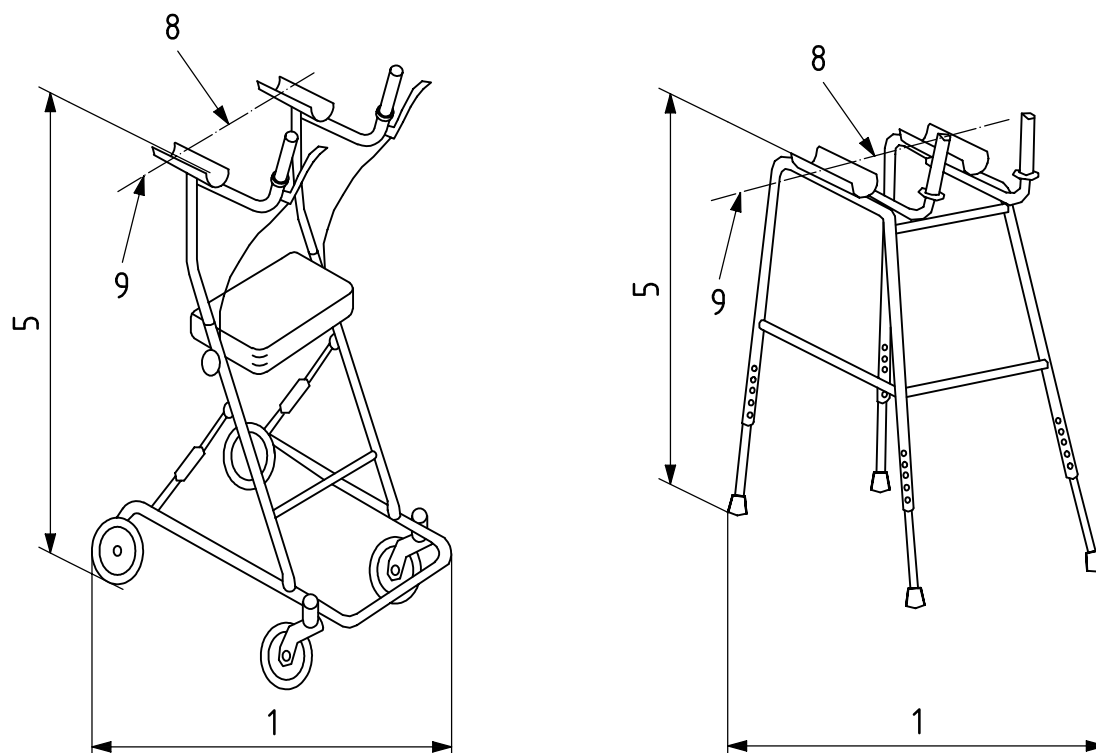
**Key**

- 1 handgrip length
- 2 handgrip width

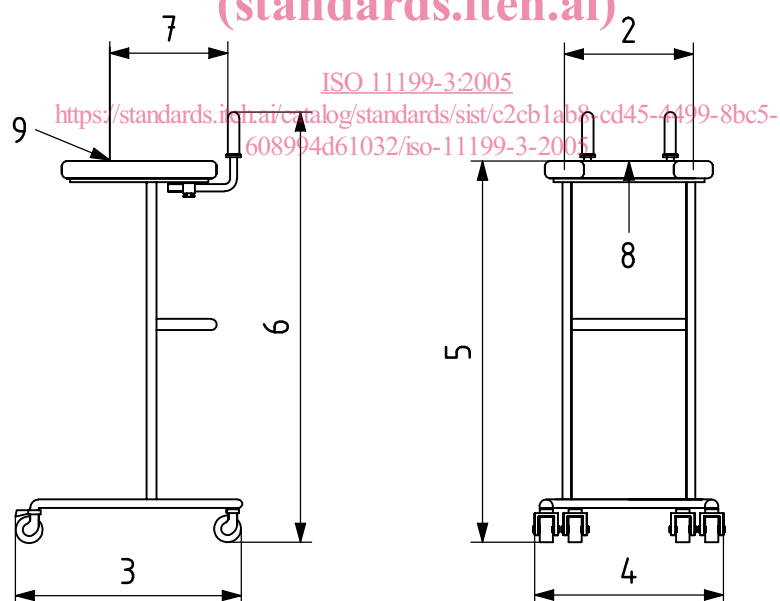
**Figure 5 — Details of a handgrip****Key**

- 1 tyre
- 2 0 mm to 5 mm up from the walking surface
- 3 wheel width

**Figure 6 — Wheel width measurement**



iTeh STANDARD PREVIEW  
(standards.iteh.ai)



**Key**

- |   |                                 |   |                                       |
|---|---------------------------------|---|---------------------------------------|
| 1 | turning width                   | 6 | maximum height                        |
| 2 | width between supporting points | 7 | distance from handgrips to datum line |
| 3 | maximum length                  | 8 | datum point                           |
| 4 | maximum width                   | 9 | datum line                            |
| 5 | supporting height               |   |                                       |

**Figure 7 — Dimensions of a walking table**